



COB - Technologie

WU - M - 001 - ...

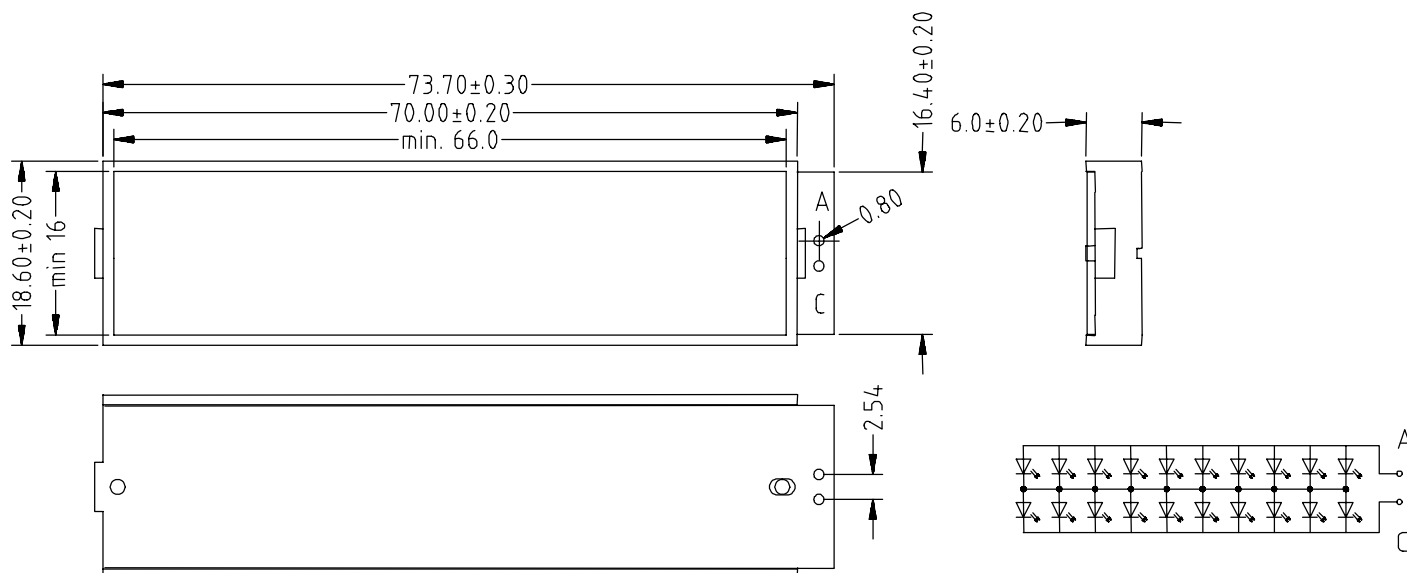
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 001 - R	90010	640	red	244	10	100
WU - M - 001 - PG	90011	560	pure-green	38	10	100
WU - M - 001 - YG	90012	570	yellow-green	293	10	100
WU - M - 001 - Y	90013	590	yellow	173	10	100
WU - M - 001 - O	90014	620	orange	173	10	100
WU - M - 001 - A	90015	605	amber	203	10	100
WU - M - 001 - B	90016	465	blue	60	10	100
WU - M - 001 - IR	90018	870	infrared	86W/m ²	20	200
WU - M - 001 - SO	90019	620	super-orange	1200	10	100
WU - M - 001 - SG	900110	530	super-green	1425	10	100
WU - M - 001 - SY	900111	590	super-yellow	750	10	100
WU - M - 001 - W	900112	---	white	1875	10	100
WU - M - 001 - SA	900113	605	super-amber	975	10	100
WU - M - 001 - SB	900114	470	super-blue	825	10	100

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M- 001-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	200	200	200	200	200	200	200	200	200	200	200	200	500	200	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

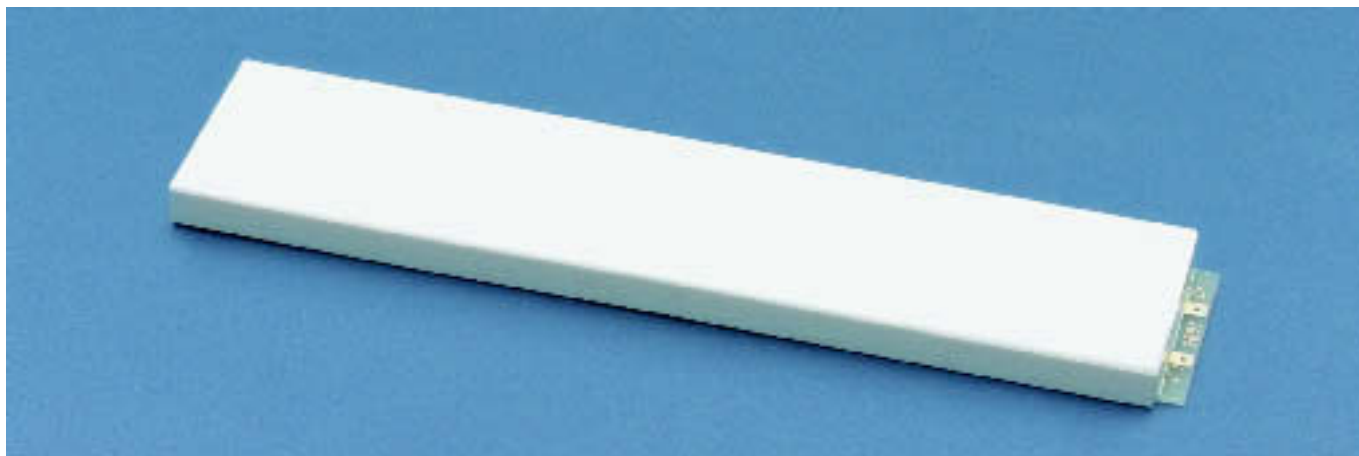


COB - Technologie

WU - M - 003 - ...

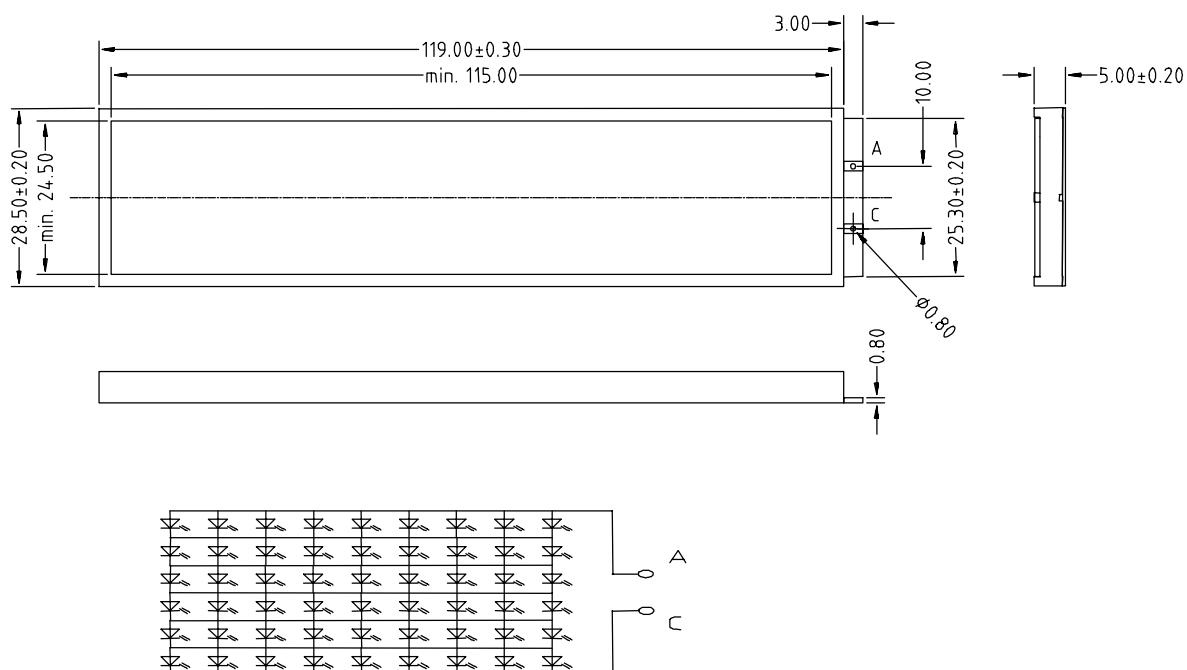
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Herstellung in Deutschland

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Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 003 - R	90030	640	red	163	10	90
WU - M - 003 - PG	90031	560	pure-green	25	10	90
WU - M - 003 - YG	90032	570	yellow-green	197	10	90
WU - M - 003 - Y	90033	590	yellow	116	10	90
WU - M - 003 - O	90034	620	orange	116	10	90
WU - M - 003 - A	90035	605	amber	137	10	90
WU - M - 003 - B	90036	465	blue	40	10	90
WU - M - 003 - IR	90038	870	infrared	57 W/m ²	20	180
WU - M - 003 - SO	90039	620	super-orange	810	10	90
WU - M - 003 - SG	900310	530	super-green	961	10	90
WU - M - 003 - SY	900311	590	super-yellow	506	10	90
WU - M - 003 - W	900312	---	white	1265	10	90
WU - M - 003 - SA	900313	605	super-amber	658	10	90
WU - M - 003 - SB	900314	470	super-blue	557	10	90

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-003-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	180	180	180	180	180	180	180	180	180	180	180	180	450	180	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

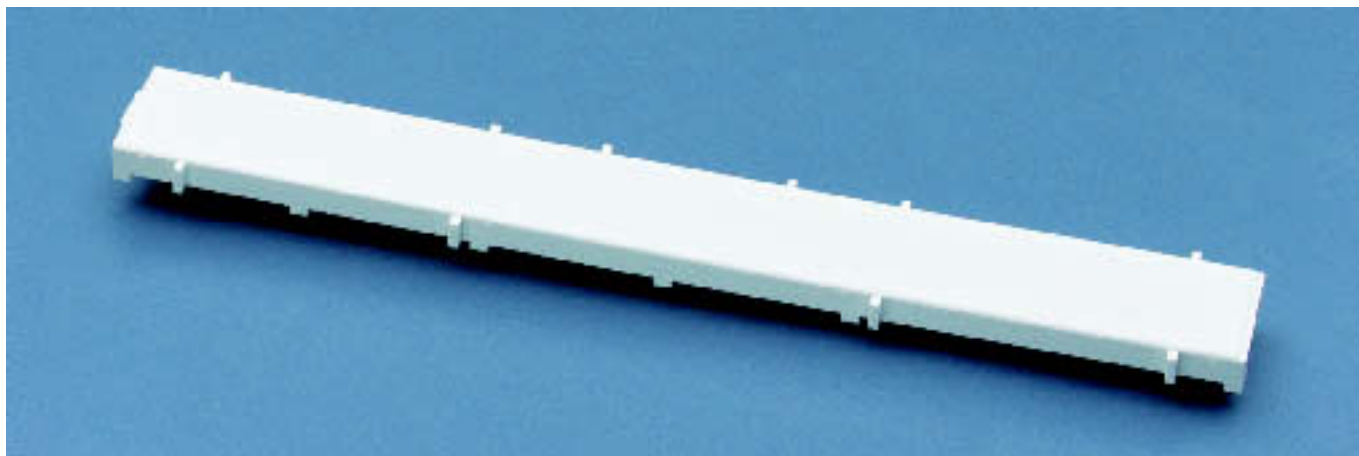


COB - Technologie

WU - M - 004 - ...

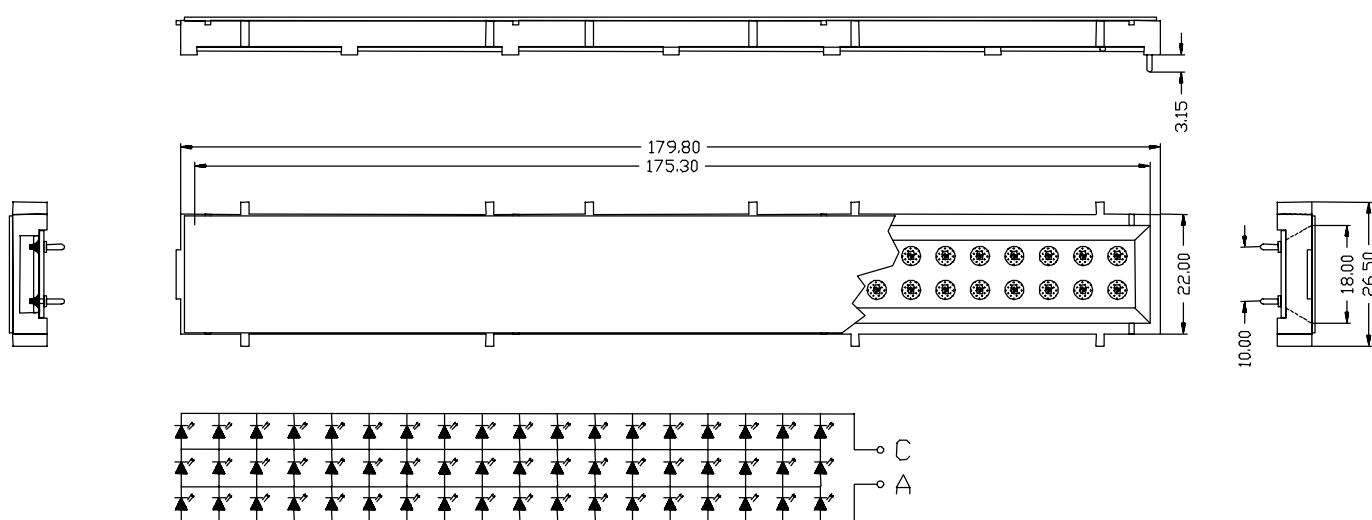
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 004 - R	90040	640	red	146	10	180
WU - M - 004 - PG	90041	560	pure-green	23	10	180
WU - M - 004 - YG	90042	570	yellow-green	176	10	180
WU - M - 004 - Y	90043	590	yellow	104	10	180
WU - M - 004 - O	90044	620	orange	104	10	180
WU - M - 004 - A	90045	605	amber	122	10	180
WU - M - 004 - B	90046	465	blue	36	10	180
WU - M - 004 - IR	90048	870	infrared	51 W/m ²	20	360
WU - M - 004 - SO	90049	620	super-orange	723	10	180
WU - M - 004 - SG	900410	530	super-green	858	10	180
WU - M - 004 - SY	900411	590	super-yellow	452	10	180
WU - M - 004 - W	900412	---	white	1129	10	180
WU - M - 004 - SA	900413	605	super-amber	587	10	180
WU - M - 004 - SB	900414	470	super-blue	497	10	180

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-004-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	360	360	360	360	360	360	360	360	360	360	360	360	900	360	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

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COB - Technologie

WU - M - 007 - ...

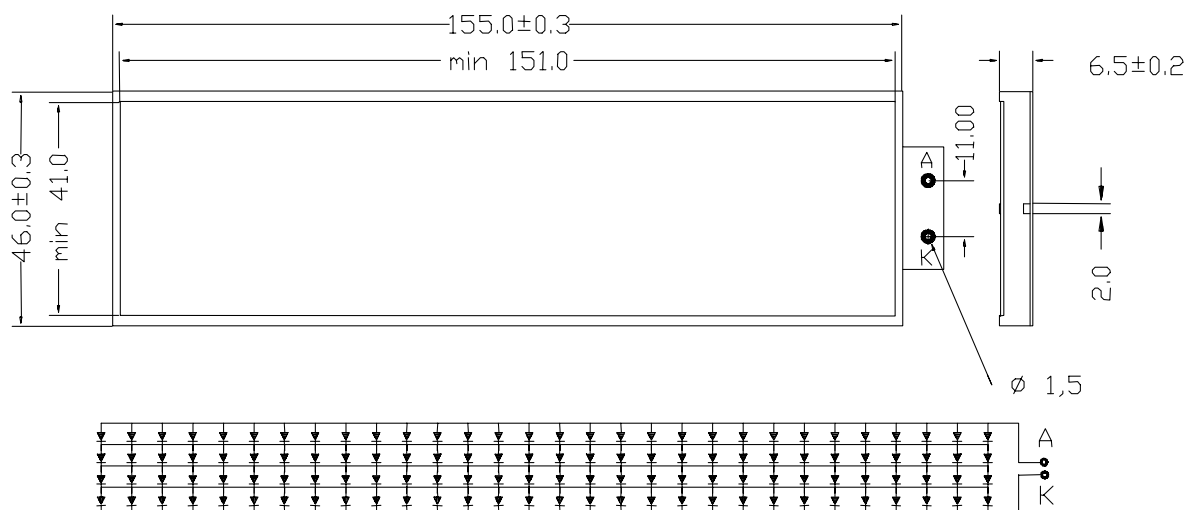
LED-Hintergrundbeleuchtung
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 007 - R	90070	640	red	165	10	300
WU - M - 007 - PG	90071	560	pure-green	26	10	300
WU - M - 007 - YG	90072	570	yellow-green	200	10	300
WU - M - 007 - Y	90073	590	yellow	118	10	300
WU - M - 007 - O	90074	620	orange	118	10	300
WU - M - 007 - A	90075	605	amber	138	10	300
WU - M - 007 - B	90076	465	blue	41	10	300
WU - M - 007 - IR	90078	870	infrared	58 W/m ²	20	600
WU - M - 007 - SO	90079	620	super-orange	819	10	300
WU - M - 007 - SG	900710	530	super-green	972	10	300
WU - M - 007 - SY	900711	590	super-yellow	512	10	300
WU - M - 007 - W	900712	---	white	1279	10	300
WU - M - 007 - SA	900713	605	super-amber	665	10	300
WU - M - 007 - SB	900714	470	super-blue	563	10	300

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -007-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	600	600	600	600	600	600	600	600	600	600	600	600	1500	600	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

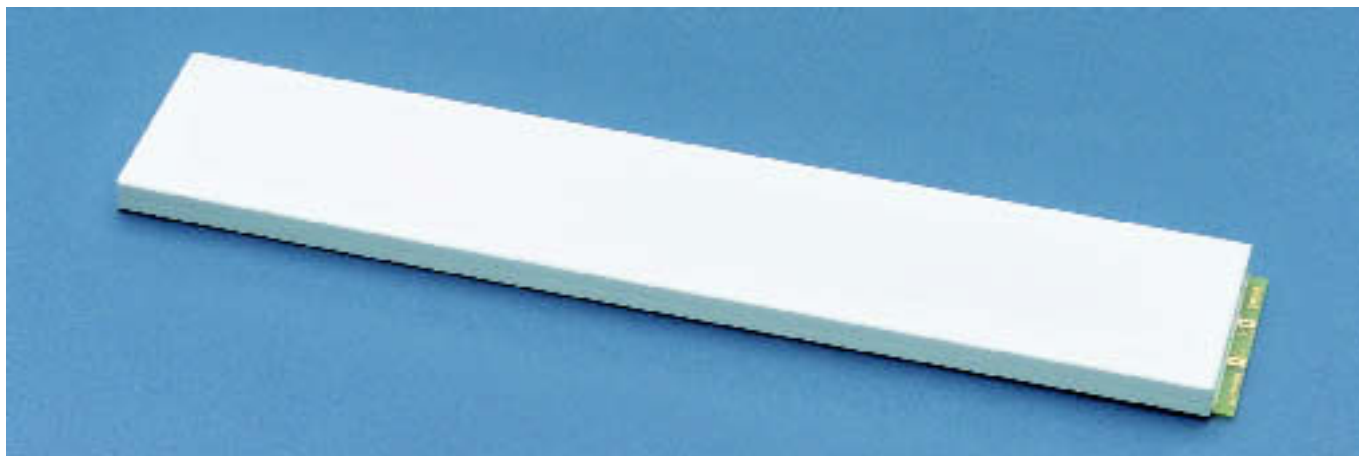


COB - Technologie

WU - M - 008 - ...

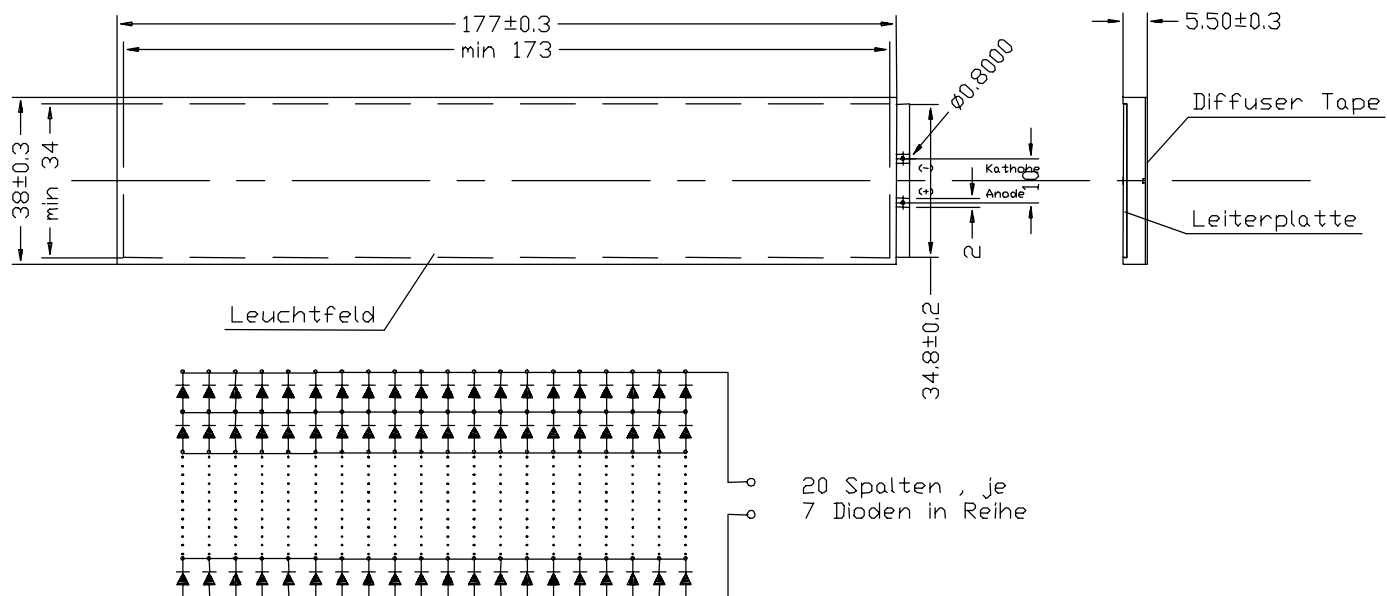
LED-Hintergrundbeleuchtung
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 008 - R	90080	640	red	203	10	200
WU - M - 008 - PG	90081	560	pure-green	31	10	200
WU - M - 008 - YG	90082	570	yellow-green	245	10	200
WU - M - 008 - Y	90083	590	yellow	145	10	200
WU - M - 008 - O	90084	620	orange	145	10	200
WU - M - 008 - A	90085	605	amber	170	10	200
WU - M - 008 - B	90086	465	blue	50	10	200
WU - M - 008 - IR	90088	870	infrared	71 W/m ²	20	400
WU - M - 008 - SO	90089	620	super-orange	1005	10	200
WU - M - 008 - SG	900810	530	super-green	1194	10	200
WU - M - 008 - SY	900811	590	super-yellow	628	10	200
WU - M - 008 - W	900812	---	white	1571	10	200
WU - M - 008 - SA	900813	605	super-amber	817	10	200
WU - M - 008 - SB	900814	470	super-blue	691	10	200

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -008-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	400	400	400	400	400	400	400	400	400	400	400	400	1000	400	mA
U_F typ.	12.6	18.2	15.4	14.0	14.7	15.4	26.6	24.5	15.4	14.0	15.4	24.5	9.1	24.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	35	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

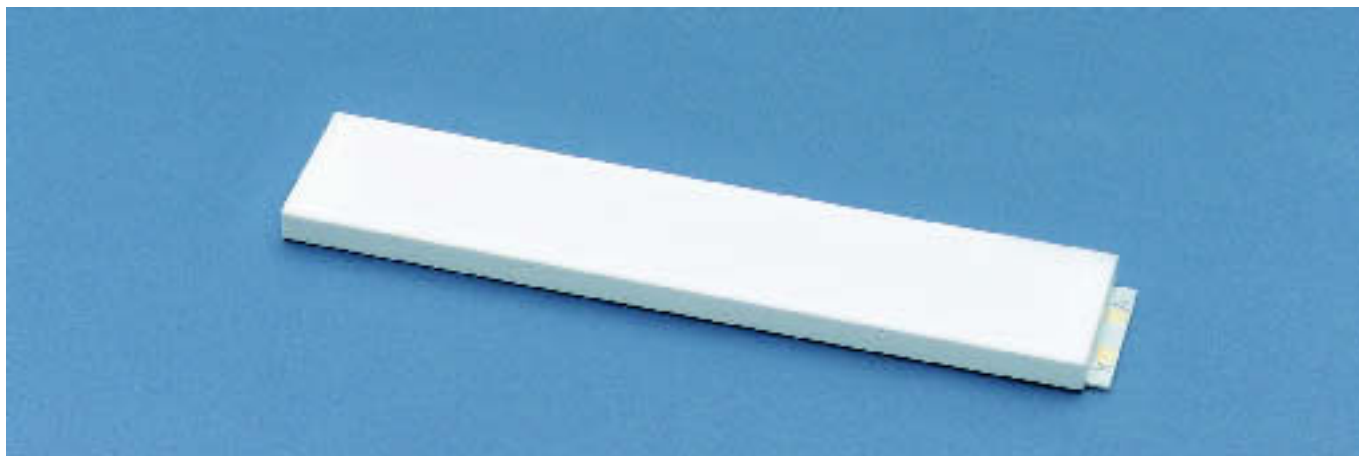


COB - Technologie

WU - M - 011 - ...

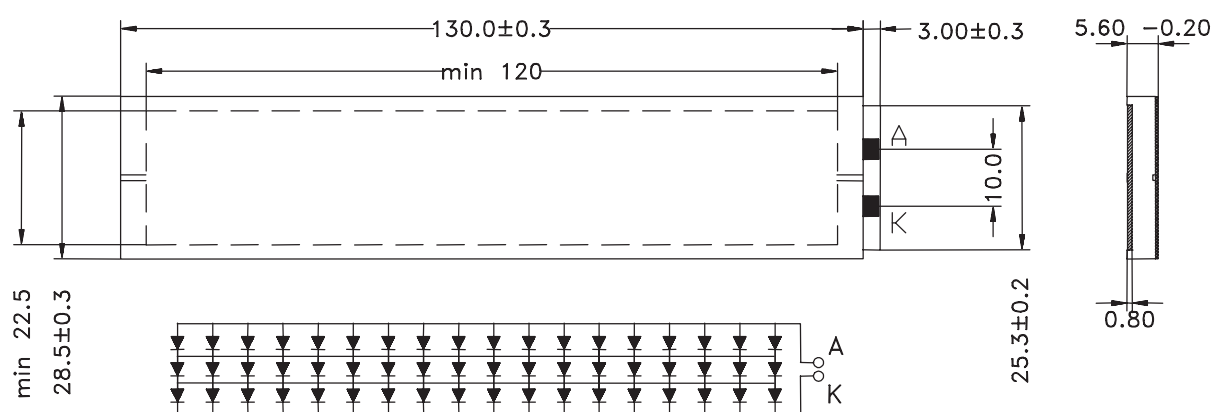
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Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 011 - R	90110	640	red	---	10	180
WU - M - 011 - PG	90111	560	pure-green	---	10	180
WU - M - 011 - YG	90112	570	yellow-green	---	10	180
WU - M - 011 - Y	90113	590	yellow	---	10	180
WU - M - 011 - O	90114	620	orange	---	10	180
WU - M - 011 - A	90114	605	amber	---	10	180
WU - M - 011 - B	90116	465	blue	---	10	180
WU - M - 011 - IR	90118	870	infrared	---	20	360
WU - M - 011 - SO	90119	620	super-orange	---	10	180
WU - M - 011 - SG	901110	530	super-green	---	10	180
WU - M - 011 - SY	901111	590	super-yellow	---	10	180
WU - M - 011 - W	901112	---	white	---	10	180
WU - M - 011 - SA	901113	605	super-amber	---	10	180
WU - M - 011 - SB	901114	470	super-blue	---	10	180

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-011-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	360	360	360	360	360	360	360	360	360	360	360	360	900	360	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - M - 012 - ...

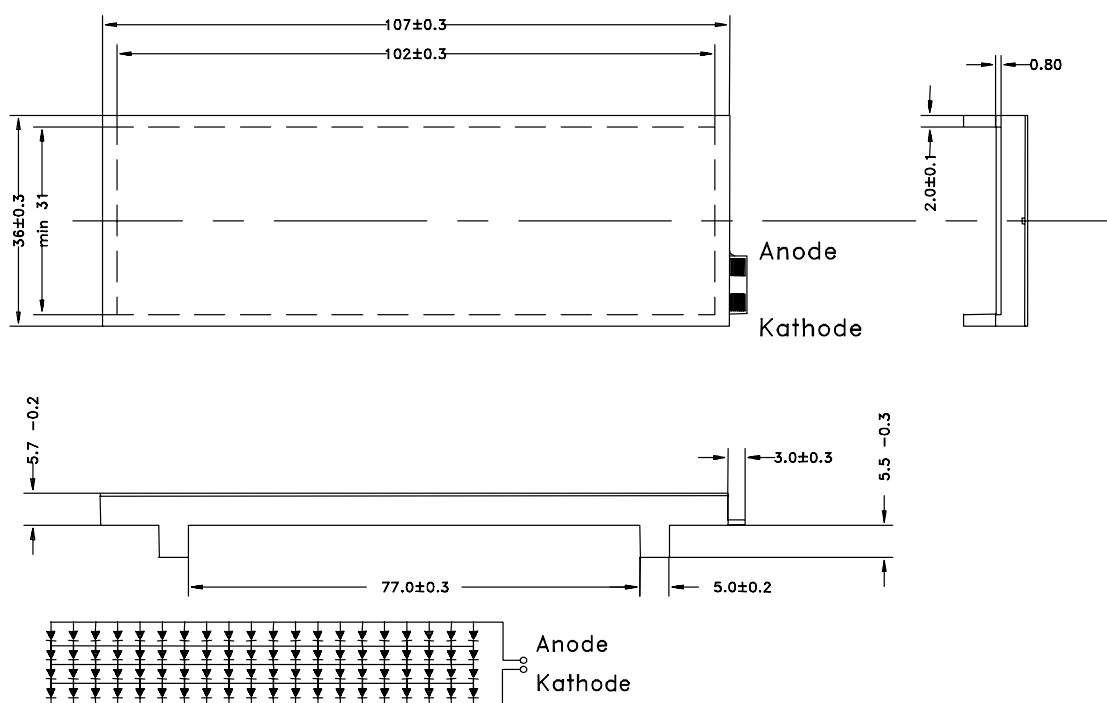
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 012 - R	90120	640	red	173	10	200
WU - M - 012 - PG	90121	560	pure-green	27	10	200
WU - M - 012 - YG	90122	570	yellow-green	208	10	200
WU - M - 012 - Y	90123	590	yellow	123	10	200
WU - M - 012 - O	90124	620	orange	123	10	200
WU - M - 012 - A	90125	605	amber	144	10	200
WU - M - 012 - B	90126	465	blue	43	10	200
WU - M - 012 - IR	90128	870	infrared	61 W/m ²	20	400
WU - M - 012 - SO	90129	620	super-orange	855	10	200
WU - M - 012 - SG	901210	530	super-green	1015	10	200
WU - M - 012 - SY	901211	590	super-yellow	534	10	200
WU - M - 012 - W	901212	---	white	1336	10	200
WU - M - 012 - SA	901213	605	super-amber	695	10	200
WU - M - 012 - SB	901214	470	super-blue	588	10	200

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -012-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	400	400	400	400	400	400	400	400	400	400	400	400	1000	400	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	11.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 014 - ...

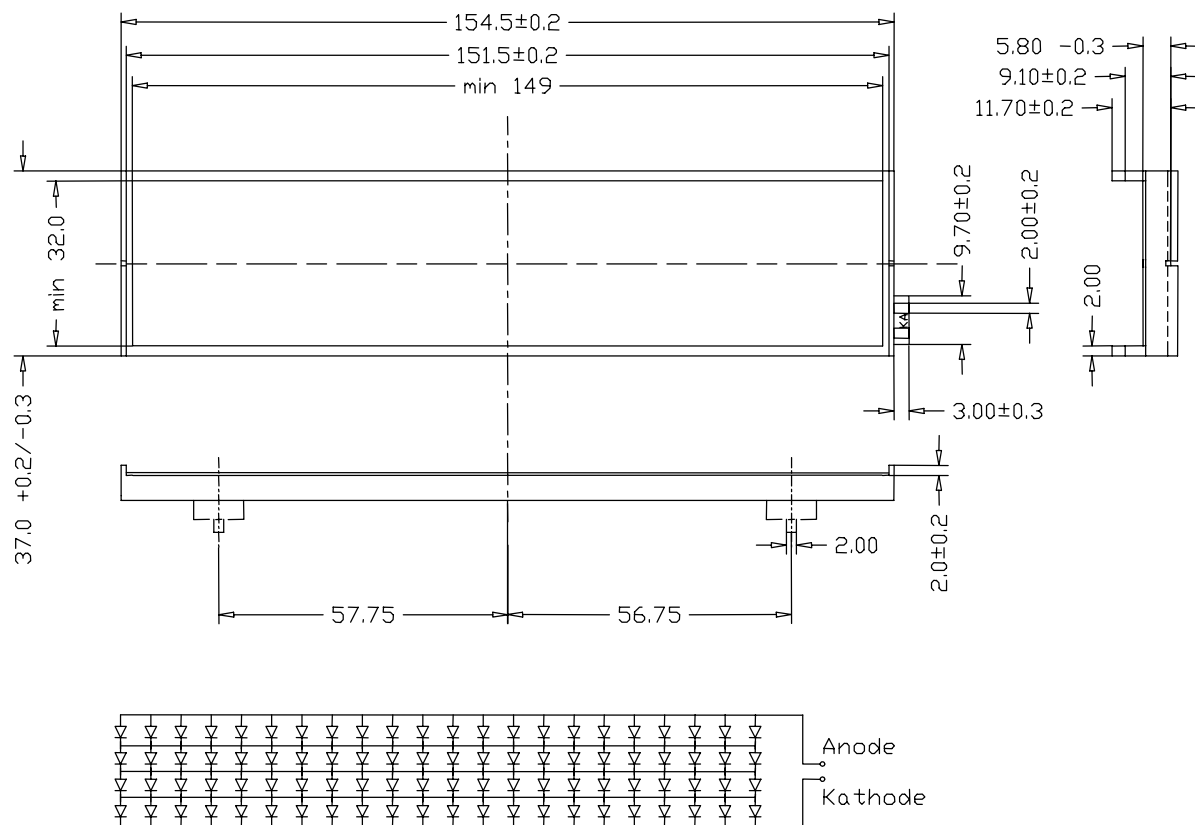
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 014 - R	90140	640	red	157	10	220
WU - M - 014 - PG	90141	560	pure-green	24	10	220
WU - M - 014 - YG	90142	570	yellow-green	190	10	220
WU - M - 014 - Y	90143	590	yellow	112	10	220
WU - M - 014 - O	90144	620	orange	112	10	220
WU - M - 014 - A	90145	605	amber	132	10	220
WU - M - 014 - B	90146	465	blue	39	10	220
WU - M - 014 - IR	90148	870	infrared	55 W/m ²	20	440
WU - M - 014 - SO	90149	620	super-orange	780	10	220
WU - M - 014 - SG	901410	530	super-green	926	10	220
WU - M - 014 - SY	901411	590	super-yellow	487	10	220
WU - M - 014 - W	901412	---	white	1218	10	220
WU - M - 014 - SA	901413	605	super-amber	633	10	220
WU - M - 014 - SB	901414	470	super-blue	536	10	220

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -014-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	440	440	440	440	440	440	440	440	440	440	440	440	1100	440	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

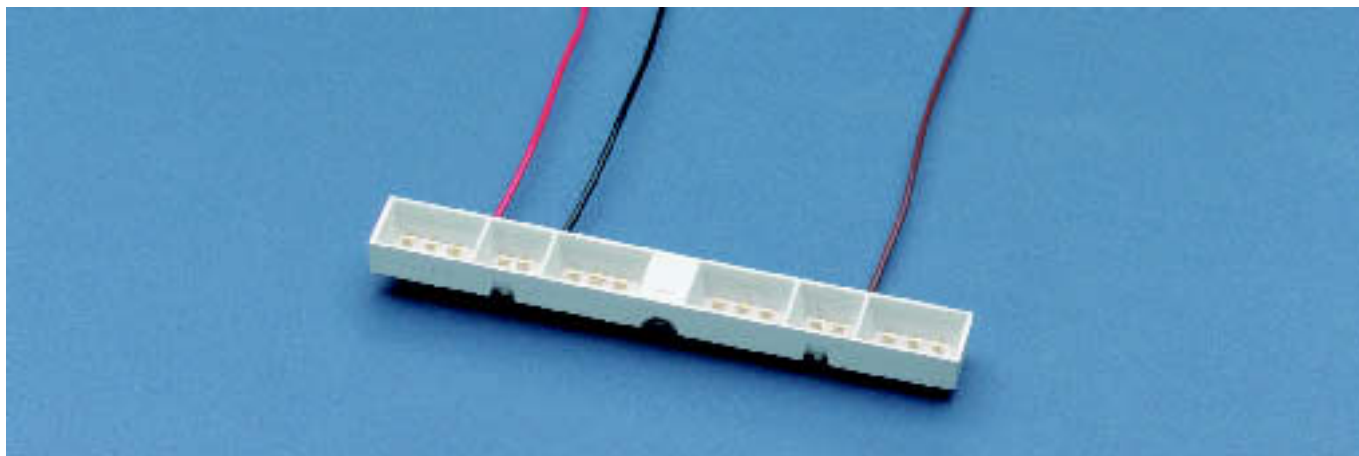


COB - Technologie

WU - M - 021 - ...

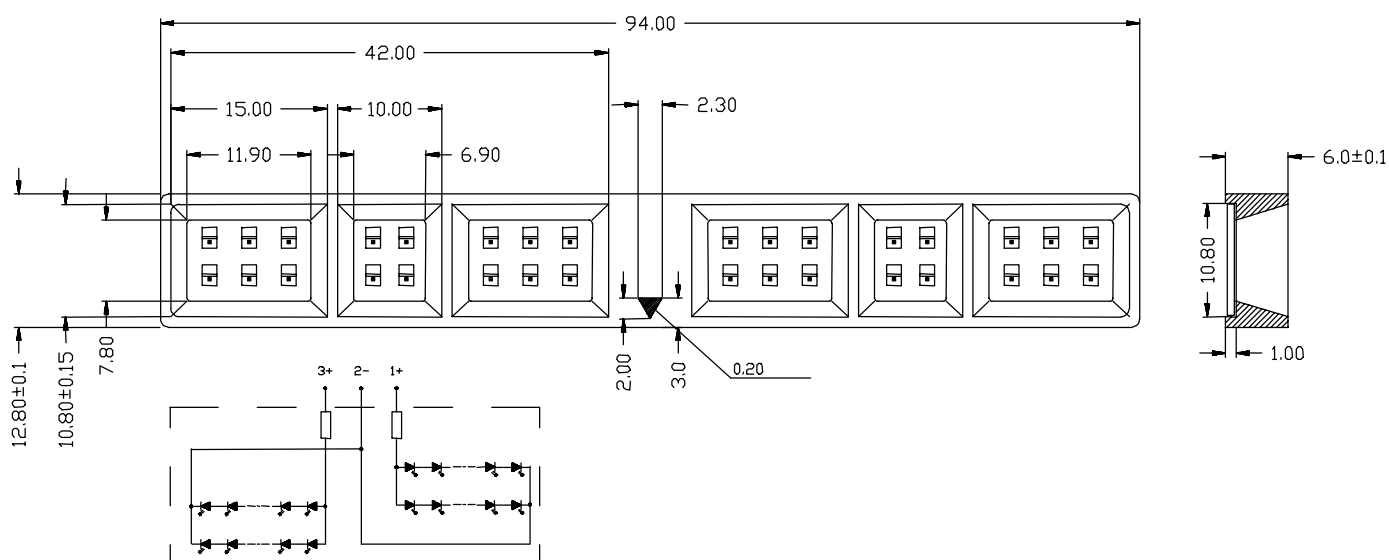
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

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Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 021 - R	90210	640	red	301	10	40
WU - M - 021 - PG	90211	560	pure-green	47	10	40
WU - M - 021 - YG	90212	570	yellow-green	363	10	40
WU - M - 021 - Y	90213	590	yellow	214	10	40
WU - M - 021 - O	90214	620	orange	214	10	40
WU - M - 021 - A	90215	605	amber	251	10	40
WU - M - 021 - B	90216	465	blue	74	10	40
WU - M - 021 - IR	90218	870	infrared	106 W/m ²	20	80
WU - M - 021 - SO	90219	620	super-orange	1490	10	40
WU - M - 021 - SG	902110	530	super-green	1769	10	40
WU - M - 021 - SY	902111	590	super-yellow	931	10	40
WU - M - 021 - W	902112	---	white	2328	10	40
WU - M - 021 - SA	902113	605	super-amber	1211	10	40
WU - M - 021 - SB	902114	470	super-blue	1024	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -021-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	14.4	20.8	17.6	16.0	16.8	17.6	30.4	28.0	17.6	16.0	17.6	28.0	10.4	28.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	40	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 024 - ...

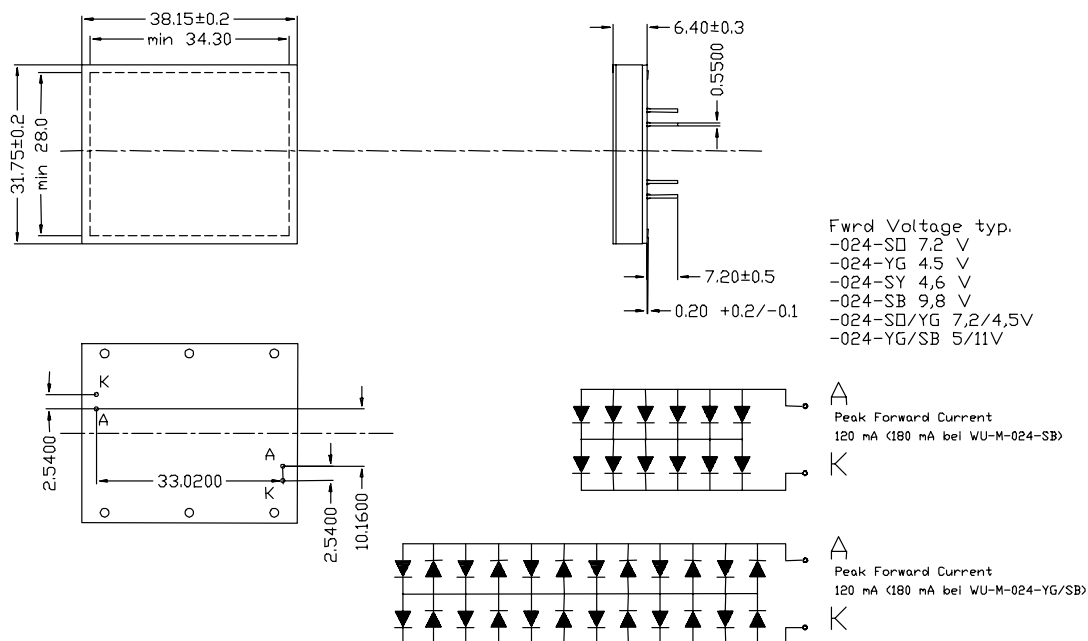
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Bipolar SB/YG Bezeichnung A K gilt für SB
Bipolar YG/SB Bezeichnung A K gilt für YG

Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 024 - R	90240	640	red	107	10	60
WU - M - 024 - PG	90241	560	pure-green	16	10	60
WU - M - 024 - YG	90242	570	yellow-green	129	10	60
WU - M - 024 - Y	90243	590	yellow	76	10	60
WU - M - 024 - O	90244	620	orange	76	10	60
WU - M - 024 - A	90245	605	amber	89	10	60
WU - M - 024 - B	90246	465	blue	26	10	60
WU - M - 024 - IR	90248	870	infrared	37 W/m ²	20	120
WU - M - 024 - SO	90249	620	super-orange	528	10	60
WU - M - 024 - SG	902410	530	super-green	627	10	60
WU - M - 024 - SY	902411	590	super-yellow	330	10	60
WU - M - 024 - W	902412	---	white	825	10	60
WU - M - 024 - SA	902413	605	super-amber	429	10	60
WU - M - 024 - SB	902414	470	super-blue	363	10	60
WU - M - 024 - SO/YG	90247/A	620/570	bicolor	528/129	10	120
WU - M - 024 - YG/SB	90247/B	570/470	bicolor	129/363	10	120

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-024-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	120	120	120	120	120	120	120	120	120	120	120	120	300	120	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 026 - ...

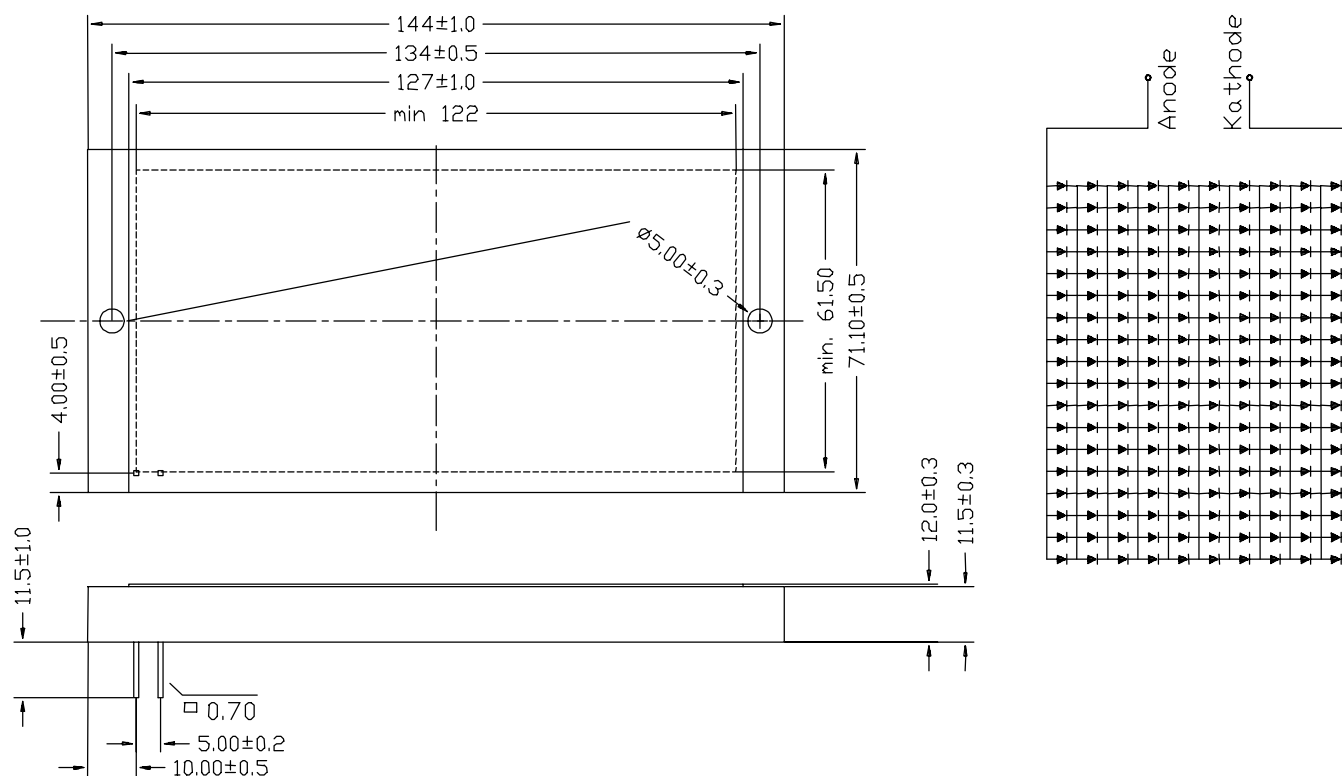
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 026 - R	90260	640	red	205	10	180
WU - M - 026 - PG	90261	560	pure-green	32	10	180
WU - M - 026 - YG	90262	570	yellow-green	247	10	180
WU - M - 026 - Y	90263	590	yellow	146	10	180
WU - M - 026 - O	90264	620	orange	146	10	180
WU - M - 026 - A	90265	605	amber	171	10	180
WU - M - 026 - B	90266	465	blue	51	10	180
WU - M - 026 - IR	90268	870	infrared	72 W/m ²	20	360
WU - M - 026 - SO	90269	620	super-orange	1013	10	180
WU - M - 026 - SG	902610	530	super-green	1203	10	180
WU - M - 026 - SY	902611	590	super-yellow	633	10	180
WU - M - 026 - W	902612	---	white	1583	10	180
WU - M - 026 - SA	902613	605	super-amber	823	10	180
WU - M - 026 - SB	902614	470	super-blue	697	10	180

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-026-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	360	360	360	360	360	360	360	360	360	360	360	360	900	360	mA
U_F typ.	18.0	26.0	22.0	20.0	21.0	22.0	38.0	35.0	22.0	20.0	22.0	35.0	13.0	35.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	50	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 028 - ...

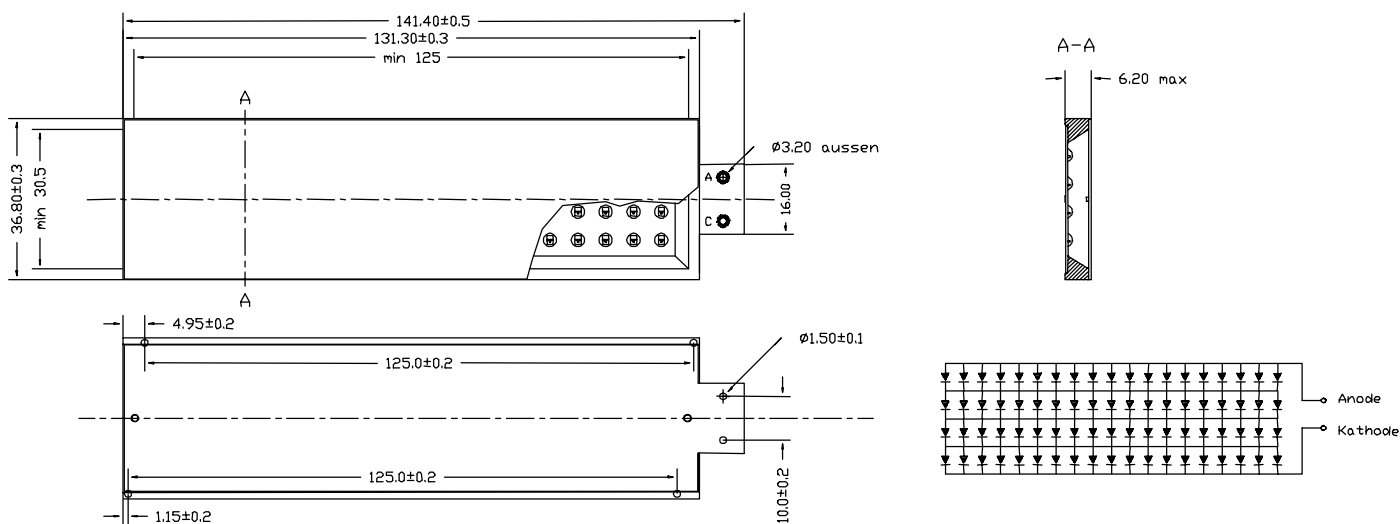
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 028 - R	90280	640	red	170	10	190
WU - M - 028 - PG	90281	560	pure-green	26	10	190
WU - M - 028 - YG	90282	570	yellow-green	205	10	190
WU - M - 028 - Y	90283	590	yellow	121	10	190
WU - M - 028 - O	90284	620	orange	121	10	190
WU - M - 028 - A	90285	605	amber	142	10	190
WU - M - 028 - B	90286	465	blue	42	10	190
WU - M - 028 - IR	90288	870	infrared	60 W/m ²	20	380
WU - M - 028 - SO	90289	620	super-orange	842	10	190
WU - M - 028 - SG	902810	530	super-green	1000	10	190
WU - M - 028 - SY	902811	590	super-yellow	526	10	190
WU - M - 028 - W	902812	---	white	1316	10	190
WU - M - 028 - SA	902813	605	super-amber	684	10	190
WU - M - 028 - SB	902814	470	super-blue	579	10	190

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -028-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	380	380	380	380	380	380	380	380	380	380	380	380	950	380	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 029 - ...

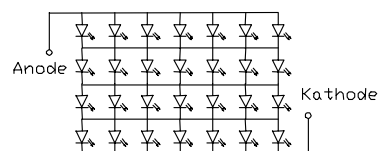
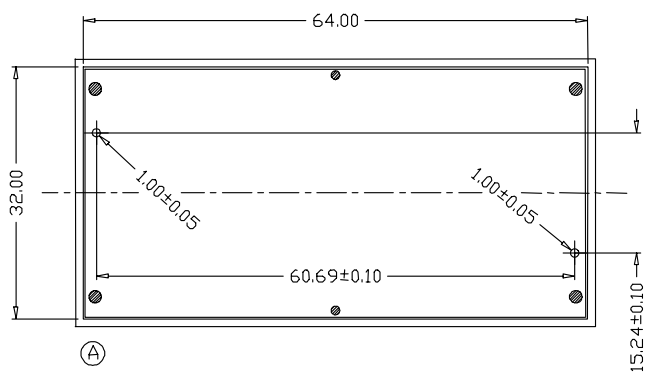
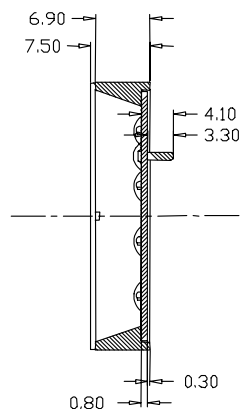
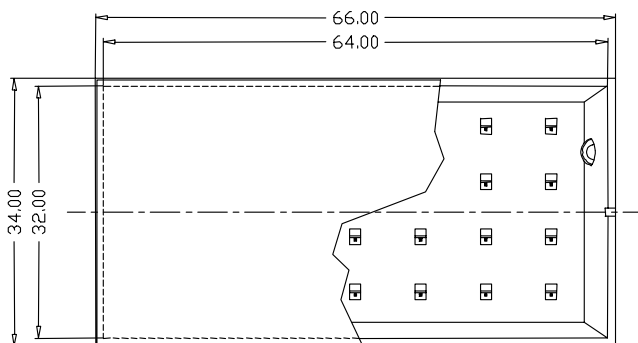
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 029 - R	90290	640	red	117	10	70
WU - M - 029 - PG	90291	560	pure-green	18	10	70
WU - M - 029 - YG	90292	570	yellow-green	141	10	70
WU - M - 029 - Y	90293	590	yellow	83	10	70
WU - M - 029 - O	90294	620	orange	83	10	70
WU - M - 029 - A	90295	605	amber	97	10	70
WU - M - 029 - B	90296	465	blue	29	10	70
WU - M - 029 - IR	90298	870	infrared	41 W/m ²	20	140
WU - M - 029 - SO	90299	620	super-orange	578	10	70
WU - M - 029 - SG	902910	530	super-green	686	10	70
WU - M - 029 - SY	902911	590	super-yellow	361	10	70
WU - M - 029 - W	902912	---	white	902	10	70
WU - M - 029 - SA	902913	605	super-amber	469	10	70
WU - M - 029 - SB	902914	470	super-blue	397	10	70

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -029-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	140	140	140	140	140	140	140	140	140	140	140	140	350	140	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 054 -...

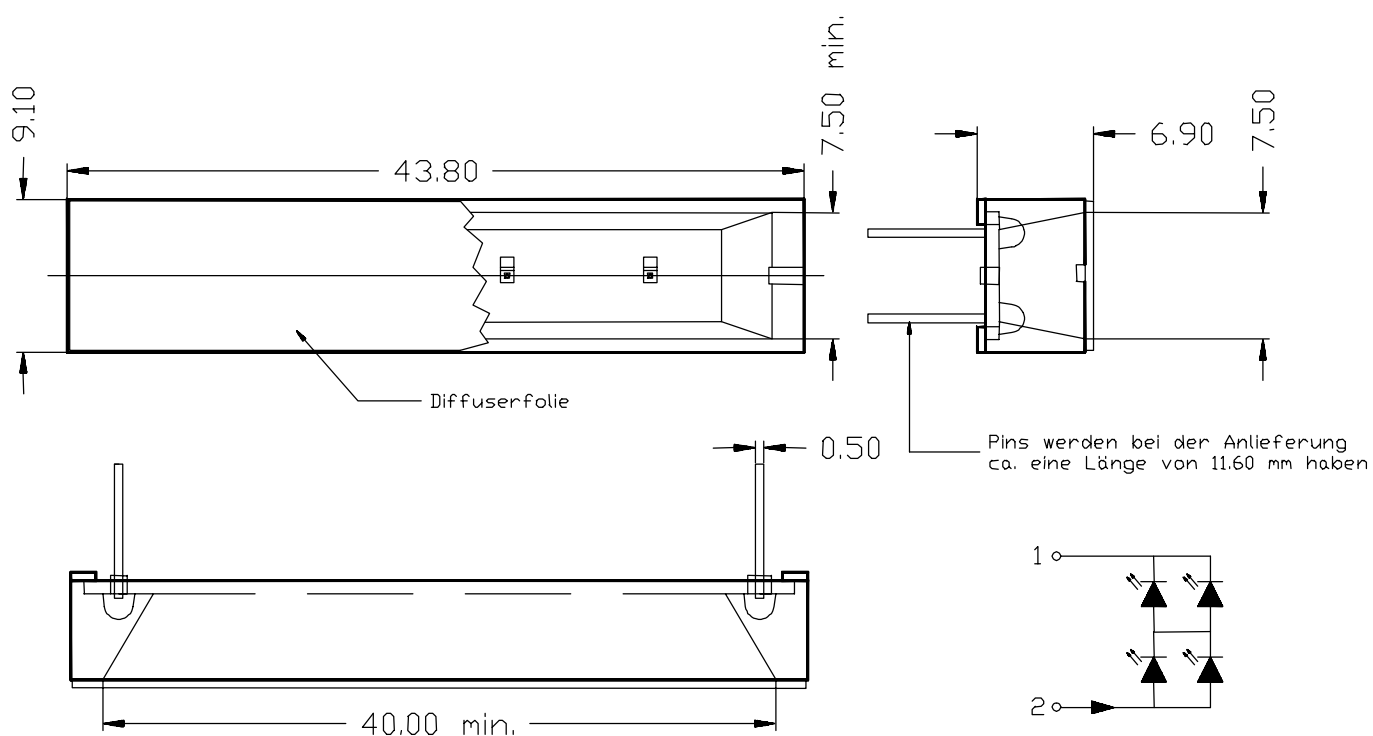
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 054 - R	90540	640	red	114	10	20
WU - M - 054 - PG	90541	560	pure-green	18	10	20
WU - M - 054 - YG	90542	570	yellow-green	137	10	20
WU-- M - 054 - Y	90543	590	yellow	81	10	20
WU - M - 054 - O	90544	620	orange	81	10	20
WU - M - 054 - A	90545	605	amber	95	10	20
WU - M - 054 - B	90546	465	blue	28	10	20
WU - M - 054 - IR	90548	870	infrared	40 W/m ²	20	40
WU - M - 054 - SO	90549	620	super-orange	563	10	20
WU - M - 054 - SG	905410	530	super-green	669	10	20
WU - M - 054 - SY	905411	590	super-yellow	352	10	20
WU - M - 054 - W	905412	---	white	880	10	20
WU - M - 054 - SA	905413	605	super-amber	458	10	20
WU - M - 054 - SB	905414	470	super-blue	387	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-054-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

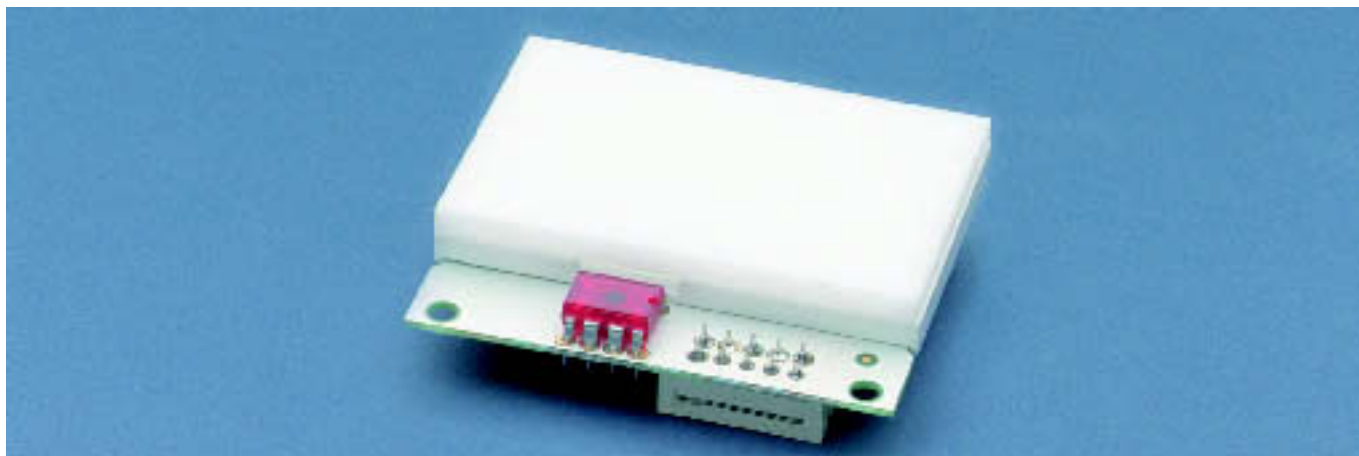


COB - Technologie

WU - M - 062 -...

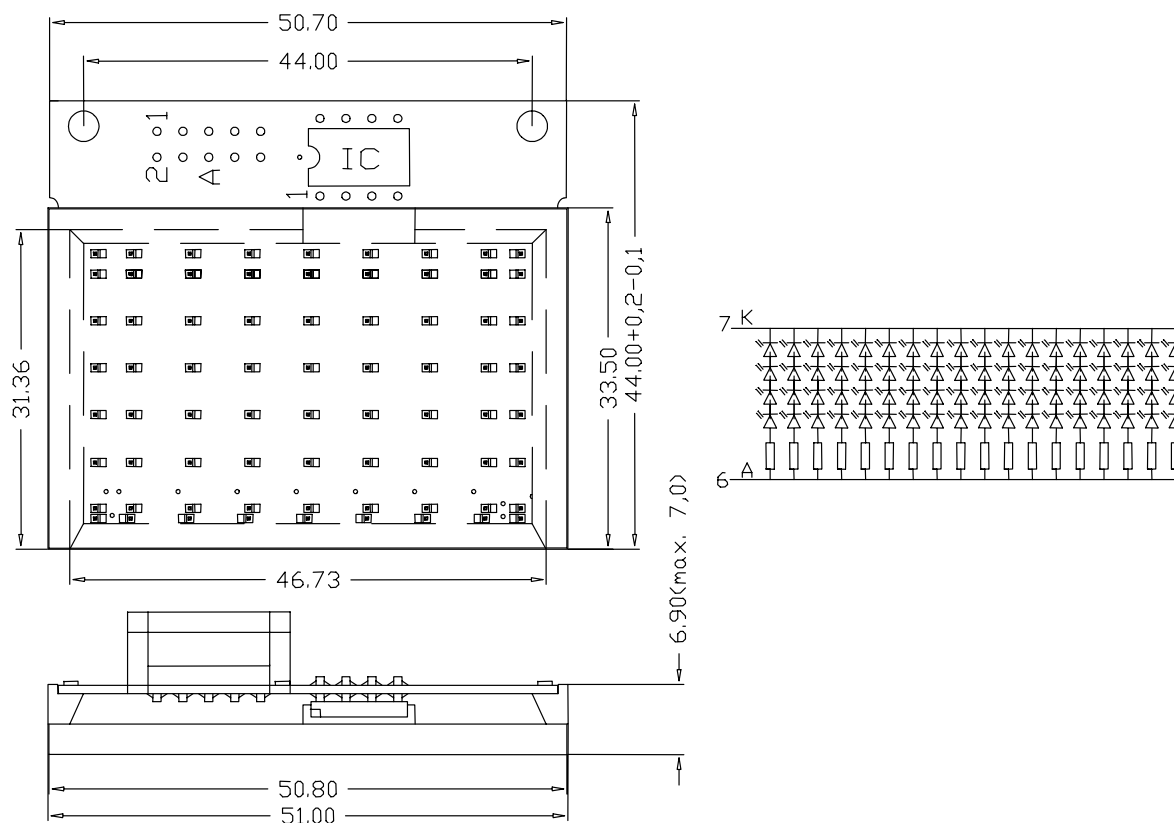
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 062 - R	90620	640	red	419	10	180
WU - M - 062 - PG	90621	560	pure-green	65	10	180
WU - M - 062 - YG	90622	570	yellow-green	506	10	180
WU - M - 062 - Y	90623	590	yellow	298	10	180
WU - M - 062 - O	90624	620	orange	298	10	180
WU - M - 062 - A	90625	605	amber	350	10	180
WU - M - 062 - B	90626	465	blue	104	10	180
WU - M - 062 - IR	90628	870	infrared	147 W/m ²	20	360
WU - M - 062 - SO	90629	620	super-orange	2075	10	180
WU - M - 062 - SG	906210	530	super-green	2464	10	180
WU - M - 062 - SY	906211	590	super-yellow	1297	10	180
WU - M - 062 - W	906212	---	white	3243	10	180
WU - M - 062 - SA	906213	605	super-amber	1686	10	180
WU - M - 062 - SB	906214	470	super-blue	1427	10	180

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-062-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	360	360	360	360	360	360	360	360	360	360	360	360	900	360	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.9	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

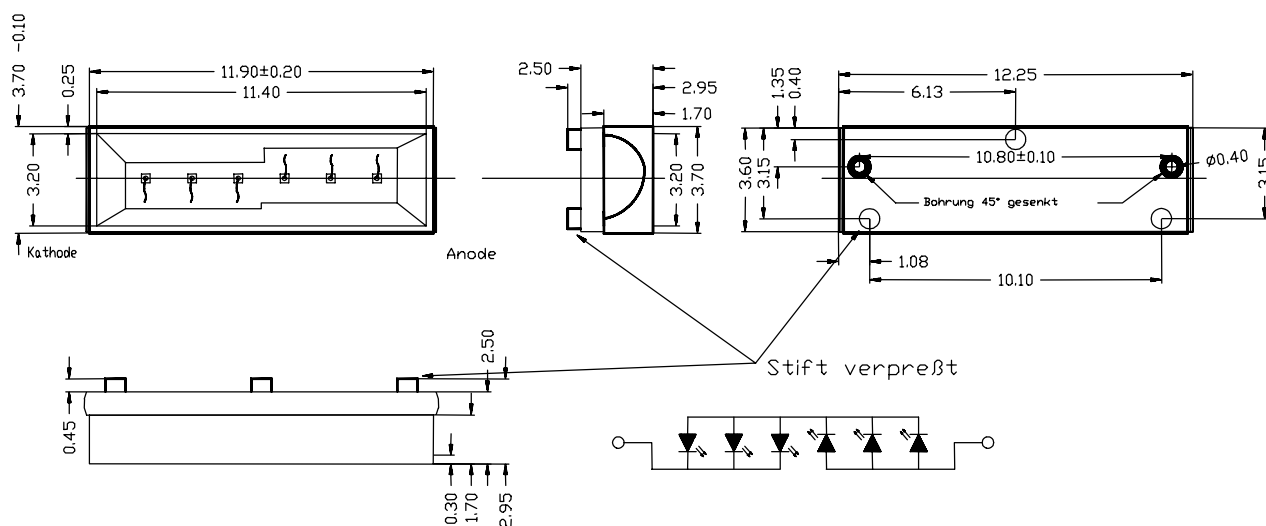


LED-Hintergrundbeleuchtung für LCD-Anzeigen und andere lichttechnische Anwendungen

LED-Back Lights for LCD-Displays and other technical light applications



Made in Germany

Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 064 - R	90640	640	red	1403	10	30
WU - M - 064 - PG	90641	560	pure-green	217	10	30
WU - M - 064 - YG	90642	570	yellow-green	1693	10	30
WU - M - 064 - Y	90643	590	yellow	999	10	30
WU - M - 064 - O	90644	620	orange	999	10	30
WU - M - 064 - A	90645	605	amber	1172	10	30
WU - M - 064 - B	90646	465	blue	347	10	30
WU - M - 064 - IR	90648	870	infrared	493 W/m ²	20	60
WU - M - 064 - SO	90649	620	super-orange	6947	10	30
WU - M - 064 - SG	906410	530	super-green	8250	10	30
WU - M - 064 - SY	906411	590	super-yellow	4342	10	30
WU - M - 064 - W	906412	---	white	10855	10	30
WU - M - 064 - SA	906413	605	super-amber	5645	10	30
WU - M - 064 - SB	906414	470	super-blue	4776	10	30

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-064-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	60												75	60	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

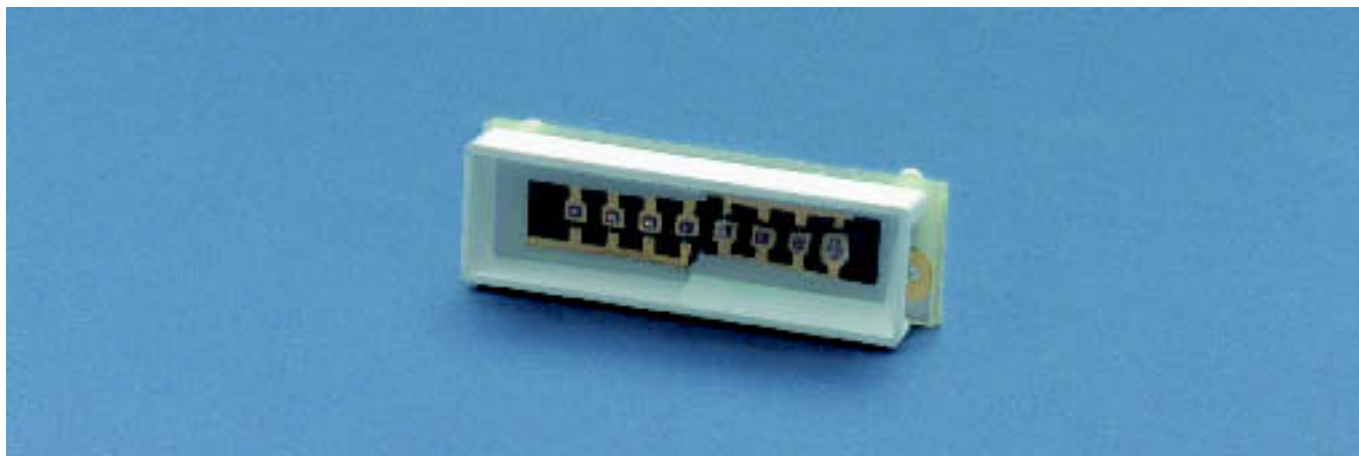


COB - Technologie

WU - M - 065 -...

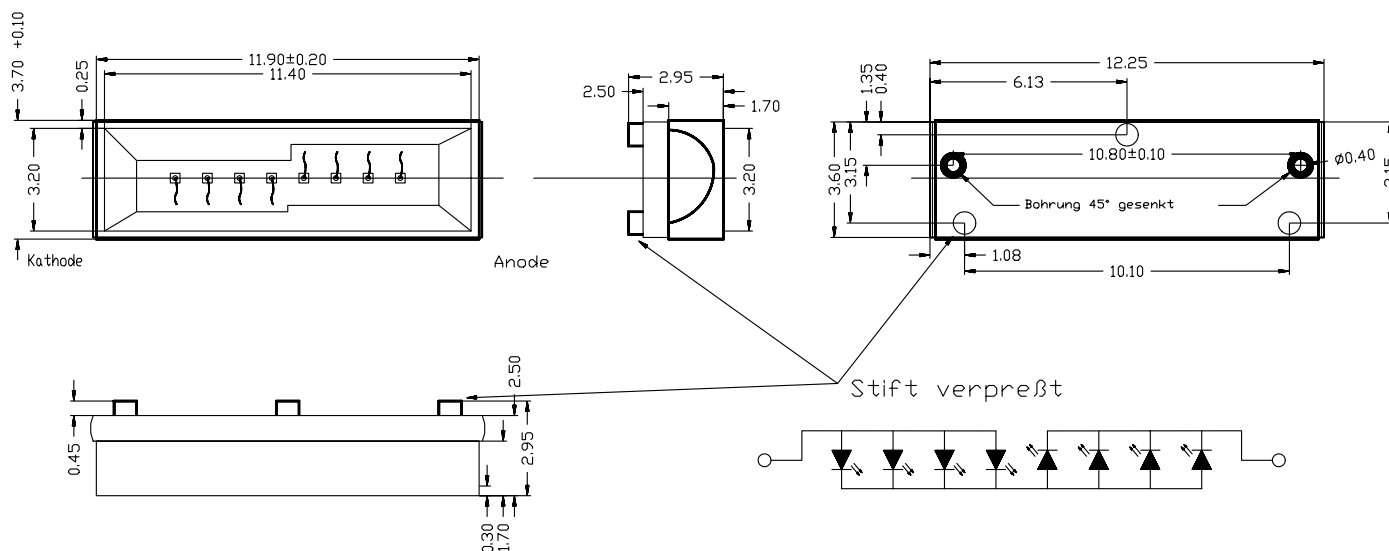
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 065 - R	90650	640	red	1870	10	40
WU - M - 065 - PG	90651	560	pure-green	289	10	40
WU - M - 065 - YG	90652	570	yellow-green	2258	10	40
WU - M - 065 - Y	90653	590	yellow	1332	10	40
WU - M - 065 - O	90654	620	orange	1332	10	40
WU - M - 065 - A	90655	605	amber	1563	10	40
WU - M - 065 - B	90656	465	blue	463	10	40
WU - M - 065 - IR	90658	870	infrared	658 W/m ²	20	80
WU - M - 065 - SO	90659	620	super-orange	9263	10	40
WU - M - 065 - SG	906510	530	super-green	11000	10	40
WU - M - 065 - SY	906511	590	super-yellow	5789	10	40
WU - M - 065 - W	906512	---	white	14474	10	40
WU - M - 065 - SA	906513	605	super-amber	7526	10	40
WU - M - 065 - SB	906514	470	super-blue	6368	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-065-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 068 -...

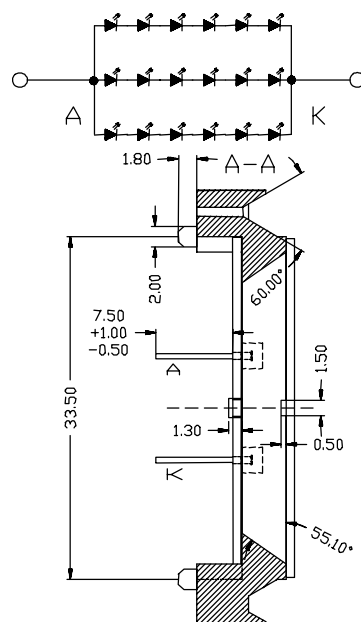
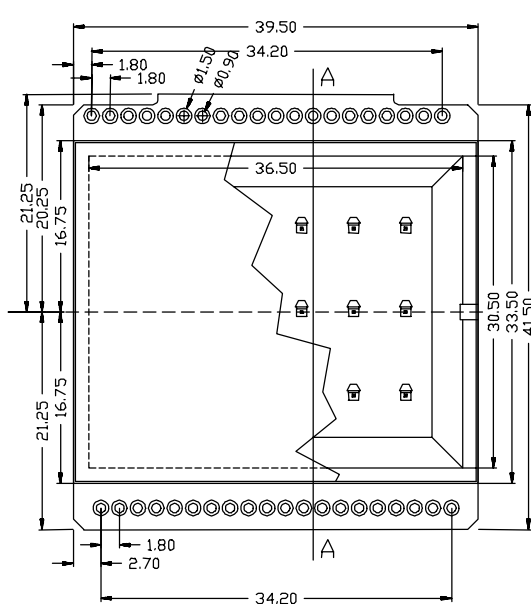
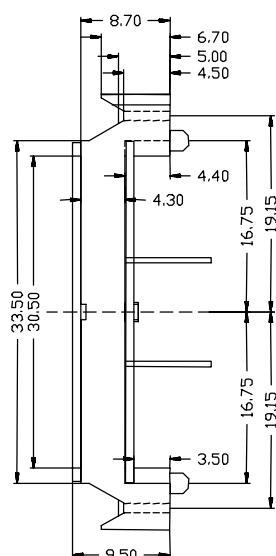
LED-Hintergrundbeleuchtung
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lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 068 - R	90680	640	red	147	10	30
WU - M - 068 - PG	90681	560	pure-green	23	10	30
WU - M - 068 - YG	90682	570	yellow-green	178	10	30
WU - M - 068 - Y	90683	590	yellow	105	10	30
WU - M - 068 - O	90684	620	orange	105	10	30
WU - M - 068 - A	90685	605	amber	123	10	30
WU - M - 068 - B	90686	465	blue	36	10	30
WU - M - 068 - IR	90688	870	infrared	52 W/m ²	20	60
WU - M - 068 - SO	90689	620	super-orange	729	10	30
WU - M - 068 - SG	906810	530	super-green	866	10	30
WU - M - 068 - SY	906811	590	super-yellow	456	10	30
WU - M - 068 - W	906812	---	white	1139	10	30
WU - M - 068 - SA	906813	605	super-amber	592	10	30
WU - M - 068 - SB	906814	470	super-blue	501	10	30

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-068-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	60	60	60	60	60	60	60	60	60	60	60	60	150	60	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



®

COB - Technologie

WU - M - 073 -...

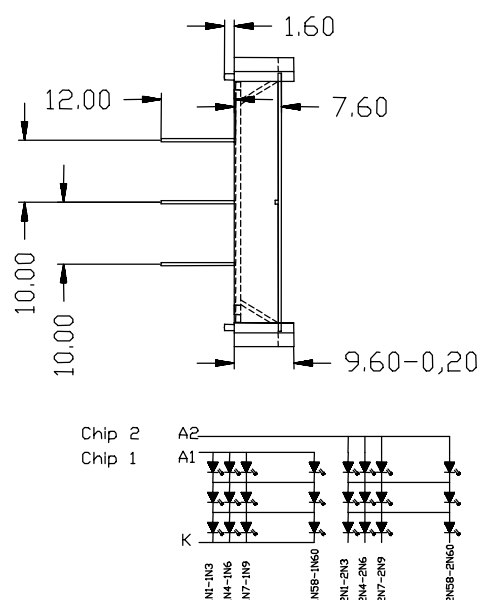
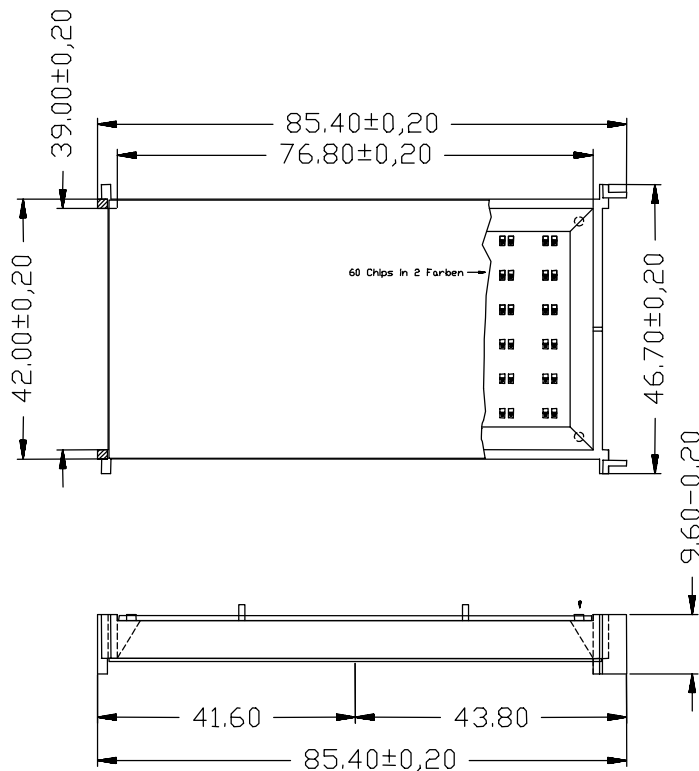
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 073 - R	90730	640	red	171	10	200
WU - M - 073 - PG	90731	560	pure-green	26	10	200
WU - M - 073 - YG	90732	570	yellow-green	206	10	200
WU - M - 073 - Y	90733	590	yellow	121	10	200
WU - M - 073 - O	90734	620	orange	121	10	200
WU - M - 073 - A	90735	605	amber	143	10	200
WU - M - 073 - B	90736	465	blue	42	10	200
WU - M - 073 - IR	90738	870	infrared	60 W/m ²	20	400
WU - M - 073 - SO	90739	620	super-orange	845	10	200
WU - M - 073 - SG	907310	530	super-green	1004	10	200
WU - M - 073 - SY	907311	590	super-yellow	528	10	200
WU - M - 073 - W	907312	---	white	1320	10	200
WU - M - 073 - SA	907313	605	super-amber	687	10	200
WU - M - 073 - SB	907314	470	super-blue	581	10	200

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-073-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	400												1000	400	mA
U_F typ.	5.4	7.8	6.6	6.3	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 075 -...

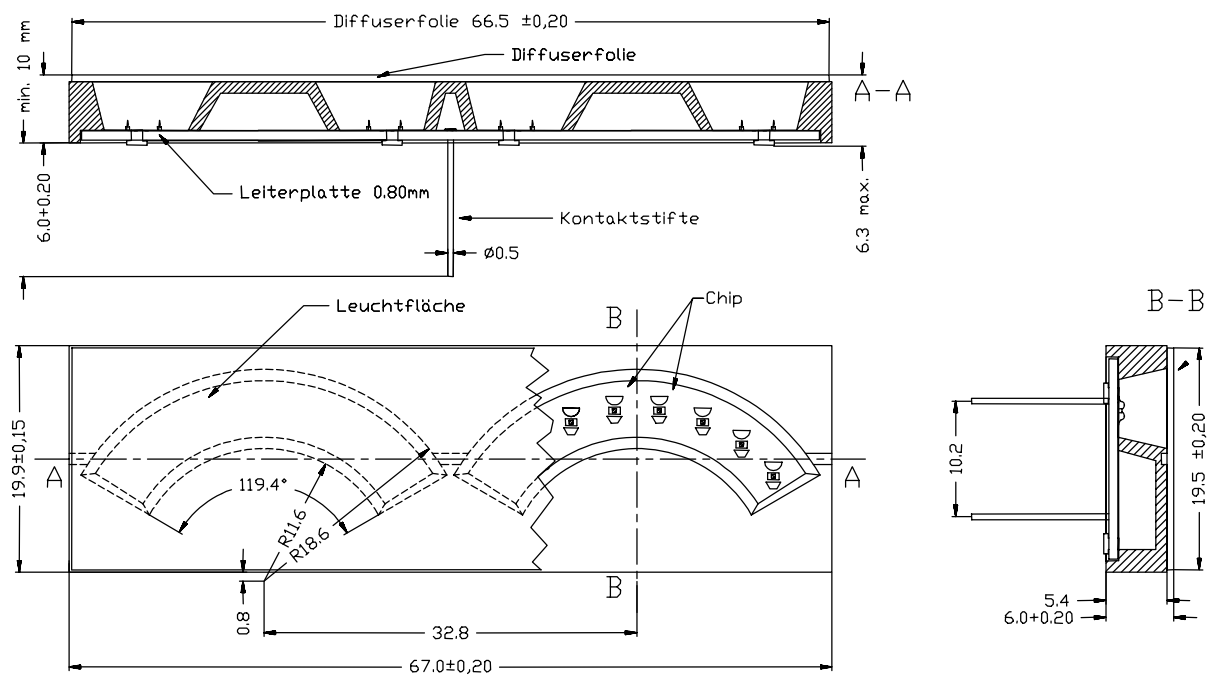
LED-Hintergrundbeleuchtung
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 075 - R	90750	640	red	617	10	40
WU - M - 075 - PG	90751	560	pure-green	96	10	40
WU - M - 075 - YG	90752	570	yellow-green	745	10	40
WU - M - 075 - Y	90753	590	yellow	440	10	40
WU - M - 075 - O	90754	620	orange	440	10	40
WU - M - 075 - A	90755	605	amber	516	10	40
WU - M - 075 - B	90756	465	blue	153	10	40
WU - M - 075 - IR	90758	870	infrared	217 W/m ²	20	80
WU - M - 075 - SO	90759	620	super-orange	3058	10	40
WU - M - 075 - SG	907510	530	super-green	3631	10	40
WU - M - 075 - SY	907511	590	super-yellow	1911	10	40
WU - M - 075 - W	907512	---	white	4778	10	40
WU - M - 075 - SA	907513	605	super-amber	2485	10	40
WU - M - 075 - SB	907514	470	super-blue	2102	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-075-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 076 -...

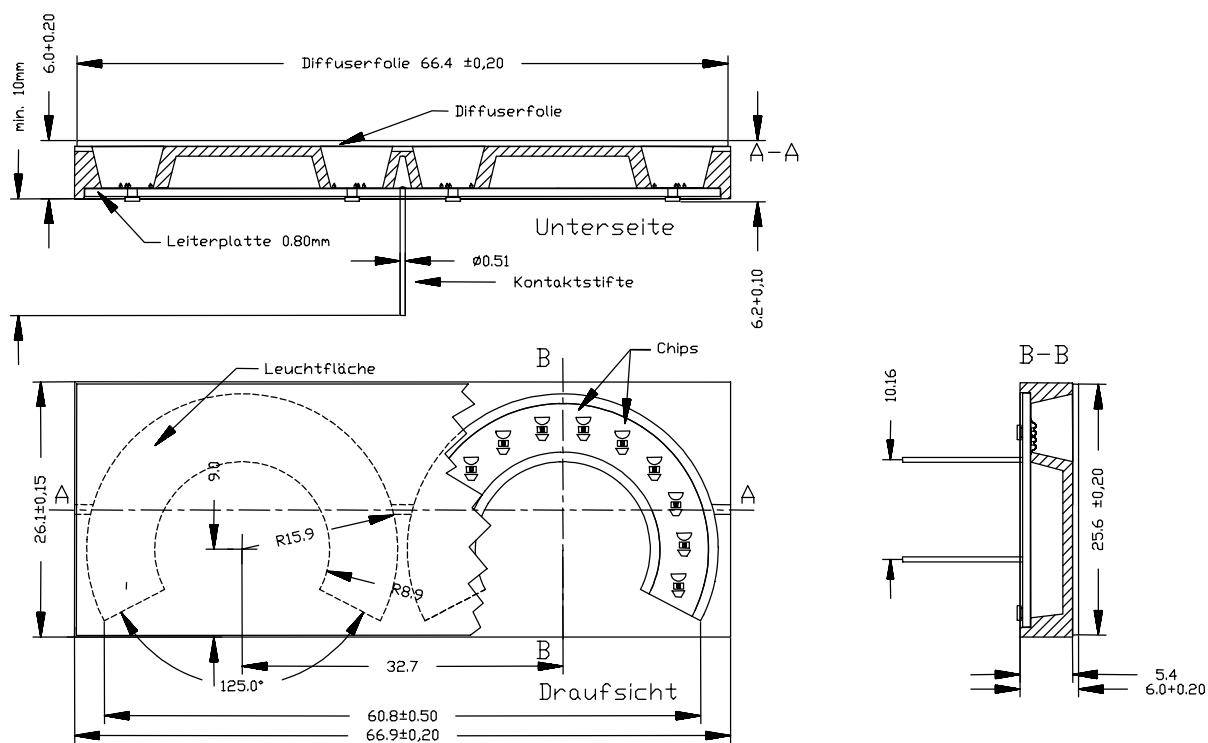
LED-Hintergrundbeleuchtung
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 076 - R	90760	640	red	284	10	60
WU - M - 076 - PG	90761	560	pure-green	44	10	60
WU - M - 076 - YG	90762	570	yellow-green	343	10	60
WU - M - 076 - Y	90763	590	yellow	202	10	60
WU - M - 076 - O	90764	620	orange	202	10	60
WU - M - 076 - A	90765	605	amber	238	10	60
WU - M - 076 - B	90766	465	blue	70	10	60
WU - M - 076 - IR	90768	870	infrared	100 W/m ²	20	120
WU - M - 076 - SO	90769	620	super-orange	1410	10	60
WU - M - 076 - SG	907610	530	super-green	1672	10	60
WU - M - 076 - SY	907611	590	super-yellow	880	10	60
WU - M - 076 - W	907612	---	white	2200	10	60
WU - M - 076 - SA	907613	605	super-amber	1144	10	60
WU - M - 076 - SB	907614	470	super-blue	968	10	60

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-076-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	120	120	120	120	120	120	120	120	120	120	120	120	300	120	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter			Unit
Power Dissipation P_D	U_F typ. x I_F per Module		mW
Reverse Voltage U_R	20		V
Operating Temperature $T_{Opr.}$	- 20 - + 80		°C
Storage Temperature $T_{Sto.}$	- 40 - + 80		°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 095 -...

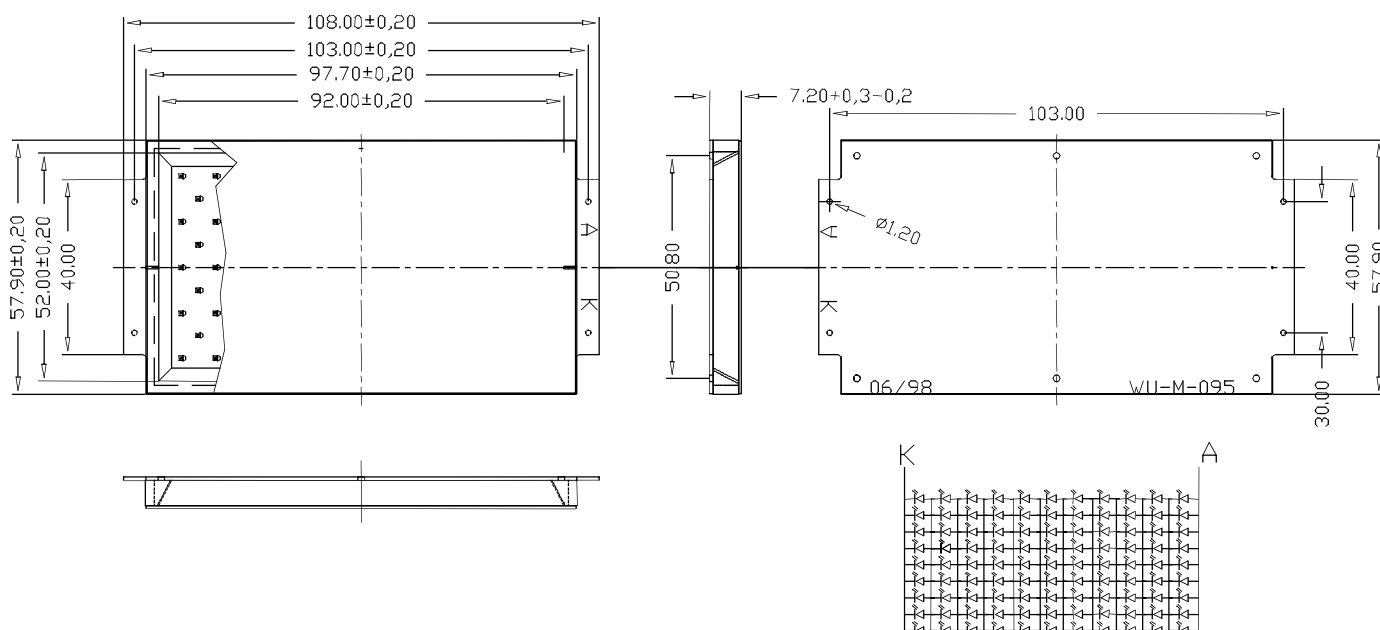
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 095 - R	90950	640	red	176	10	90
WU - M - 095 - PG	90951	560	pure-green	27	10	90
WU - M - 095 - YG	90952	570	yellow-green	213	10	90
WU - M - 095 - Y	90953	590	yellow	126	10	90
WU - M - 095 - O	90954	620	orange	126	10	90
WU - M - 095 - A	90955	605	amber	148	10	90
WU - M - 095 - B	90956	465	blue	44	10	90
WU - M - 095 - IR	90958	870	infrared	62 W/m ²	20	180
WU - M - 095 - SO	90959	620	super-orange	874	10	90
WU - M - 095 - SG	909510	530	super-green	1038	10	90
WU - M - 095 - SY	909511	590	super-yellow	546	10	90
WU - M - 095 - W	909512	---	white	1366	10	90
WU - M - 095 - SA	909513	605	super-amber	710	10	90
WU - M - 095 - SB	909514	470	super-blue	601	10	90

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-095-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	180	180	180	180	180	180	180	180	180	180	180	180	450	180	mA
U_F typ.	19.8	28.6	24.2	22.0	23.1	24.2	41.8	38.5	24.2	22.0	24.2	38.5	14.3	38.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	55	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 114 -...

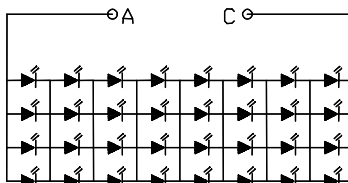
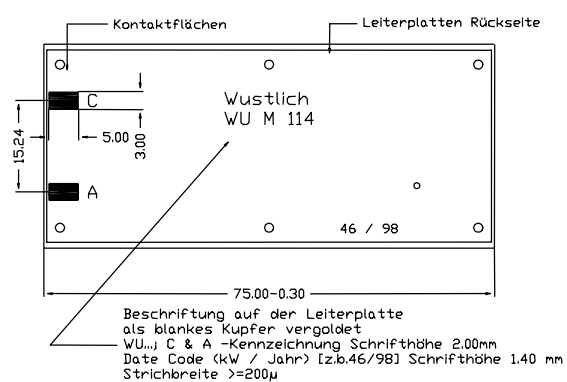
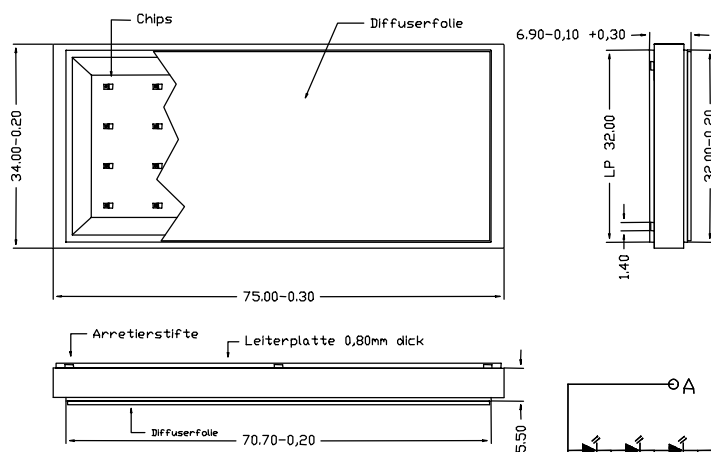
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 114 - R	91140	640	red	121	10	40
WU - M - 114 - PG	91141	560	pure-green	19	10	40
WU - M - 114 - YG	91142	570	yellow-green	146	10	40
WU - M - 114 - Y	91143	590	yellow	86	10	40
WU - M - 114 - O	91144	620	orange	86	10	40
WU - M - 114 - A	91145	605	amber	101	10	40
WU - M - 114 - B	91146	465	blue	30	10	40
WU - M - 114 - IR	91148	870	infrared	42 W/m ²	20	80
WU - M - 114 - SO	91149	620	super-orange	597	10	40
WU - M - 114 - SG	911410	530	super-green	709	10	40
WU - M - 114 - SY	911411	590	super-yellow	373	10	40
WU - M - 114 - W	911412	---	white	934	10	40
WU - M - 114 - SA	911413	605	super-amber	485	10	40
WU - M - 114 - SB	911414	470	super-blue	411	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-114-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	14.4	20.8	17.6	16.0	16.8	17.6	30.4	28.0	17.6	16.0	17.6	28.0	10.4	28.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	40	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 115 -...

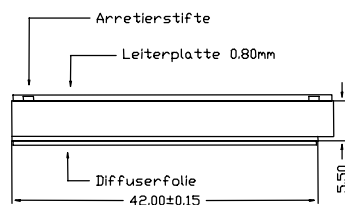
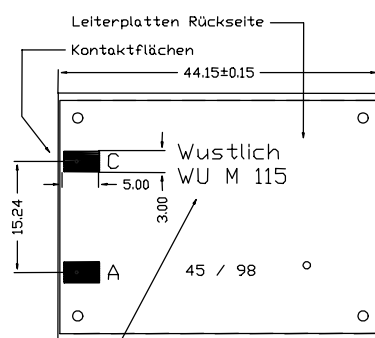
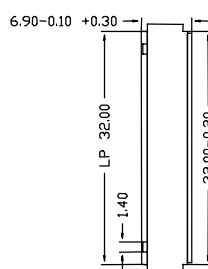
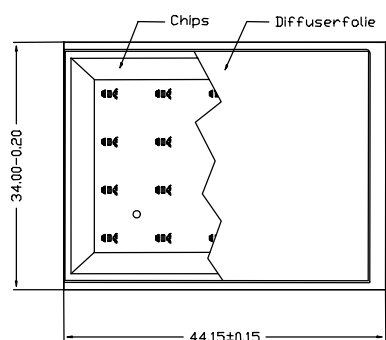
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications

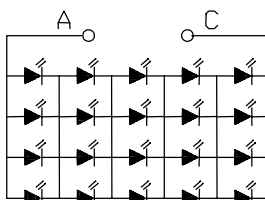


Herstellung in Deutschland

Made in Germany



Beschriftung auf der Leiterplatte
WU... Schrifthöhe 2mm
Date Code (kW / Jahr) [z.B.45/98] Schrifthöhe 1.4mm
Strichbreite >=200µ



Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 115 - R	91150	640	red	144	10	40
WU - M - 115 - PG	91151	560	pure-green	22	10	40
WU - M - 115 - YG	91152	570	yellow-green	174	10	40
WU - M - 115 - Y	91153	590	yellow	103	10	40
WU - M - 115 - O	91154	620	orange	103	10	40
WU - M - 115 - A	91155	605	amber	120	10	40
WU - M - 115 - B	91156	465	blue	36	10	40
WU - M - 115 - IR	91158	870	infrared	51 W/m ²	20	80
WU - M - 115 - SO	91159	620	super-orange	714	10	40
WU - M - 115 - SG	911510	530	super-green	847	10	40
WU - M - 115 - SY	911511	590	super-yellow	446	10	40
WU - M - 115 - W	911512	---	white	1115	10	40
WU - M - 115 - SA	911513	605	super-amber	580	10	40
WU - M - 115 - SB	911514	470	super-blue	491	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-115-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	9.0	13.0	11.0	10.0	10.5	11.0	19.0	17.5	11.0	10.0	11.0	17.5	6.5	17.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	25	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 125 -...

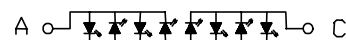
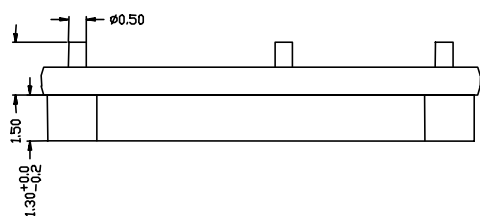
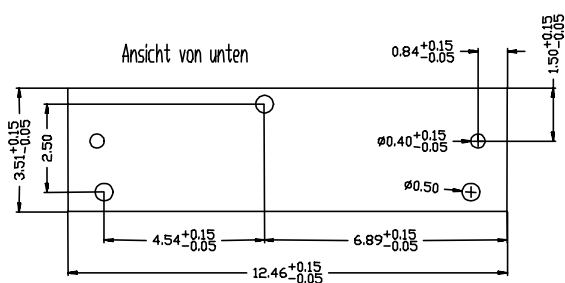
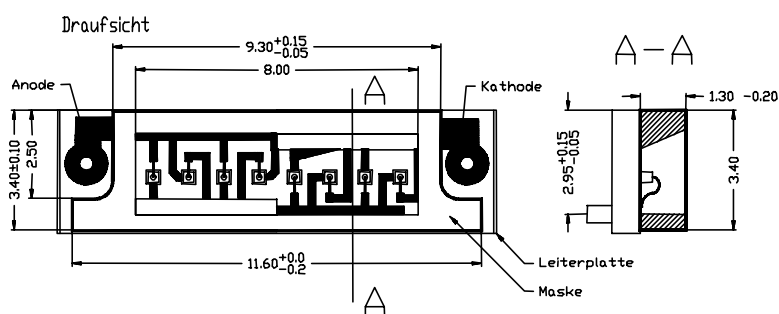
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 125 - R	91250	640	red	---	10	20
WU - M - 125 - PG	91251	560	pure-green	---	10	20
WU - M - 125 - YG	91252	570	yellow-green	---	10	20
WU - M - 125 - Y	91253	590	yellow	---	10	20
WU - M - 125 - O	91254	620	orange	---	10	20
WU - M - 125 - A	91255	605	amber	---	10	20
WU - M - 125 - B	91256	465	blue	---	10	20
WU - M - 125 - IR	91258	870	infrared	---	20	40
WU - M - 125 - SO	91259	620	super-orange	---	10	20
WU - M - 125 - SG	912510	530	super-green	---	10	20
WU - M - 125 - SY	912511	590	super-yellow	---	10	20
WU - M - 125 - W	912512	---	white	---	10	20
WU - M - 125 - SA	912513	605	super-amber	---	10	20
WU - M - 125 - SB	912514	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-125-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

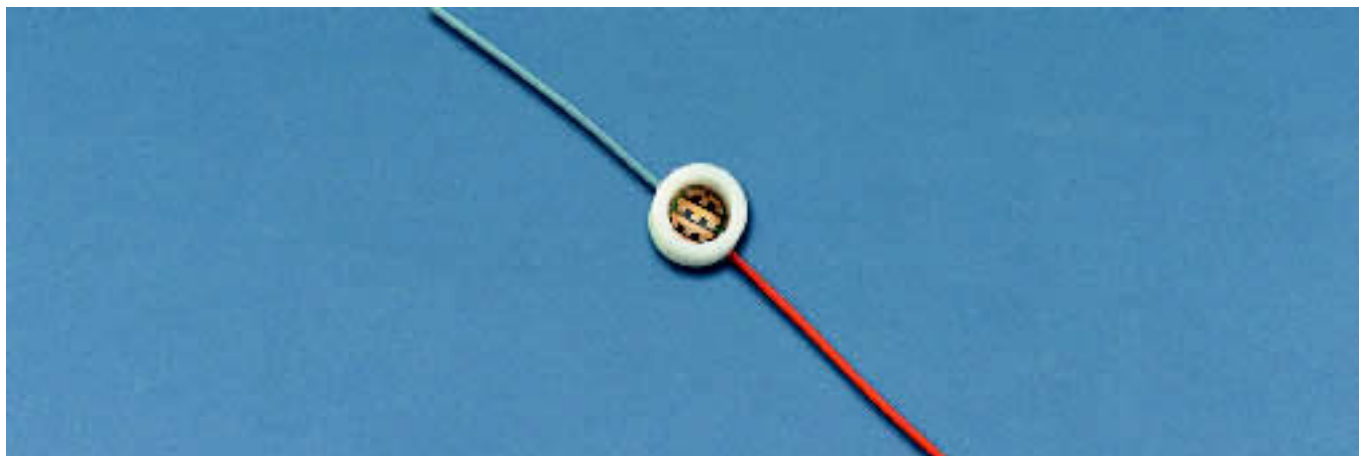


COB - Technologie

WU - M - 164 -...

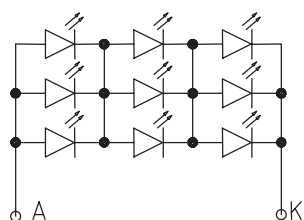
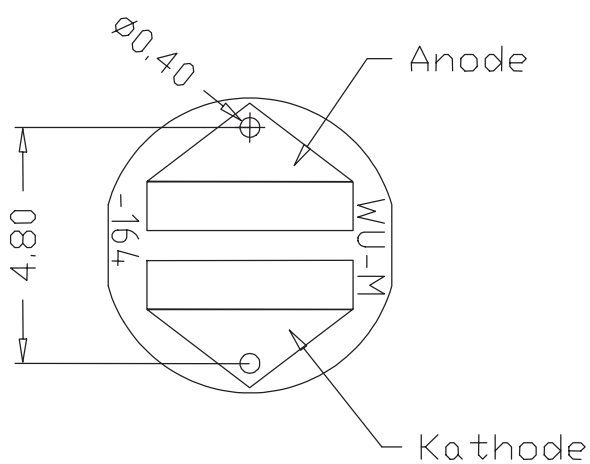
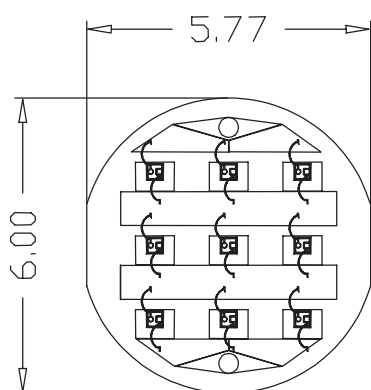
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 164 - R	91640	640	red	---	10	30
WU - M - 164 - PG	91641	560	pure-green	---	10	30
WU - M - 164 - YG	91642	570	yellow-green	---	10	30
WU - M - 164 - Y	91643	590	yellow	---	10	30
WU - M - 164 - O	91644	620	orange	---	10	30
WU - M - 164 - A	91645	605	amber	---	10	30
WU - M - 164 - B	91646	465	blue	---	10	30
WU - M - 164 - IR	91648	870	infrared	---	20	60
WU - M - 164 - SO	91649	620	super-orange	---	10	30
WU - M - 164 - SG	916410	530	super-green	---	10	30
WU - M - 164 - SY	916411	590	super-yellow	---	10	30
WU - M - 164 - W	916412	---	white	---	10	30
WU - M - 164 - SA	916413	605	super-amber	---	10	30
WU - M - 164 - SB	916414	470	super-blue	---	10	30

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-164-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	60	60	60	60	60	60	60	60	60	60	60	60	150	60	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



®

COB - Technologie

WU - M - 056 -...

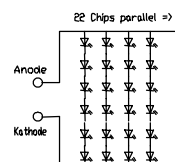
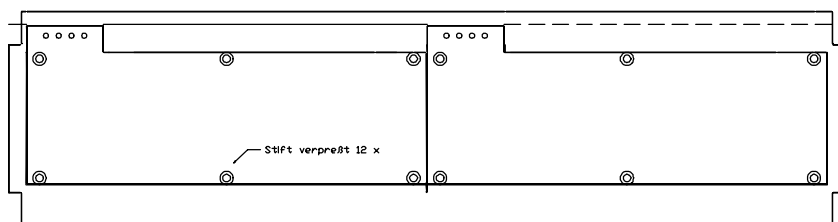
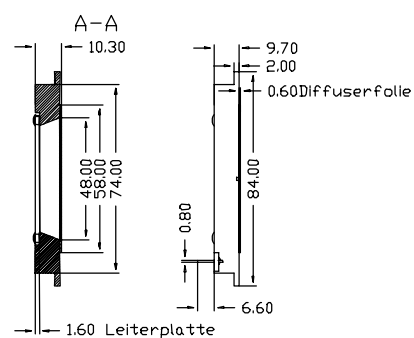
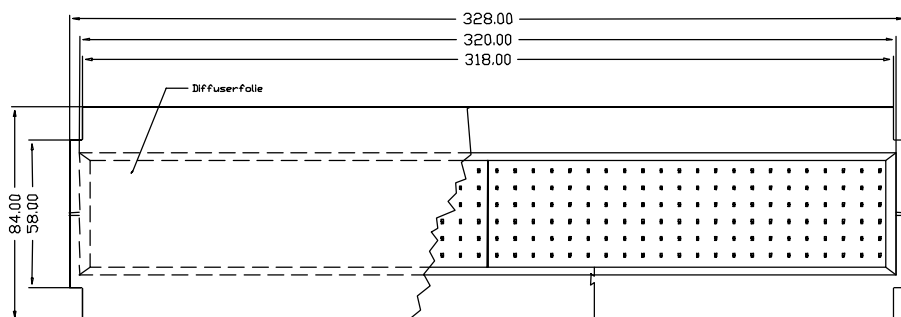
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 056 - R	90560	640	red	121	10	440
WU - M - 056 - PG	90561	560	pure-green	19	10	440
WU - M - 056 - YG	90562	570	yellow-green	146	10	440
WU - M - 056 - Y	90563	590	yellow	86	10	440
WU - M - 056 - O	90564	620	orange	86	10	440
WU - M - 056 - A	90565	605	amber	101	10	440
WU - M - 056 - B	90566	465	blue	30	10	440
WU - M - 056 - IR	90568	870	infrared	43 W/m ²	20	880
WU - M - 056 - SO	90569	620	super-orange	601	10	440
WU - M - 056 - SG	905610	530	super-green	713	10	440
WU - M - 056 - SY	905611	590	super-yellow	376	10	440
WU - M - 056 - W	905612	---	white	939	10	440
WU - M - 056 - SA	905613	605	super-amber	488	10	440
WU - M - 056 - SB	905614	470	super-blue	413	10	440

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-056-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	880	880	880	880	880	880	880	880	880	880	880	880	2200	880	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 057 -...

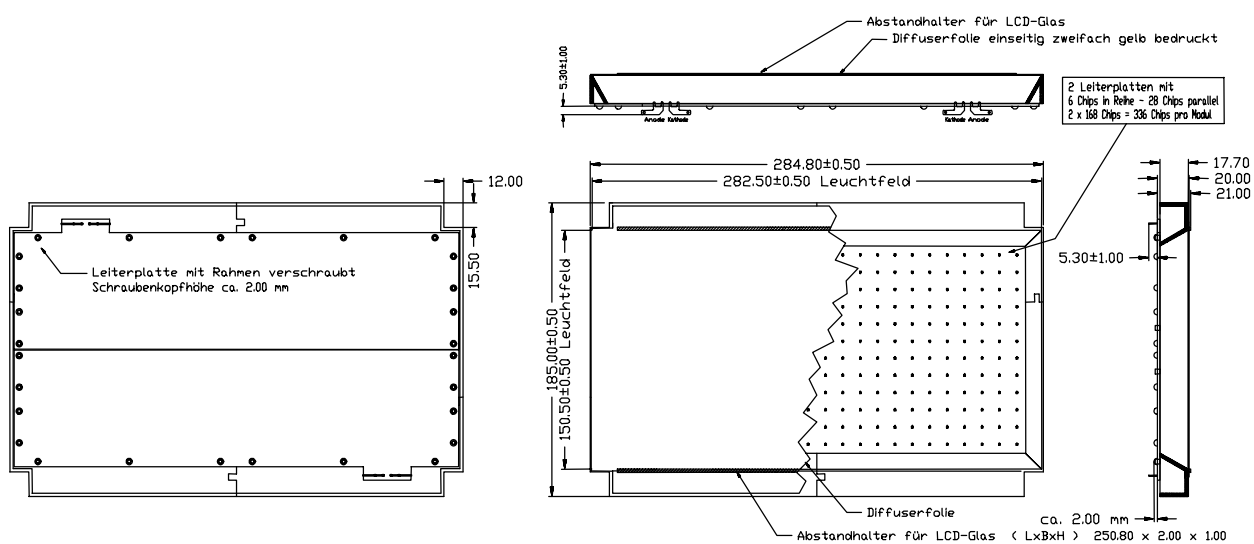
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 057 - R	90570	640	red	73	10	560
WU - M - 057 - PG	90571	560	pure-green	11	10	560
WU - M - 057 - YG	90572	570	yellow-green	88	10	560
WU-- M - 057 - Y	90573	590	yellow	52	10	560
WU - M - 057 - O	90574	620	orange	52	10	560
WU - M - 057 - A	90575	605	amber	61	10	560
WU - M - 057 - B	90576	465	blue	18	10	560
WU - M - 057 - IR	90578	870	infrared	26 W/m ²	20	1120
WU - M - 057 - SO	90579	620	super-orange	363	10	560
WU - M - 057 - SG	905710	530	super-green	431	10	560
WU - M - 057 - SY	905711	590	super-yellow	227	10	560
WU - M - 057 - W	905712	---	white	567	10	560
WU - M - 057 - SA	905713	605	super-amber	295	10	560
WU - M - 057 - SB	905714	470	super-blue	250	10	560

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-057-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	1120	2800	1120	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



®

COB - Technologie

WU - M - 101 -...

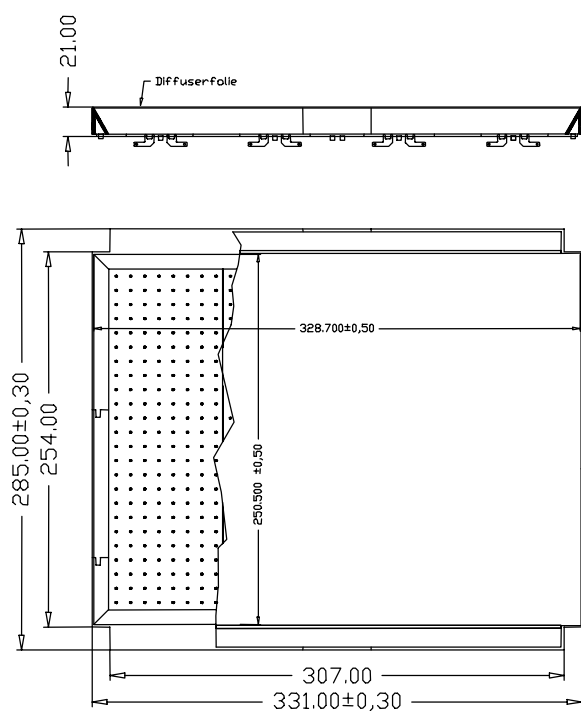
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
and other technical light applications

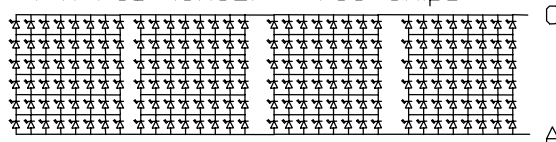


Herstellung in Deutschland

Made in Germany



4 × PCB (6×32) = 768 Chips



Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 101 - R	91010	640	red	84	10	1280
WU - M - 101 - PG	91011	560	pure-green	13	10	1280
WU - M - 101 - YG	91012	570	yellow-green	101	10	1280
WU - M - 101 - Y	91013	590	yellow	60	10	1280
WU - M - 101 - O	91014	620	orange	60	10	1280
WU - M - 101 - A	91015	605	amber	76	10	1280
WU - M - 101 - B	91016	465	blue	21	10	1280
WU - M - 101 - IR	91018	870	infrared	30 W/m ²	20	2560
WU - M - 101 - SO	91019	620	super-orange	416	10	1280
WU - M - 101 - SG	910110	530	super-green	494	10	1280
WU - M - 101 - SY	910111	590	super-yellow	260	10	1280
WU - M - 101 - W	910112	---	white	650	10	1280
WU - M - 101 - SA	910113	605	super-amber	339	10	1280
WU - M - 101 - SB	910114	470	super-blue	296	10	1280

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-101-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	6400	2560	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 102 -...

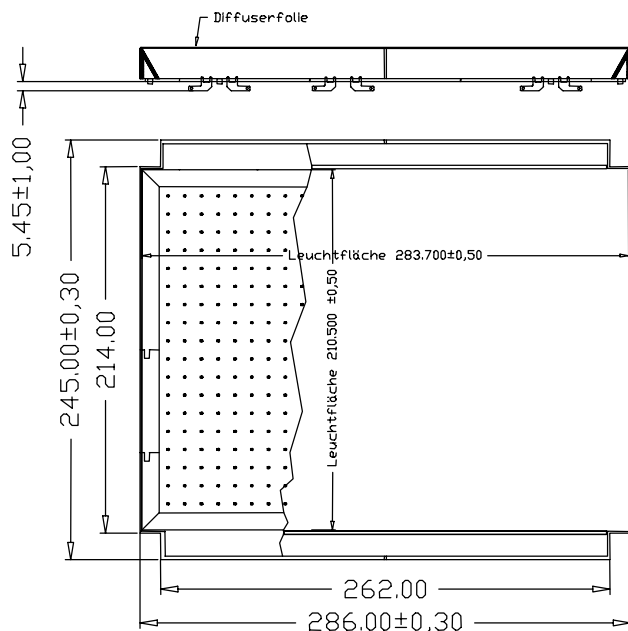
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
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LED-Back Lights for LCD-Displays
and other technical light applications

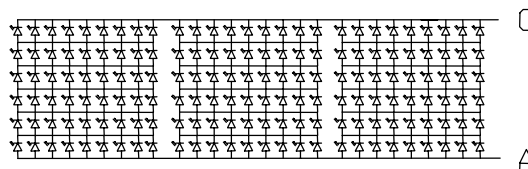


Herstellung in Deutschland

Made in Germany



3 x PCB 6x27 Chips = 486 Leds



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 102 - R	91020	640	red	74	10	810
WU - M - 102 - PG	91021	560	pure-green	11	10	810
WU - M - 102 - YG	91022	570	yellow-green	89	10	810
WU - M - 102 - Y	91023	590	yellow	53	10	810
WU - M - 102 - O	91024	620	orange	53	10	810
WU - M - 102 - A	91025	605	amber	62	10	810
WU - M - 102 - B	91026	465	blue	18	10	810
WU - M - 102 - IR	91028	870	infrared	26 W/m ²	20	1620
WU - M - 102 - SO	91029	620	super-orange	366	10	810
WU - M - 102 - SG	910210	530	super-green	435	10	810
WU - M - 102 - SY	910211	590	super-yellow	229	10	810
WU - M - 102 - W	910212	---	white	572	10	810
WU - M - 102 - SA	910213	605	super-amber	297	10	810
WU - M - 102 - SB	910214	470	super-blue	252	10	810

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-102-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	4050	1620	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 010 - ...

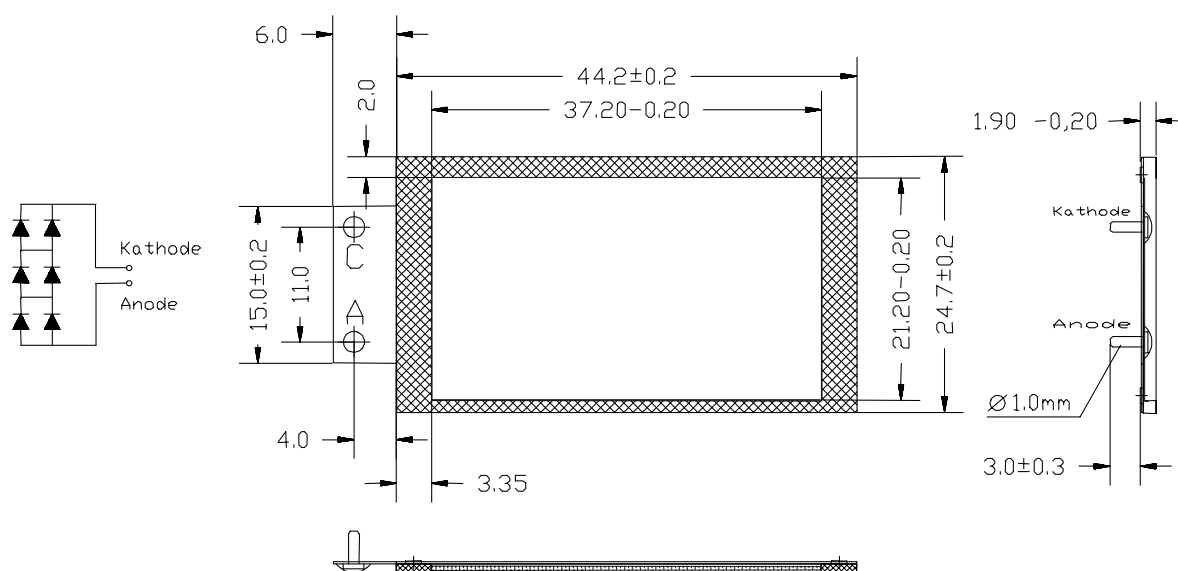
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 010 - R	90100	640	red	65	10	20
WU - M - 010 - PG	90101	560	pure-green	10	10	20
WU - M - 010 - YG	90102	570	yellow-green	78	10	20
WU - M - 010 - Y	90103	590	yellow	46	10	20
WU - M - 010 - O	90104	620	orange	46	10	20
WU - M - 010 - A	90105	605	amber	54	10	20
WU - M - 010 - B	90106	465	blue	16	10	20
WU - M - 010 - IR	90108	870	infrared	23 W/m ²	20	40
WU - M - 010 - SO	90109	620	super-orange	321	10	20
WU - M - 010 - SG	901010	530	super-green	382	10	20
WU - M - 010 - SY	901011	590	super-yellow	201	10	20
WU - M - 010 - W	901012	---	white	502	10	20
WU - M - 010 - SA	901013	605	super-amber	261	10	20
WU - M - 010 - SB	901014	470	super-blue	221	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -010-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 030 - ...

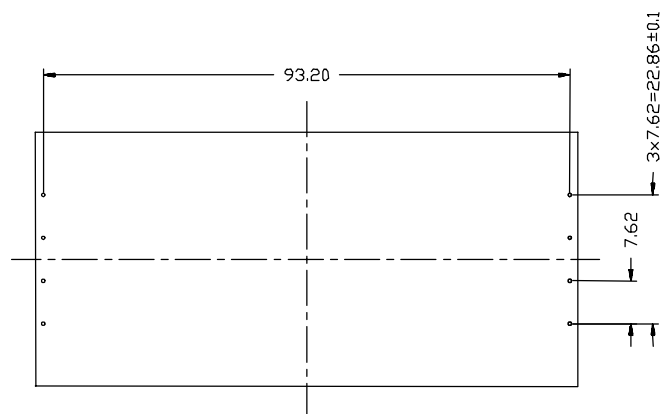
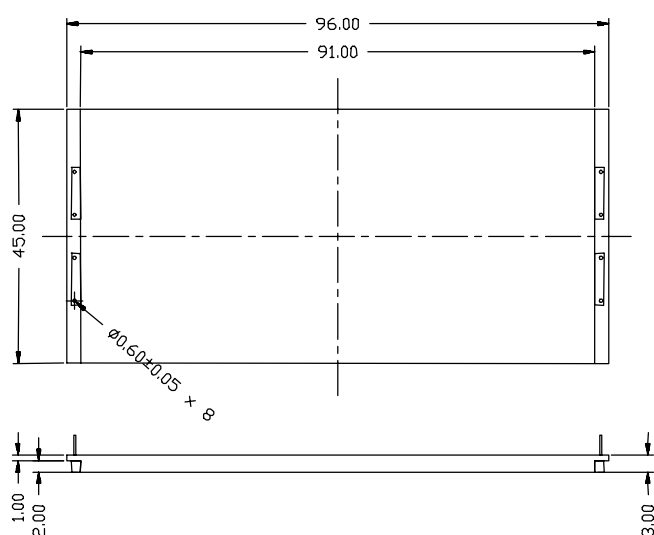
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 030 - R	90300	640	red	17	10	40
WU - M - 030 - PG	90301	560	pure-green	3	10	40
WU - M - 030 - YG	90302	570	yellow-green	20	10	40
WU - M - 030 - Y	90303	590	yellow	12	10	40
WU - M - 030 - O	90304	620	orange	12	10	40
WU - M - 030 - A	90305	605	amber	14	10	40
WU - M - 030 - B	90306	465	blue	4	10	40
WU - M - 030 - IR	90308	870	infrared	6 W/m ²	20	80
WU - M - 030 - SO	90309	620	super-orange	83	10	40
WU - M - 030 - SG	903010	530	super-green	98	10	40
WU - M - 030 - SY	903011	590	super-yellow	52	10	40
WU - M - 030 - W	903012	---	white	129	10	40
WU - M - 030 - SA	903013	605	super-amber	67	10	40
WU - M - 030 - SB	903014	470	super-blue	57	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -030-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 031 - ...

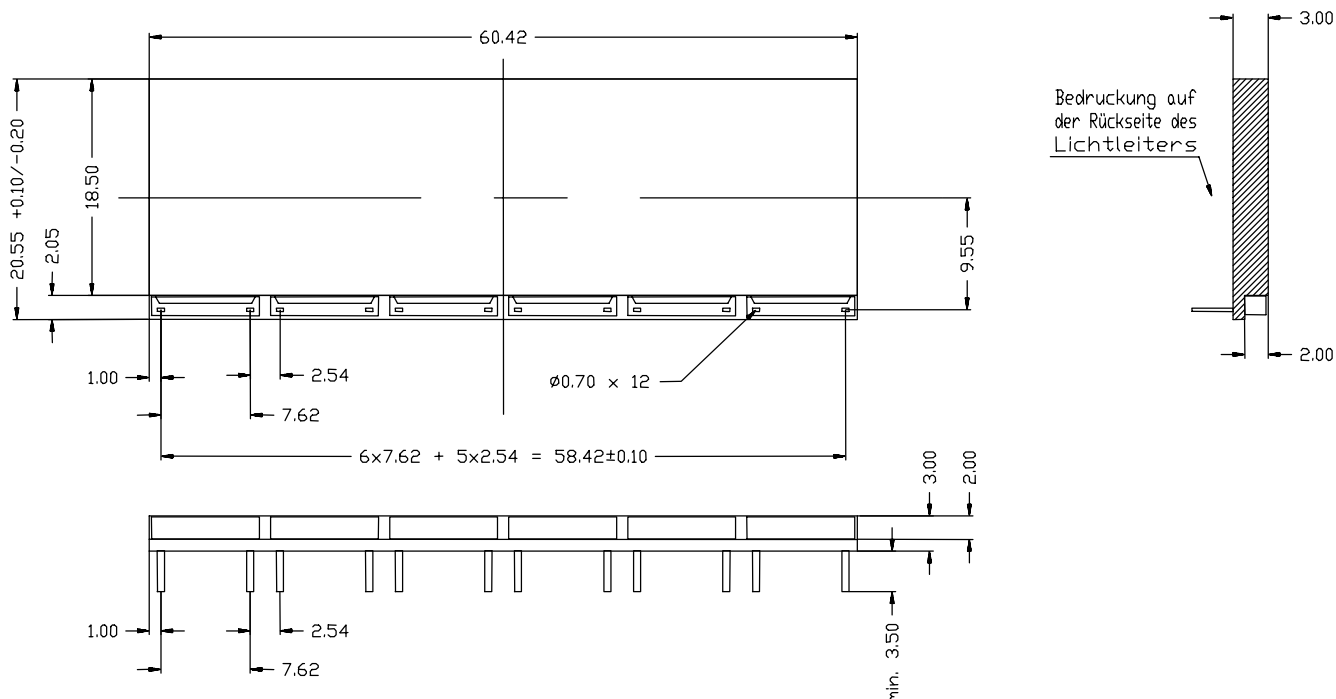
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 031 - R	90310	640	red	92	10	60
WU - M - 031 - PG	90311	560	pure-green	14	10	60
WU - M - 031 - YG	90312	570	yellow-green	111	10	60
WU - M - 031 - Y	90313	590	yellow	65	10	60
WU - M - 031 - O	90314	620	orange	65	10	60
WU - M - 031 - A	90315	605	amber	77	10	60
WU - M - 031 - B	90316	465	blue	23	10	60
WU - M - 031 - IR	90318	870	infrared	32 W/m ²	20	120
WU - M - 031 - SO	90319	620	super-orange	453	10	60
WU - M - 031 - SG	903110	530	super-green	539	10	60
WU - M - 031 - SY	903111	590	super-yellow	283	10	60
WU - M - 031 - W	903112	---	white	709	10	60
WU - M - 031 - SA	903113	605	super-amber	368	10	60
WU - M - 031 - SB	903114	470	super-blue	312	10	60

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -031-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	120	120	120	120	120	120	120	120	120	120	120	120	300	120	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 034 - ...

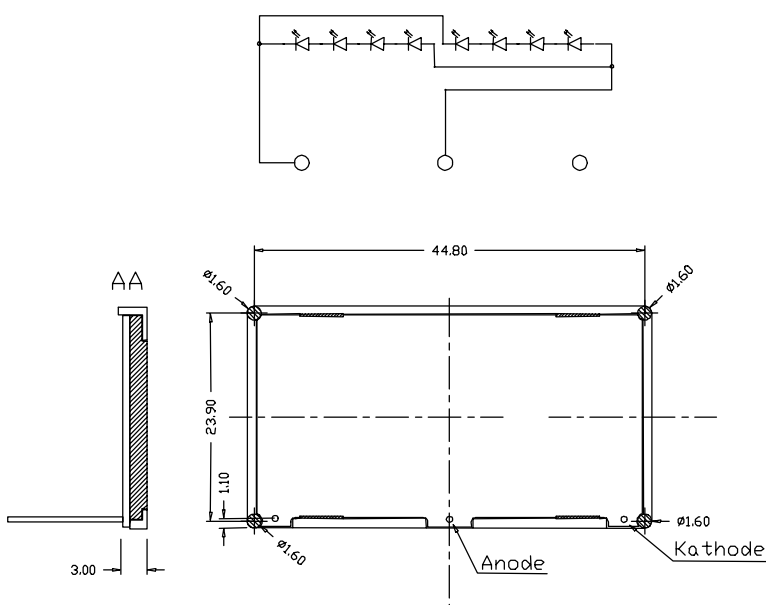
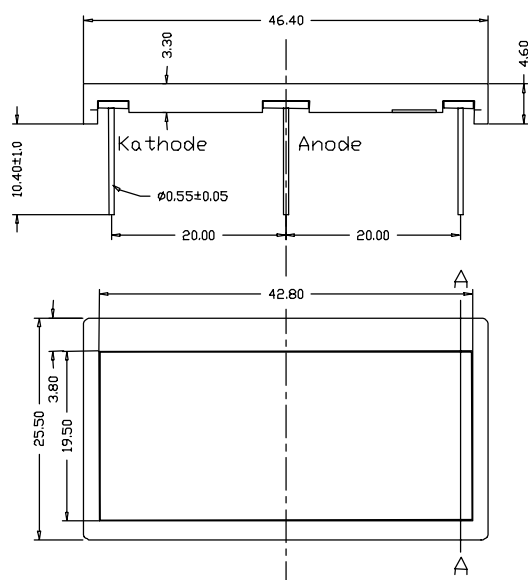
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 034 - R	90340	640	red	82	10	20
WU - M - 034 - PG	90341	560	pure-green	13	10	20
WU - M - 034 - YG	90342	570	yellow-green	99	10	20
WU - M - 034 - Y	90343	590	yellow	58	10	20
WU - M - 034 - O	90344	620	orange	58	10	20
WU - M - 034 - A	90345	605	amber	68	10	20
WU - M - 034 - B	90346	465	blue	20	10	20
WU - M - 034 - IR	90348	870	infrared	29 W/m ²	20	40
WU - M - 034 - SO	90349	620	super-orange	405	10	20
WU - M - 034 - SG	903410	530	super-green	481	10	20
WU - M - 034 - SY	903411	590	super-yellow	253	10	20
WU - M - 034 - W	903412	---	white	633	10	20
WU - M - 034 - SA	903413	605	super-amber	329	10	20
WU - M - 034 - SB	903414	470	super-blue	278	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -034-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters /Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	7.2	10.4	8.8	8.0	8.4	8.8	15.2	14.0	8.8	8.0	8.8	14.0	5.2	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	63	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	20	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 044 - ...

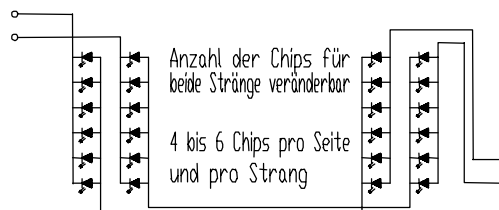
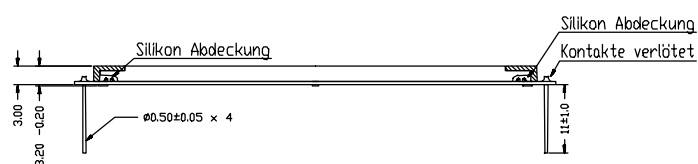
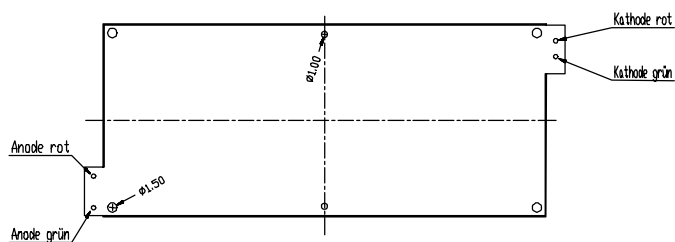
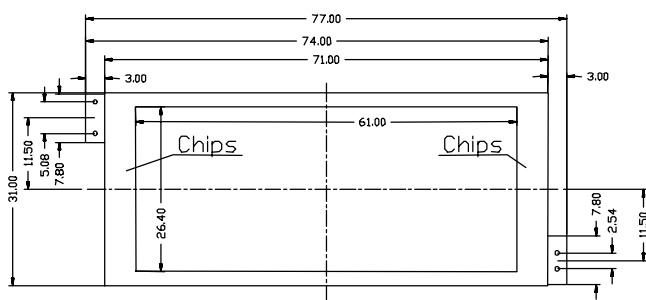
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 044 - R	90440	640	red	127	10	40
WU - M - 044 - PG	90441	560	pure-green	20	10	40
WU - M - 044 - YG	90442	570	yellow-green	153	10	40
WU - M - 044 - Y	90443	590	yellow	90	10	40
WU - M - 044 - O	90444	620	orange	90	10	40
WU - M - 044 - A	90445	605	amber	106	10	40
WU - M - 044 - B	90446	465	blue	31	10	40
WU - M - 044 - IR	90448	870	infrared	45 W/m ²	20	80
WU - M - 044 - SO	90449	620	super-orange	630	10	40
WU - M - 044 - SG	904410	530	super-green	748	10	40
WU - M - 044 - SY	904411	590	super-yellow	393	10	40
WU - M - 044 - W	904412	---	white	984	10	40
WU - M - 044 - SA	904413	605	super-amber	511	10	40
WU - M - 044 - SB	904414	470	super-blue	433	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -044-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

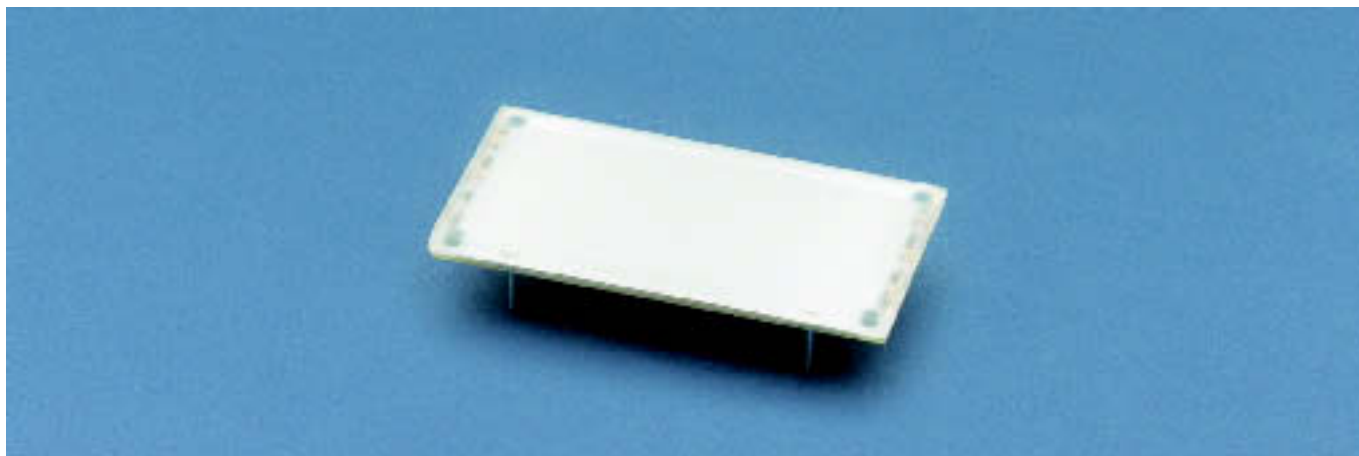


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WU - M - 051 - ...

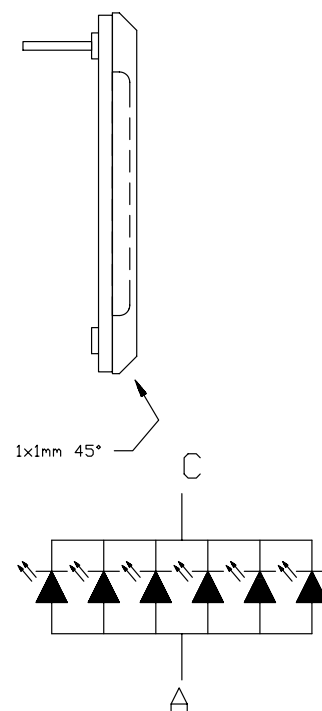
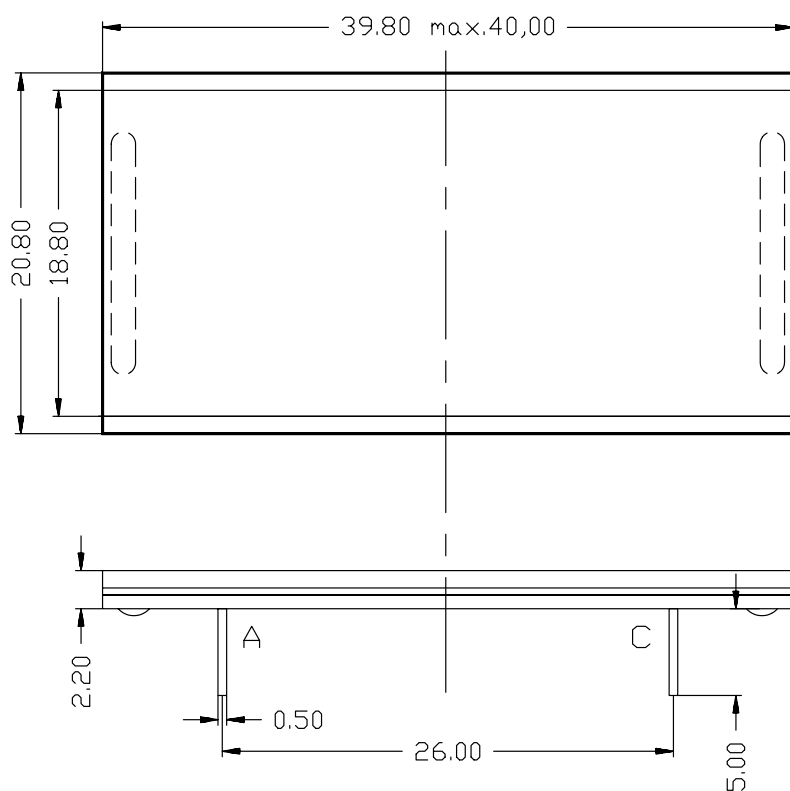
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 051 - R	90510	640	red	68	10	60
WU - M - 051 - PG	90511	560	pure-green	11	10	60
WU - M - 051 - YG	90512	570	yellow-green	83	10	60
WU - M - 051 - Y	90513	590	yellow	49	10	60
WU - M - 051 - O	90514	620	orange	49	10	60
WU - M - 051 - A	90515	605	amber	57	10	60
WU - M - 051 - B	90516	465	blue	17	10	60
WU - M - 051 - IR	90518	870	infrared	24 W/m ²	20	120
WU - M - 051 - SO	90519	620	super-orange	339	10	60
WU - M - 051 - SG	905110	530	super-green	402	10	60
WU - M - 051 - SY	905111	590	super-yellow	212	10	60
WU - M - 051 - W	905112	---	white	529	10	60
WU - M - 051 - SA	905113	605	super-amber	275	10	60
WU - M - 051 - SB	905114	470	super-blue	233	10	60

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -051-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	120	120	120	120	120	120	120	120	120	120	120	120	300	120	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



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WU - M - 053 -...

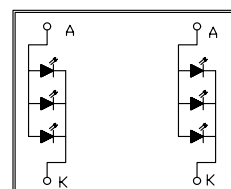
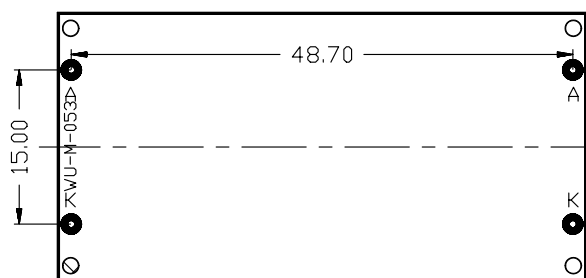
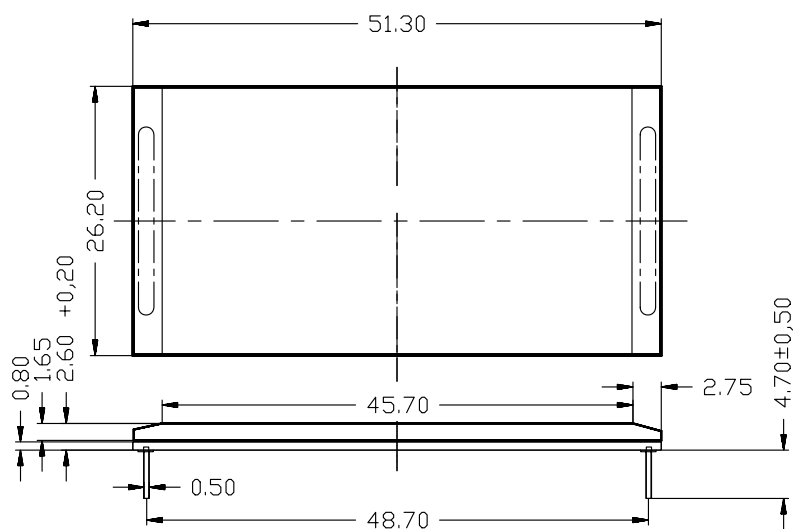
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 053 - R	90530	640	red	43	10	60
WU - M - 053 - PG	90531	560	pure-green	7	10	60
WU - M - 053 - YG	90532	570	yellow-green	52	10	60
WU-- M - 053 - Y	90533	590	yellow	30	10	60
WU - M - 053 - O	90534	620	orange	30	10	60
WU - M - 053 - A	90535	605	amber	36	10	60
WU - M - 053 - B	90536	465	blue	11	10	60
WU - M - 053 - IR	90538	870	infrared	15 W/m ²	20	120
WU - M - 053 - SO	90539	620	super-orange	212	10	60
WU - M - 053 - SG	905310	530	super-green	251	10	60
WU - M - 053 - SY	905311	590	super-yellow	132	10	60
WU - M - 053 - W	905312	---	white	331	10	60
WU - M - 053 - SA	905313	605	super-amber	172	10	60
WU - M - 053 - SB	905314	470	super-blue	146	10	60

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-053-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	120	120	120	120	120	120	120	120	120	120	120	120	300	120	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



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WU - M - 055 -...

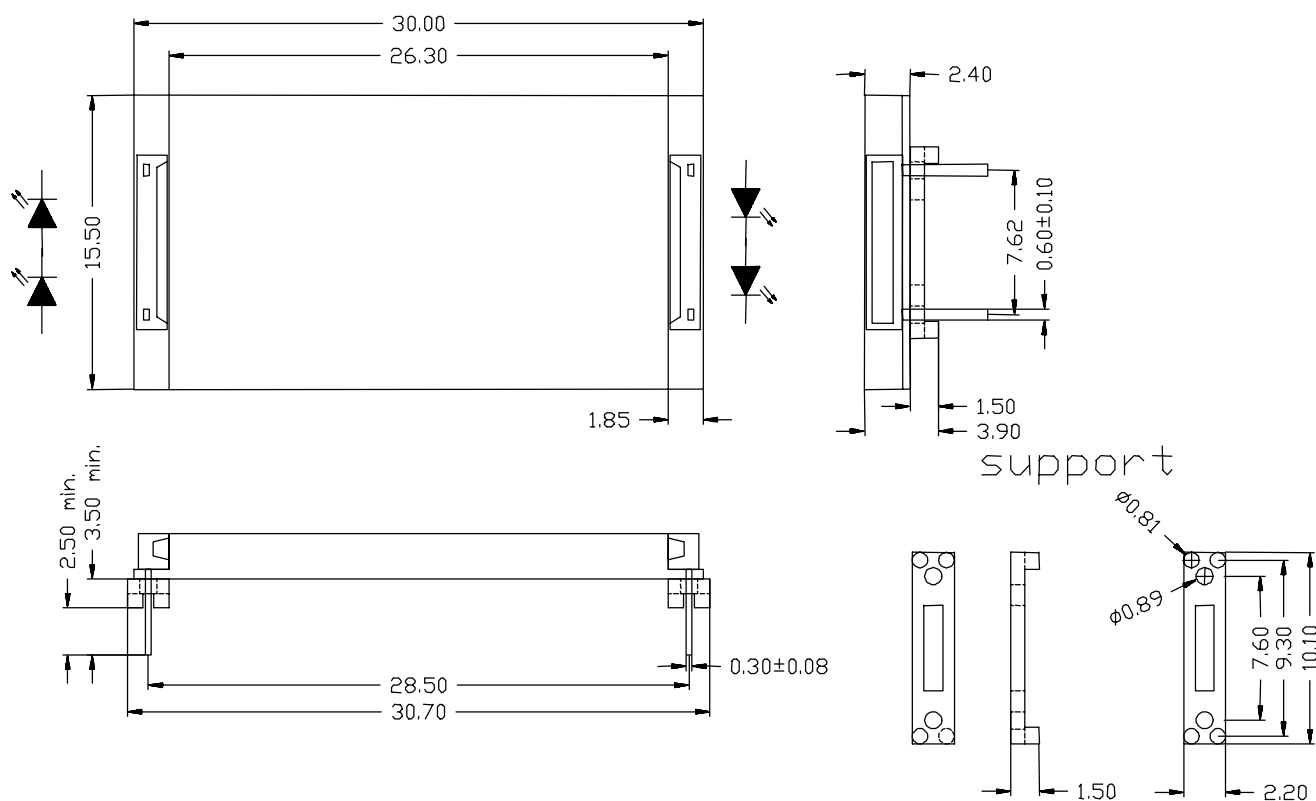
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 055 - R	90550	640	red	84	10	20
WU - M - 055 - PG	90551	560	pure-green	13	10	20
WU - M - 055 - YG	90552	570	yellow-green	101	10	20
WU-- M - 055 - Y	90553	590	yellow	60	10	20
WU - M - 055 - O	90554	620	orange	60	10	20
WU - M - 055 - A	90555	605	amber	70	10	20
WU - M - 055 - B	90556	465	blue	21	10	20
WU - M - 055 - IR	90558	870	infrared	29 W/m ²	20	40
WU - M - 055 - SO	90559	620	super-orange	414	10	20
WU - M - 055 - SG	905510	530	super-green	492	10	20
WU - M - 055 - SY	905511	590	super-yellow	259	10	20
WU - M - 055 - W	905512	---	white	648	10	20
WU - M - 055 - SA	905513	605	super-amber	337	10	20
WU - M - 055 - SB	905514	470	super-blue	285	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-055-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



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WU - M - 063 -...

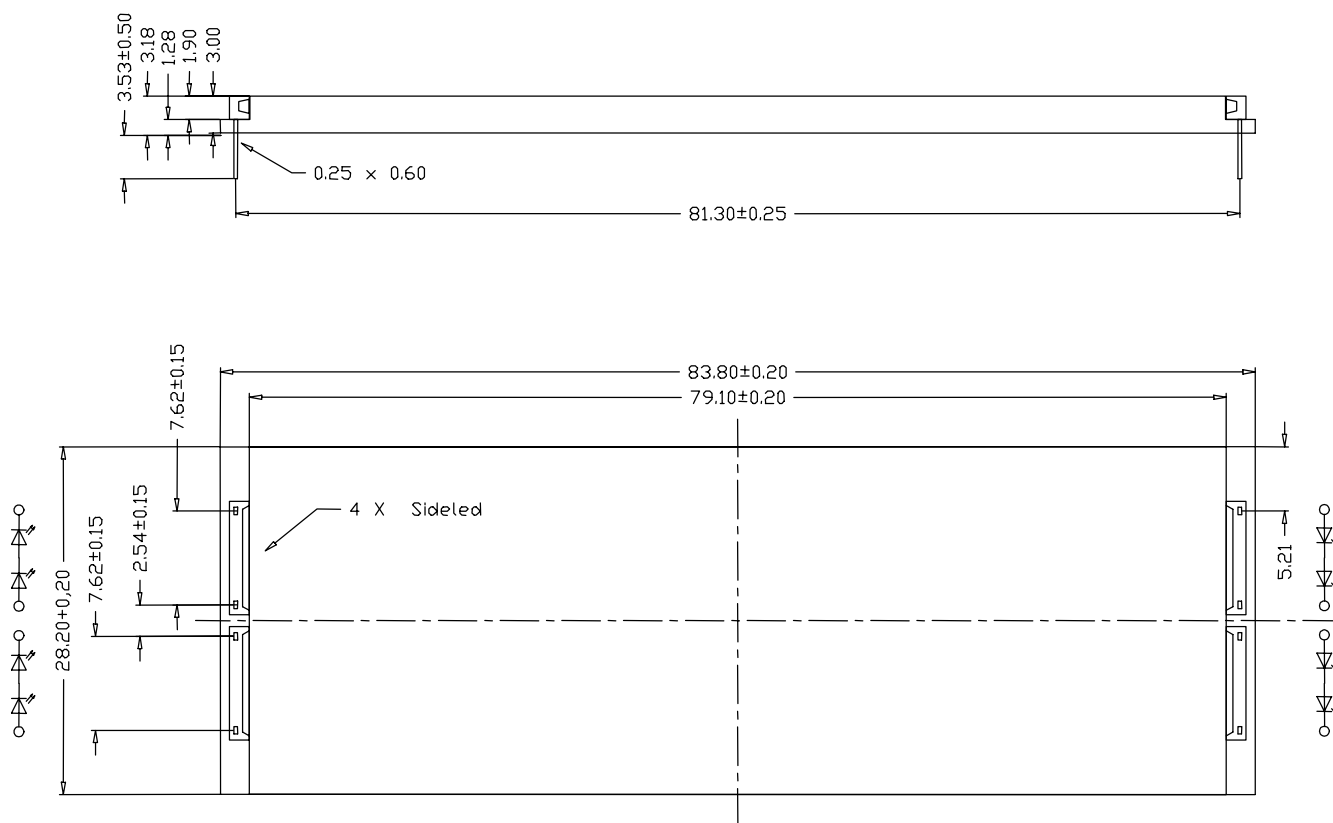
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

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Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 063 - R	90630	640	red	31	10	40
WU - M - 063 - PG	90631	560	pure-green	5	10	40
WU - M - 063 - YG	90632	570	yellow-green	37	10	40
WU - M - 063 - Y	90633	590	yellow	22	10	40
WU - M - 063 - O	90634	620	orange	22	10	40
WU - M - 063 - A	90635	605	amber	26	10	40
WU - M - 063 - B	90636	465	blue	8	10	40
WU - M - 063 - IR	90638	870	infrared	11	20	80
WU - M - 063 - SO	90639	620	super-orange	151	10	40
WU - M - 063 - SG	906310	530	super-green	180	10	40
WU - M - 063 - SY	906311	590	super-yellow	95	10	40
WU - M - 063 - W	906312	---	white	237	10	40
WU - M - 063 - SA	906313	605	super-amber	123	10	40
WU - M - 063 - SB	906314	470	super-blue	104	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-063-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

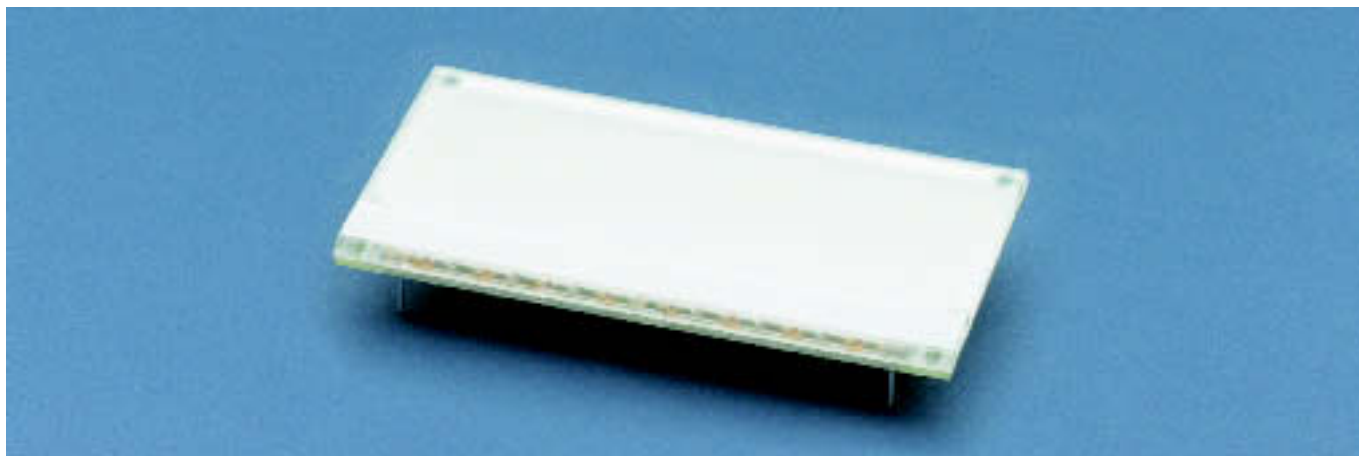


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WU - M - 069 -...

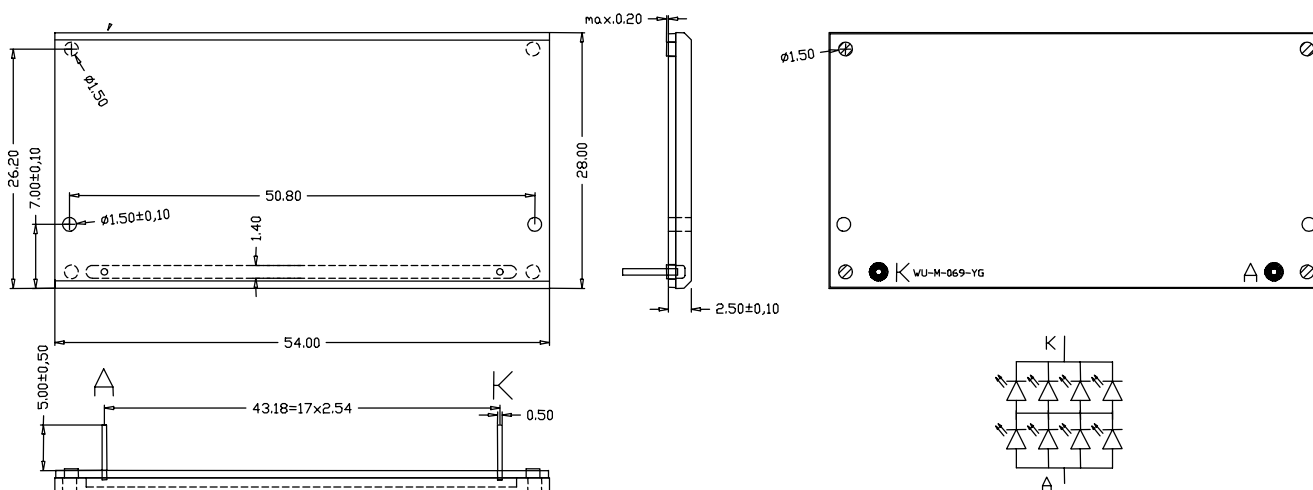
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 069 - R	90690	640	red	48	10	40
WU - M - 069 - PG	90691	560	pure-green	7	10	40
WU - M - 069 - YG	90692	570	yellow-green	58	10	40
WU - M - 069 - Y	90693	590	yellow	34	10	40
WU - M - 069 - O	90694	620	orange	34	10	40
WU - M - 069 - A	90695	605	amber	40	10	40
WU - M - 069 - B	90696	465	blue	12	10	40
WU - M - 069 - IR	90698	870	infrared	17 W/m ²	20	80
WU - M - 069 - SO	90699	620	super-orange	239	10	40
WU - M - 069 - SG	906910	530	super-green	284	10	40
WU - M - 069 - SY	906911	590	super-yellow	149	10	40
WU - M - 069 - W	906912	---	white	373	10	40
WU - M - 069 - SA	906913	605	super-amber	194	10	40
WU - M - 069 - SB	906914	470	super-blue	164	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-069-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



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WU - M - 100 -...

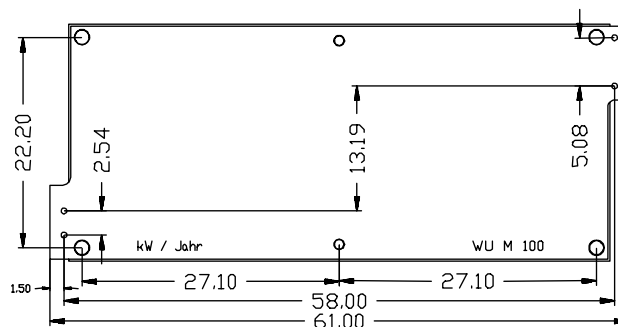
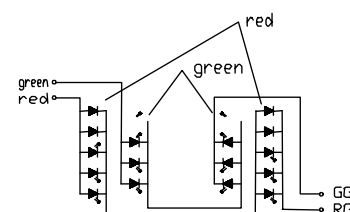
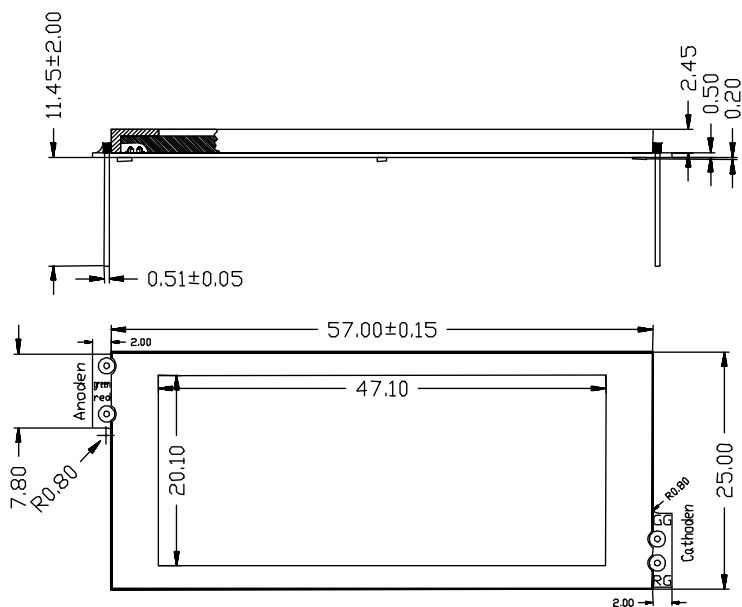
LED-Hintergrundbeleuchtung
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 100 - R	91000	640	red	90	10	50
WU - M - 100 - PG	91001	560	pure-green	14	10	50
WU - M - 100 - YG	91002	570	yellow-green	109	10	50
WU - M - 100 - Y	91003	590	yellow	64	10	50
WU - M - 100 - O	91004	620	orange	64	10	50
WU - M - 100 - A	91005	605	amber	75	10	50
WU - M - 100 - B	91006	465	blue	22	10	50
WU - M - 100 - IR	91008	870	infrared	32 W/m ²	20	100
WU - M - 100 - SO	91009	620	super-orange	447	10	50
WU - M - 100 - SG	910010	530	super-green	530	10	50
WU - M - 100 - SY	910011	590	super-yellow	279	10	50
WU - M - 100 - W	910012	---	white	697	10	50
WU - M - 100 - SA	910013	605	super-amber	363	10	50
WU - M - 100 - SB	910014	470	super-blue	307	10	50

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-100-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	100	100	100	100	100	100	100	100	100	100	100	100	250	100	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



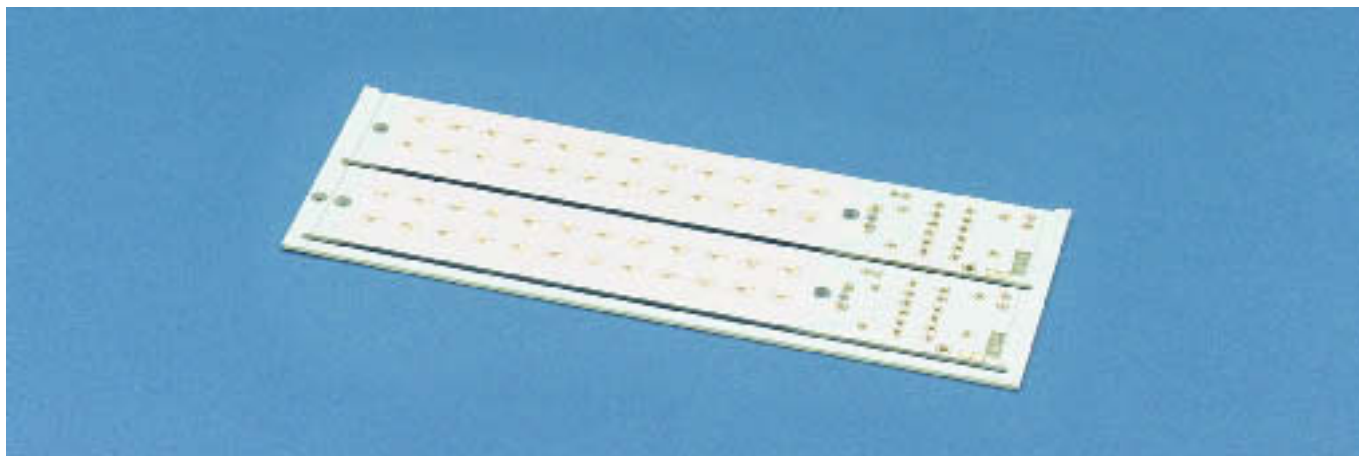
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WU - M - 005 - ...

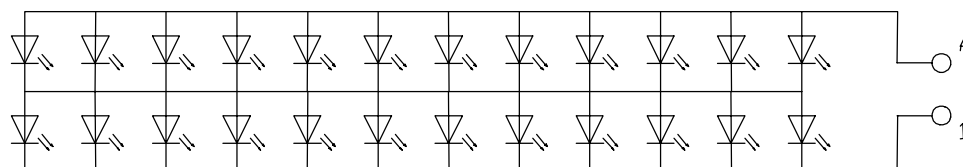
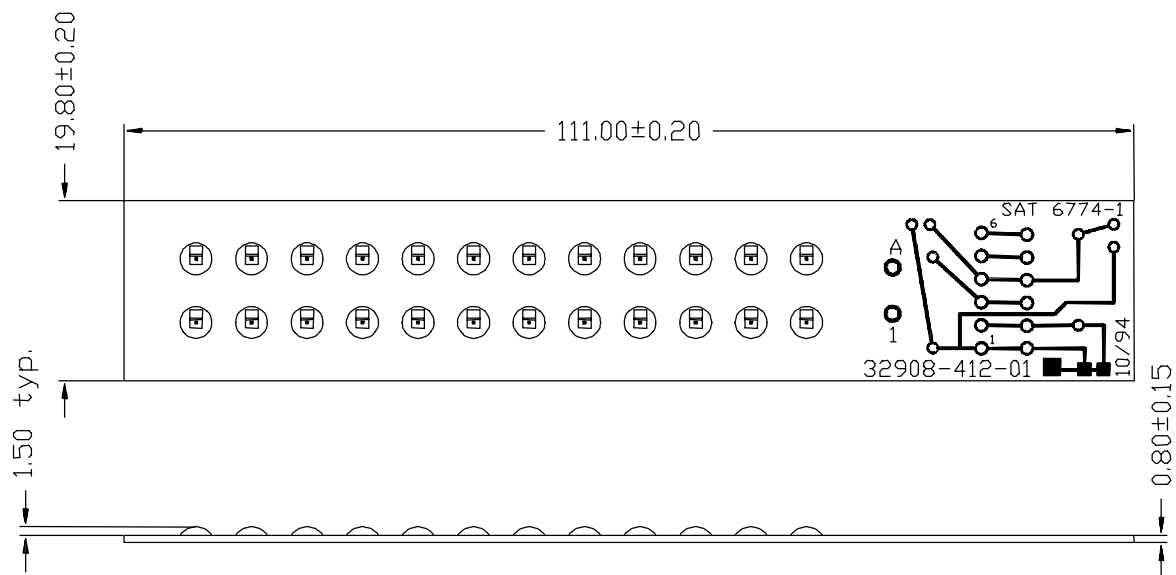
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 005 - R	90050	640	red	93	10	120
WU - M - 005 - PG	90051	560	pure-green	14	10	120
WU - M - 005 - YG	90052	570	yellow-green	122	10	120
WU - M - 005 - Y	90053	590	yellow	66	10	120
WU - M - 005 - O	90054	620	orange	66	10	120
WU - M - 005 - A	90055	605	amber	78	10	120
WU - M - 005 - B	90056	465	blue	23	10	120
WU - M - 005 - IR	90058	870	infrared	33 W/m ²	20	240
WU - M - 005 - SO	90059	620	super-orange	461	10	120
WU - M - 005 - SG	900510	530	super-green	548	10	120
WU - M - 005 - SY	900511	590	super-yellow	288	10	120
WU - M - 005 - W	900512	---	white	721	10	120
WU - M - 005 - SA	900513	605	super-amber	375	10	120
WU - M - 005 - SB	900514	470	super-blue	317	10	120

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -005-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	240	240	240	240	240	240	240	240	240	240	240	240	600	240	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 006 - ...

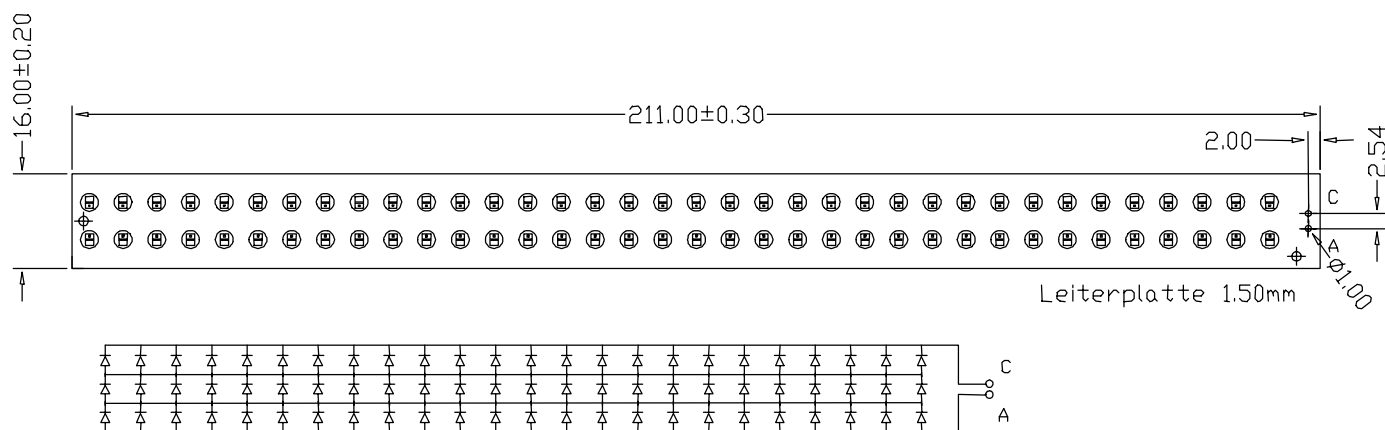
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 006 - R	90060	640	red	182	10	240
WU - M - 006 - PG	90061	560	pure-green	28	10	240
WU - M - 006 - YG	90062	570	yellow-green	220	10	240
WU - M - 006 - Y	90063	590	yellow	129	10	240
WU - M - 006 - O	90064	620	orange	129	10	240
WU - M - 006 - A	90065	605	amber	152	10	240
WU - M - 006 - B	90066	465	blue	45	10	240
WU - M - 006 - IR	90068	870	infrared	64 W/m ²	20	480
WU - M - 006 - SO	90069	620	super-orange	901	10	240
WU - M - 006 - SG	900610	530	super-green	1070	10	240
WU - M - 006 - SY	900611	590	super-yellow	563	10	240
WU - M - 006 - W	900612	---	white	1408	10	240
WU - M - 006 - SA	900613	605	super-amber	732	10	240
WU - M - 006 - SB	900614	470	super-blue	619	10	240

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -006-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	480	480	480	480	480	480	480	480	480	480	480	480	1200	480	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

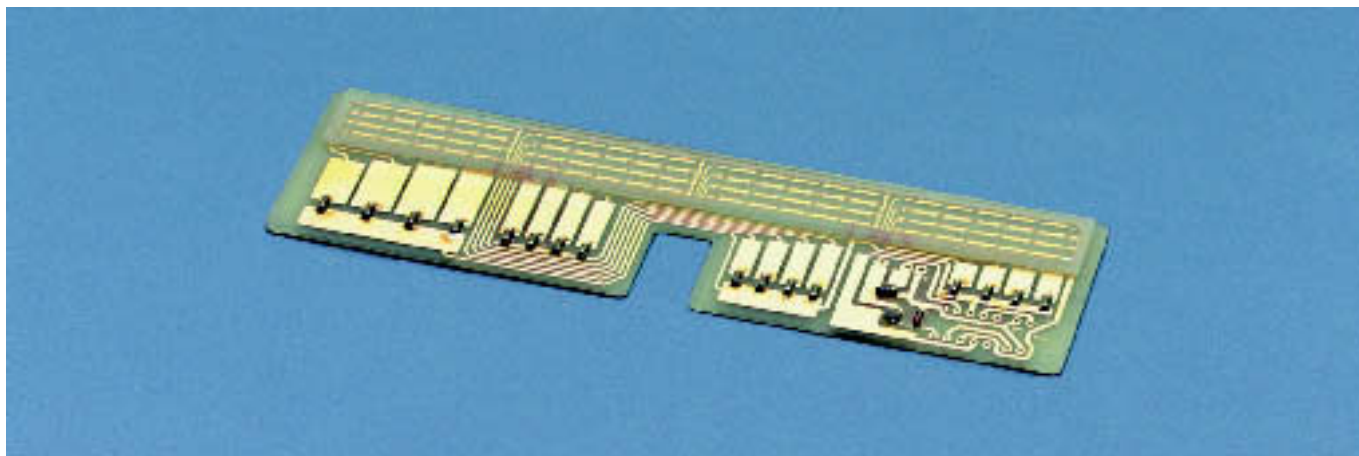


COB - Technologie

WU - M - 018 - ...

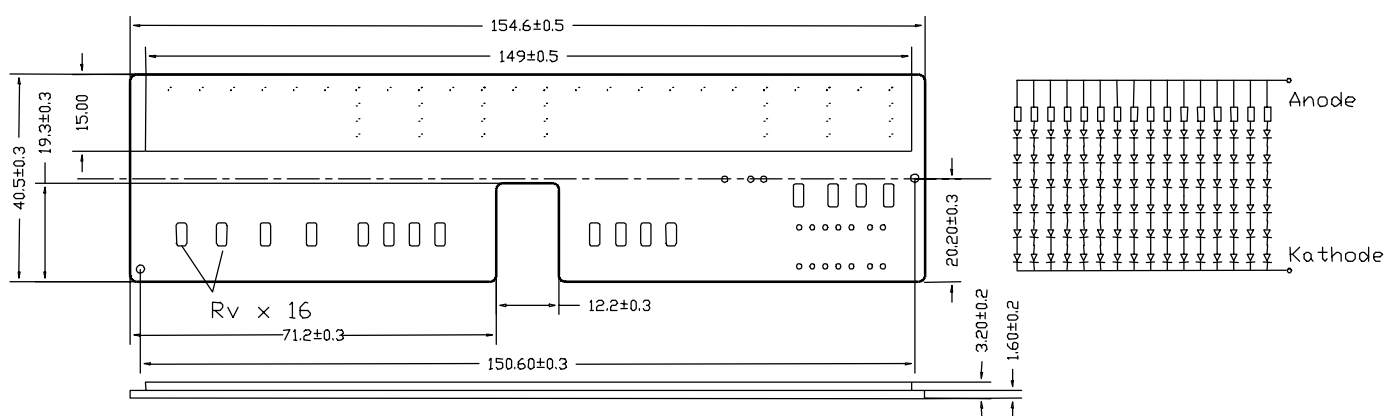
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 018 - R	90180	640	red	293	10	160
WU - M - 018 - PG	90181	560	pure-green	45	10	160
WU - M - 018 - YG	90182	570	yellow-green	354	10	160
WU - M - 018 - Y	90183	590	yellow	209	10	160
WU - M - 018 - O	90184	620	orange	209	10	160
WU - M - 018 - A	90185	605	amber	245	10	160
WU - M - 018 - B	90186	465	blue	73	10	160
WU - M - 018 - IR	90188	870	infrared	103 W/m ²	20	320
WU - M - 018 - SO	90189	620	super-orange	1451	10	160
WU - M - 018 - SG	901810	530	super-green	1723	10	160
WU - M - 018 - SY	901811	590	super-yellow	907	10	160
WU - M - 018 - W	901812	---	white	2267	10	160
WU - M - 018 - SA	901813	605	super-amber	1175	10	160
WU - M - 018 - SB	901814	470	super-blue	997	10	160

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -018-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	320	320	320	320	320	320	320	320	320	320	320	320	800	320	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



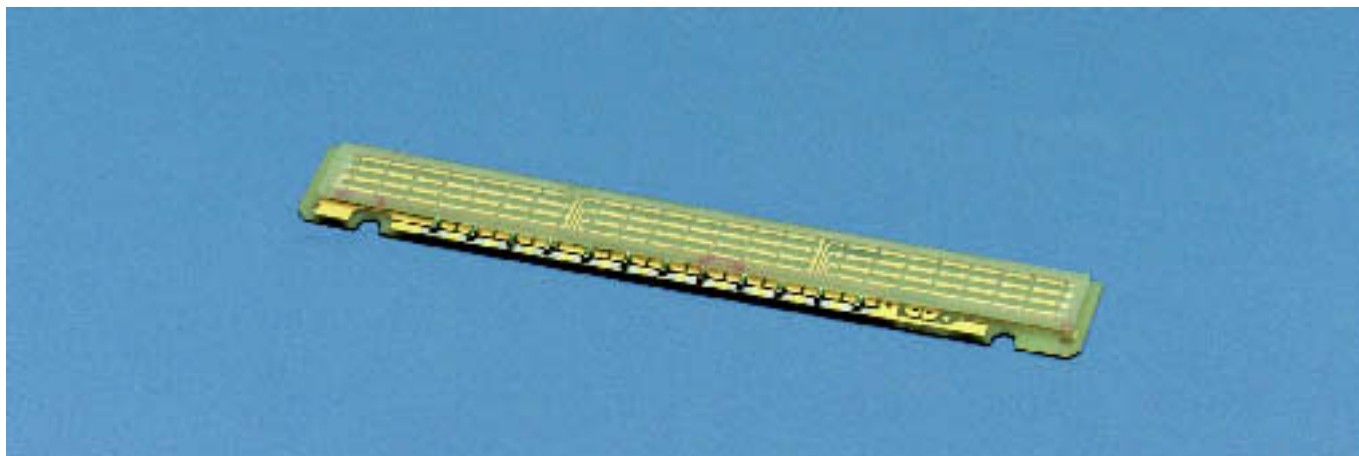
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COB - Technologie

WU - M - 025 - ...

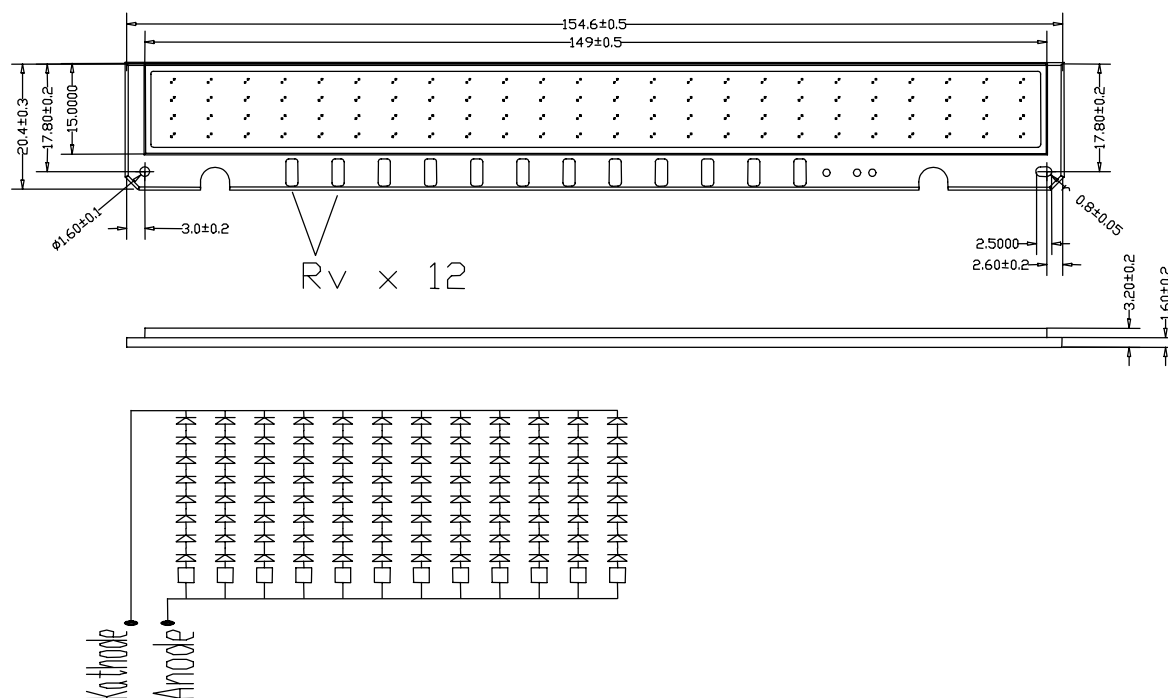
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 025 - R	90250	640	red	513	10	120
WU - M - 025 - PG	90251	560	pure-green	79	10	120
WU - M - 025 - YG	90252	570	yellow-green	620	10	120
WU - M - 025 - Y	90253	590	yellow	365	10	120
WU - M - 025 - O	90254	620	orange	365	10	120
WU - M - 025 - A	90255	605	amber	429	10	120
WU - M - 025 - B	90256	465	blue	127	10	120
WU - M - 025 - IR	90258	870	infrared	181 W/m ²	20	240
WU - M - 025 - SO	90259	620	super-orange	2542	10	120
WU - M - 025 - SG	902510	530	super-green	3019	10	120
WU - M - 025 - SY	902511	590	super-yellow	1589	10	120
WU - M - 025 - W	902512	---	white	3972	10	120
WU - M - 025 - SA	902513	605	super-amber	2066	10	120
WU - M - 025 - SB	902514	470	super-blue	1748	10	120

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -025-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	240	240	240	240	240	240	240	240	240	240	240	240	600	240	mA
U_F typ.	14.4	20.8	17.6	16.0	16.8	17.6	30.4	28.0	17.6	16.0	17.6	28.0	10.4	28.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	40	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

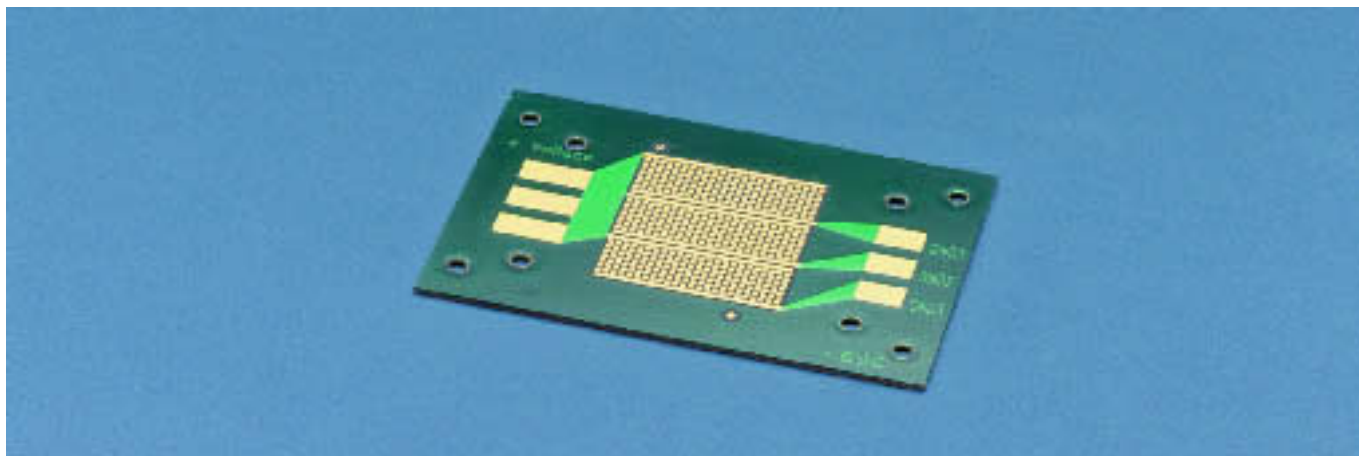


COB - Technologie

WU - M - 052 - ...

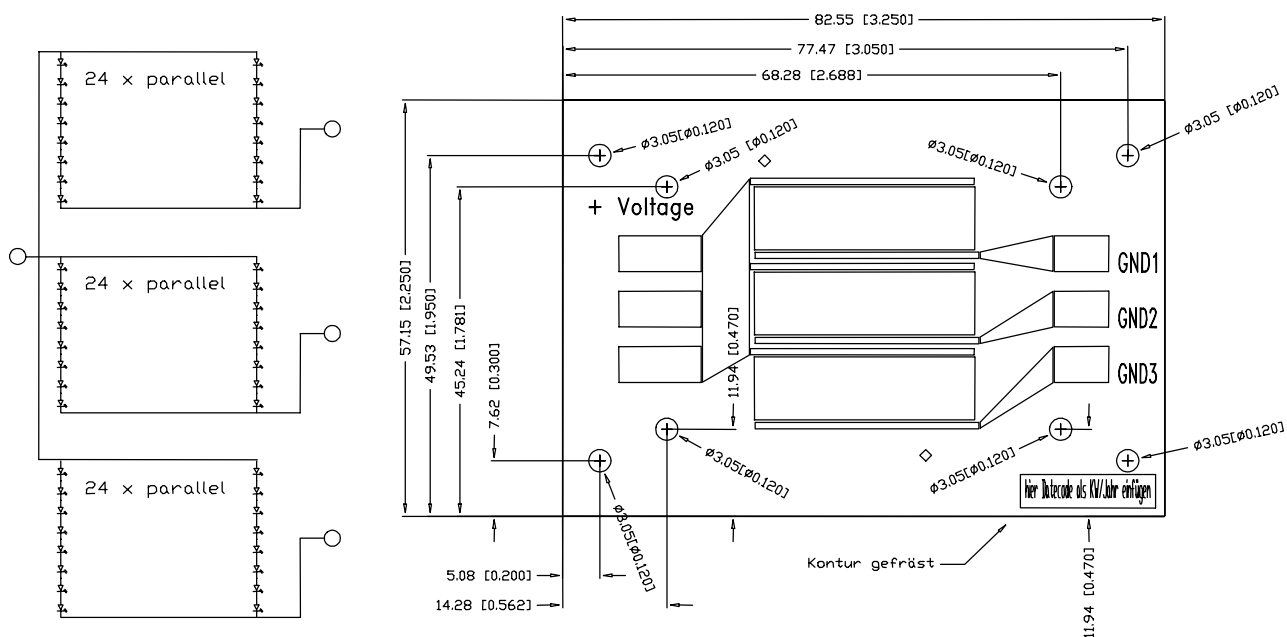
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 052 - R	90520	640	red	4527	10	720
WU - M - 052 - PG	90521	560	pure-green	701	10	720
WU - M - 052 - YG	90522	570	yellow-green	5466	10	720
WU - M - 052 - Y	90523	590	yellow	3223	10	720
WU - M - 052 - O	90524	620	orange	3223	10	720
WU - M - 052 - A	90525	605	amber	3784	10	720
WU - M - 052 - B	90526	465	blue	1121	10	720
WU - M - 052 - IR	90528	870	infrared	1593 W/m ²	20	1440
WU - M - 052 - SO	90529	620	super-orange	22424	10	720
WU - M - 052 - SG	905210	530	super-green	26629	10	720
WU - M - 052 - SY	905211	590	super-yellow	14015	10	720
WU - M - 052 - W	905212	---	white	35038	10	720
WU - M - 052 - SA	905213	605	super-amber	18220	10	720
WU - M - 052 - SB	905214	470	super-blue	15417	10	720

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M -052-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440	3600	1440	mA
U_F typ.	14.4	20.8	17.6	16.0	16.8	17.6	30.4	28.0	17.6	16.0	17.6	28.0	10.4	28.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	63	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	40	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours)



COB - Technologie

WU - M - 060 -...

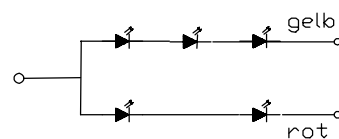
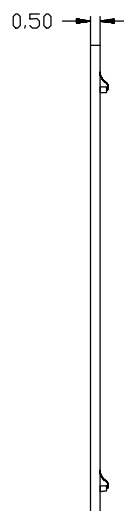
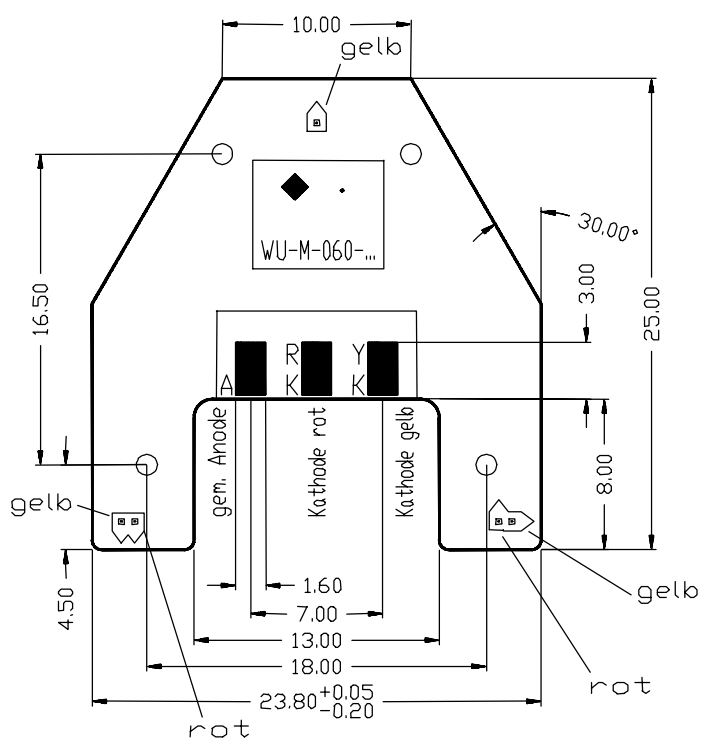
LED-Hintergrundbeleuchtung
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 060 - R	90600	640	red	---	10	20
WU - M - 060 - PG	90601	560	pure-green	---	10	20
WU - M - 060 - YG	90602	570	yellow-green	---	10	20
WU-- M - 060 - Y	90603	590	yellow	---	10	20
WU - M - 060 - O	90604	620	orange	---	10	20
WU - M - 060 - A	90605	605	amber	---	10	20
WU - M - 060 - B	90606	465	blue	---	10	20
WU - M - 060 - IR	90608	870	infrared	---	20	40
WU - M - 060 - SO	90609	620	super-orange	---	10	20
WU - M - 060 - SG	90610	530	super-green	---	10	20
WU - M - 060 - SY	90611	590	super-yellow	---	10	20
WU - M - 060 - W	90612	---	white	---	10	20
WU - M - 060 - SA	90613	605	super-amber	---	10	20
WU - M - 060 - SB	90614	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-060-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

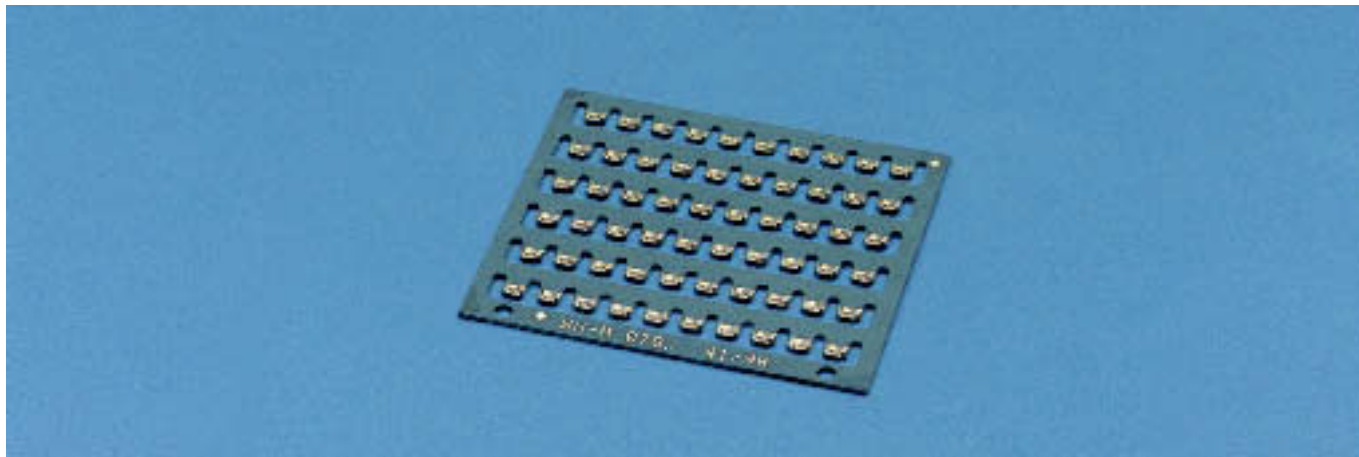


COB - Technologie

WU - M - 078 -...

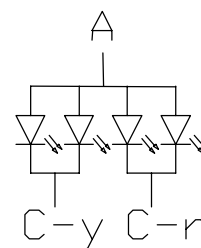
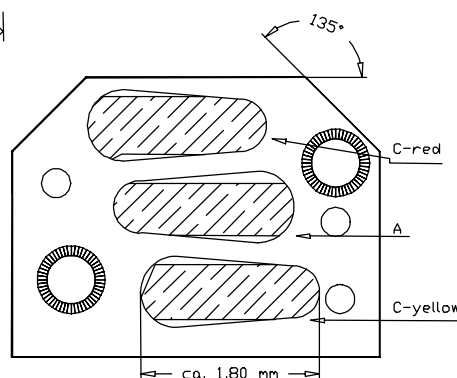
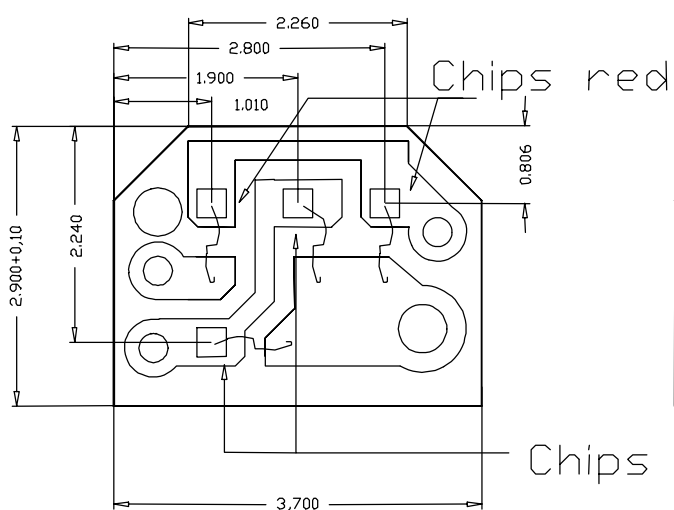
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 078 - R	90780	640	red	---	10	40
WU - M - 078 - PG	90781	560	pure-green	---	10	40
WU - M - 078 - YG	90782	570	yellow-green	---	10	40
WU - M - 078 - Y	90783	590	yellow	---	10	40
WU - M - 078 - O	90784	620	orange	---	10	40
WU - M - 078 - A	90785	605	amber	---	10	40
WU - M - 078 - B	90786	465	blue	---	10	40
WU - M - 078 - IR	90788	870	infrared	---	20	80
WU - M - 078 - SO	90789	620	super-orange	---	10	40
WU - M - 078 - SG	907810	530	super-green	---	10	40
WU - M - 078 - SY	907811	590	super-yellow	---	10	40
WU - M - 078 - W	907812	---	white	---	10	40
WU - M - 078 - SA	907813	605	super-amber	---	10	40
WU - M - 078 - SB	907814	470	super-blue	---	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-078-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	200	80	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 079 -...

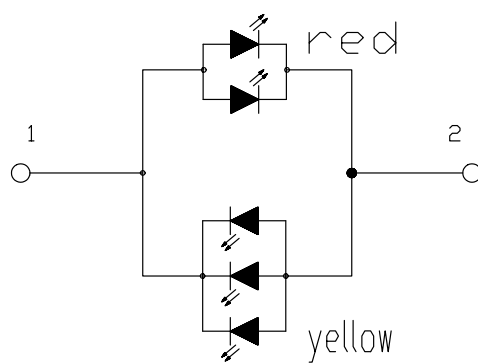
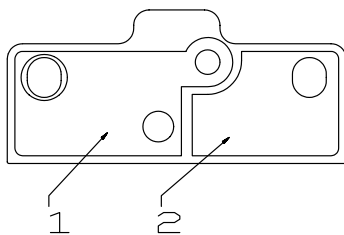
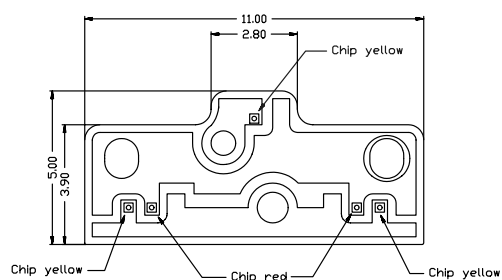
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 079 - R	90790	640	red	---	10	20
WU - M - 079 - PG	90791	560	pure-green	---	10	20
WU - M - 079 - YG	90792	570	yellow-green	---	10	20
WU - M - 079 - Y	90793	590	yellow	---	10	20
WU - M - 079 - O	90794	620	orange	---	10	20
WU - M - 079 - A	90795	605	amber	---	10	20
WU - M - 079 - B	90796	465	blue	---	10	20
WU - M - 079 - IR	90798	870	infrared	---	20	40
WU - M - 079 - SO	90799	620	super-orange	---	10	20
WU - M - 079 - SG	907910	530	super-green	---	10	20
WU - M - 079 - SY	907911	590	super-yellow	---	10	20
WU - M - 079 - W	907912	---	white	---	10	20
WU - M - 079 - SA	907913	605	super-amber	---	10	20
WU - M - 079 - SB	907914	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-079-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

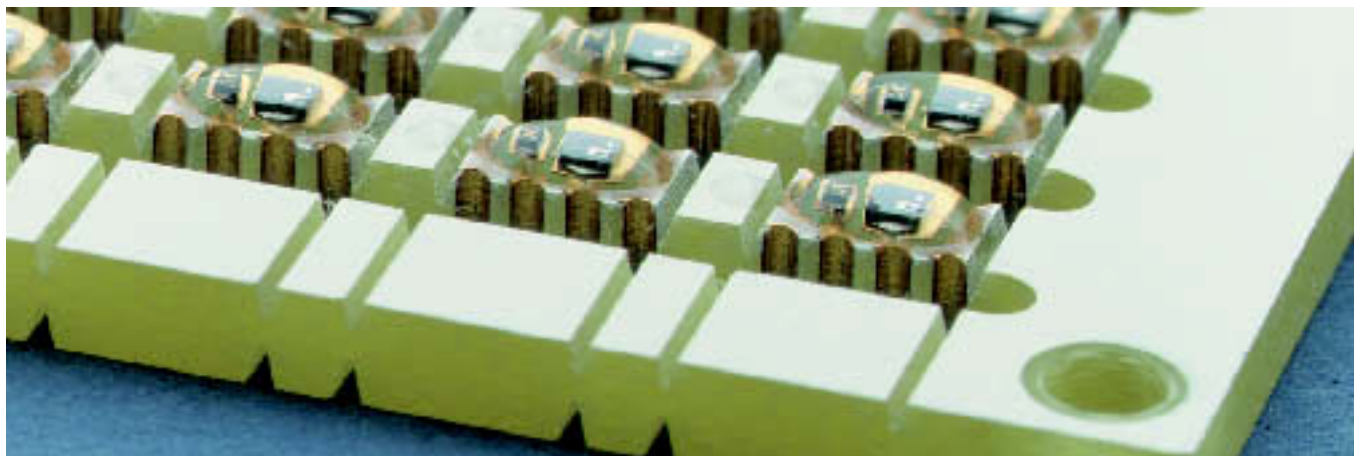


COB - Technologie

WU - M - 091 -...

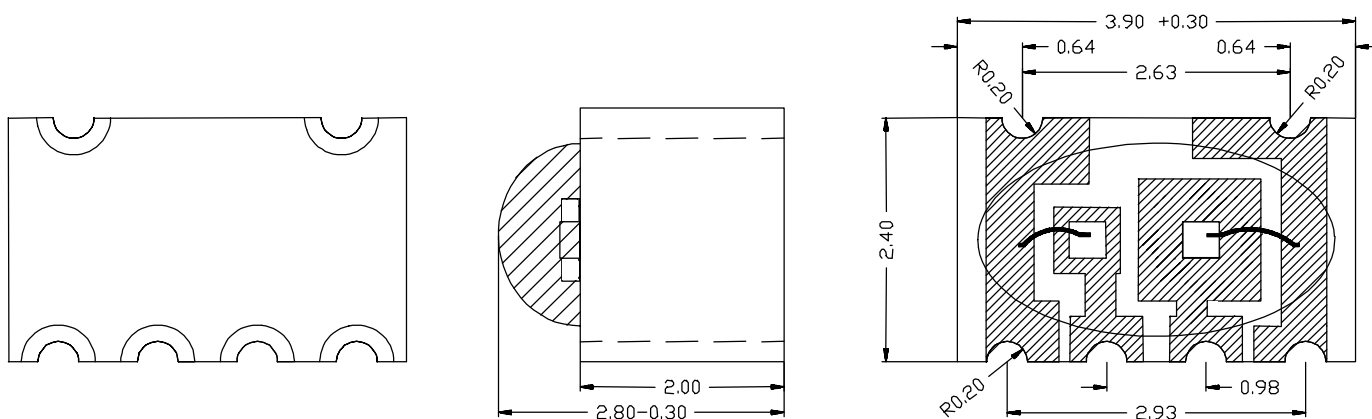
LED-Hintergrundbeleuchtung
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lichttechnische Anwendungen

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and other technical light applications



Herstellung in Deutschland

Made in Germany



Dieses Modul kann als Blisterware in stehender (vertikale Abstrahlung) oder liegender (horizontale Abstrahlung) Side-LED - Variante angeliefert werden.

Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 091 - R	90910	640	red	---	10	20
WU - M - 091 - PG	90911	560	pure-green	---	10	20
WU - M - 091 - YG	90912	570	yellow-green	---	10	20
WU - M - 091 - Y	90913	590	yellow	---	10	20
WU - M - 091 - O	90914	620	orange	---	10	20
WU - M - 091 - A	90915	605	amber	---	10	20
WU - M - 091 - B	90916	465	blue	---	10	20
WU - M - 091 - IR	90918	870	infrared	---	20	40
WU - M - 091 - SO	90919	620	super-orange	---	10	20
WU - M - 091 - SG	909110	530	super-green	---	10	20
WU - M - 091 - SY	909111	590	super-yellow	---	10	20
WU - M - 091 - W	909112	---	white	---	10	20
WU - M - 091 - SA	909113	605	super-amber	---	10	20
WU - M - 091 - SB	909114	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-091-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).



COB - Technologie

WU - M - 108 -...

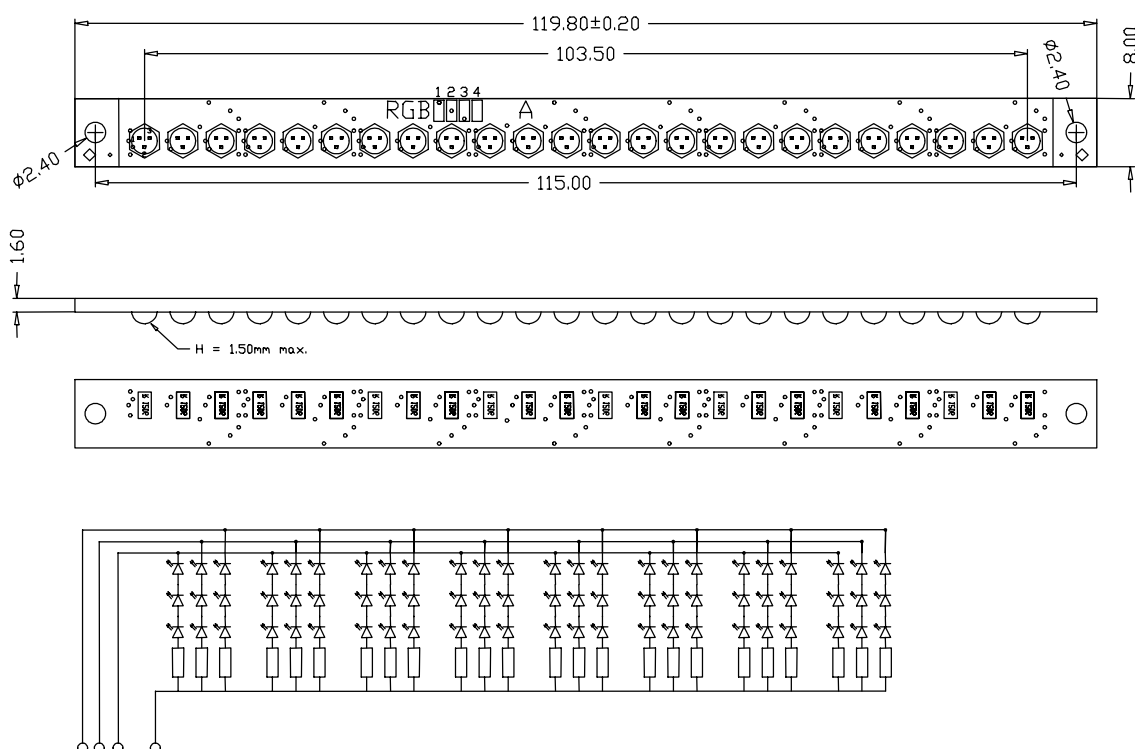
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 108 - R	91080	640	red	1186	10	240
WU - M - 108 - PG	91081	560	pure-green	184	10	240
WU - M - 108 - YG	91082	570	yellow-green	1432	10	240
WU - M - 108 - Y	91083	590	yellow	845	10	240
WU - M - 108 - O	91084	620	orange	845	10	240
WU - M - 108 - A	91085	605	amber	992	10	240
WU - M - 108 - B	91086	465	blue	294	10	240
WU - M - 108 - IR	91088	870	infrared	417 W/m ²	20	480
WU - M - 108 - SO	91089	620	super-orange	5877	10	240
WU - M - 108 - SG	910810	530	super-green	6979	10	240
WU - M - 108 - SY	910811	590	super-yellow	3673	10	240
WU - M - 108 - W	910812	---	white	9183	10	240
WU - M - 108 - SA	910813	605	super-amber	4775	10	240
WU - M - 108 - SB	910814	470	super-blue	4040	10	240

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-108-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	480	480	480	480	480	480	480	480	480	480	480	480	1200	480	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter		Unit
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information on request.

All luminous intensities are standard values, other values available on request (mixture of colours).

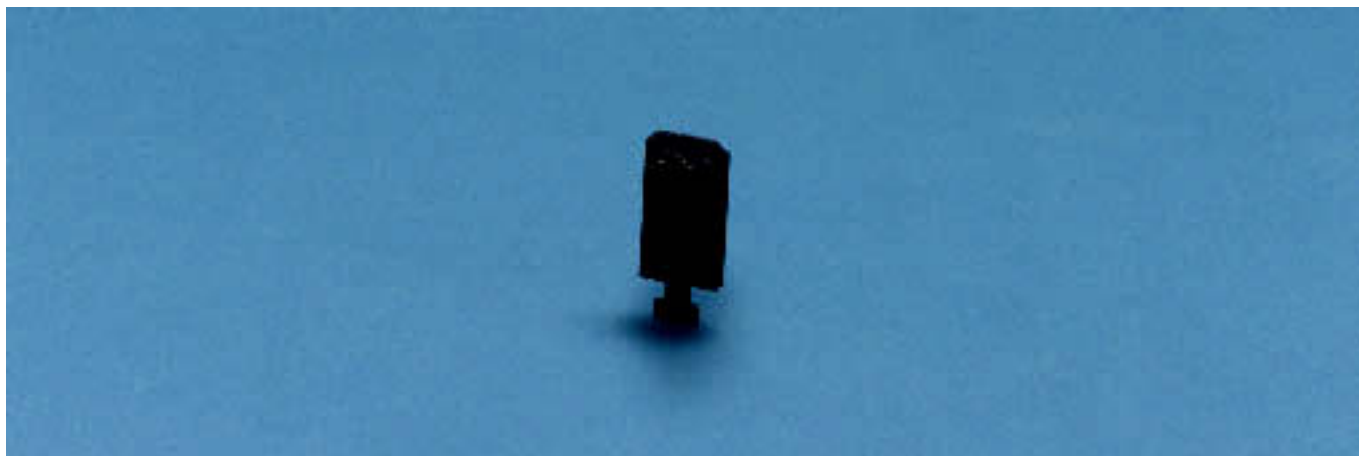


COB - Technologie

WU - M - 120 -...

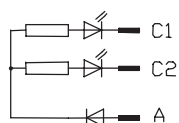
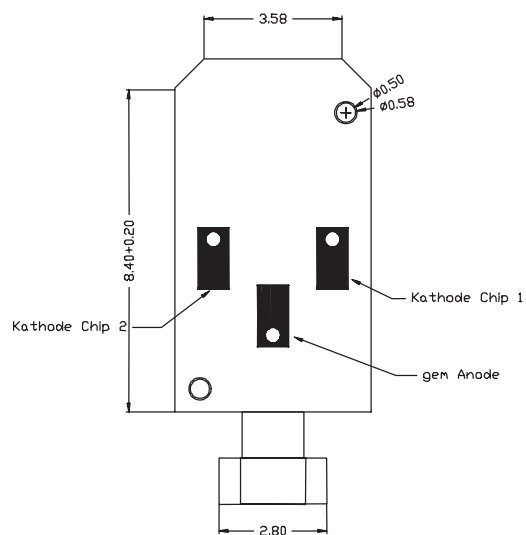
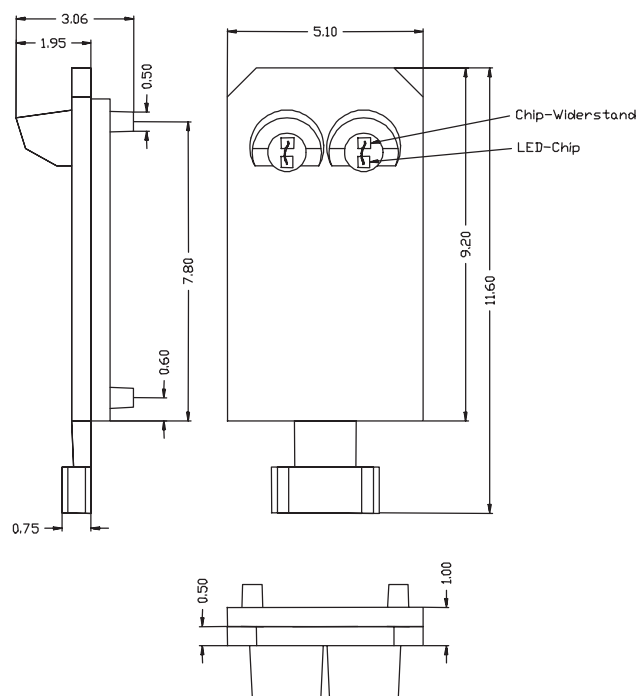
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 120 - R	91200	640	red	---	10	20
WU - M - 120 - PG	91201	560	pure-green	---	10	20
WU - M - 120 - YG	91202	570	yellow-green	---	10	20
WU - M - 120 - Y	91203	590	yellow	---	10	20
WU - M - 120 - O	91204	620	orange	---	10	20
WU - M - 120 - A	91205	605	amber	---	10	20
WU - M - 120 - B	91206	465	blue	---	10	20
WU - M - 120 - IR	91208	870	infrared	---	20	40
WU - M - 120 - SO	91209	620	super-orange	---	10	20
WU - M - 120 - SG	912010	530	super-green	---	10	20
WU - M - 120 - SY	912011	590	super-yellow	---	10	20
WU - M - 120 - W	912012	---	white	---	10	20
WU - M - 120 - SA	912013	605	super-amber	---	10	20
WU - M - 120 - SB	912014	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-120-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



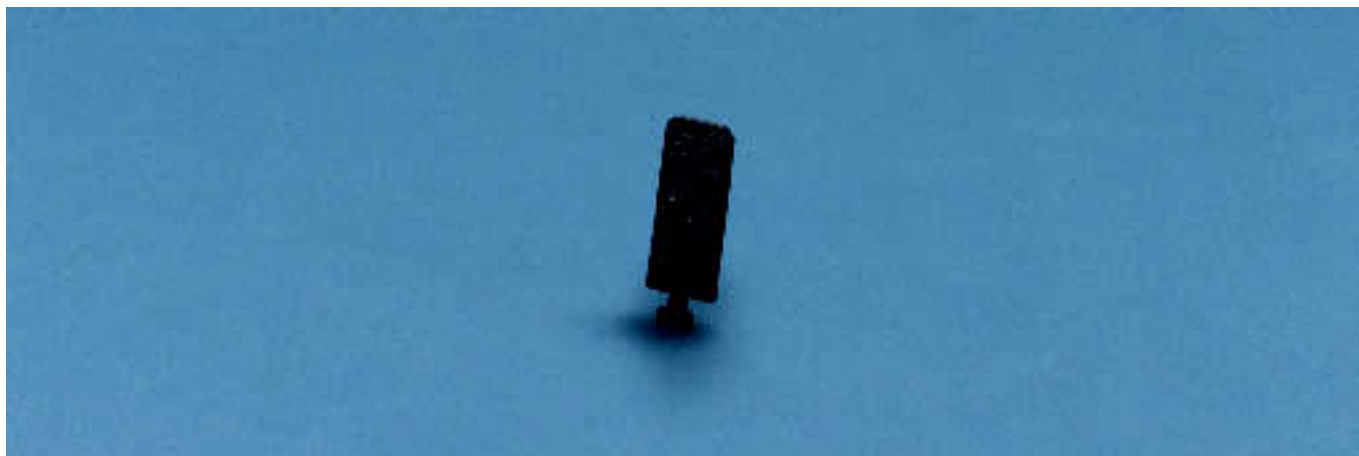
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COB - Technologie

WU - M - 121 -...

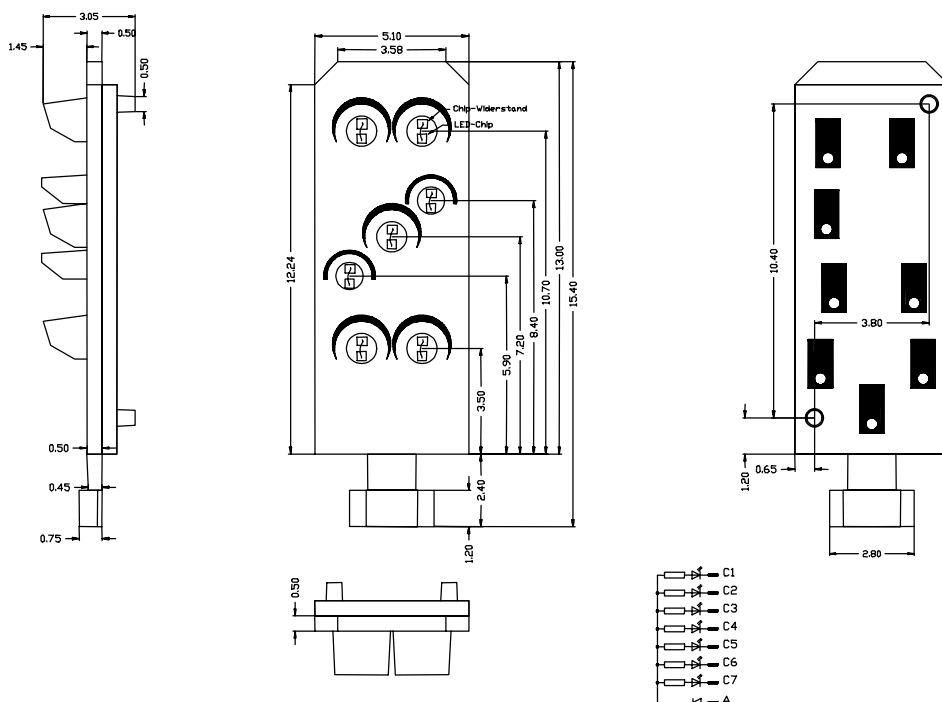
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 121 - R	91210	640	red	---	10	70
WU - M - 121 - PG	91211	560	pure-green	---	10	70
WU - M - 121 - YG	91212	570	yellow-green	---	10	70
WU - M - 121 - Y	91213	590	yellow	---	10	70
WU - M - 121 - O	91214	620	orange	---	10	70
WU - M - 121 - A	91215	605	amber	---	10	70
WU - M - 121 - B	91216	465	blue	---	10	70
WU - M - 121 - IR	91218	870	infrared	---	20	140
WU - M - 121 - SO	91219	620	super-orange	---	10	70
WU - M - 121 - SG	912110	530	super-green	---	10	70
WU - M - 121 - SY	912111	590	super-yellow	---	10	70
WU - M - 121 - W	912112	---	white	---	10	70
WU - M - 121 - SA	912113	605	super-amber	---	10	70
WU - M - 121 - SB	912114	470	super-blue	---	10	70

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-121-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	140	140	140	140	140	140	140	140	140	140	140	140	280	140	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - M - 127 -...

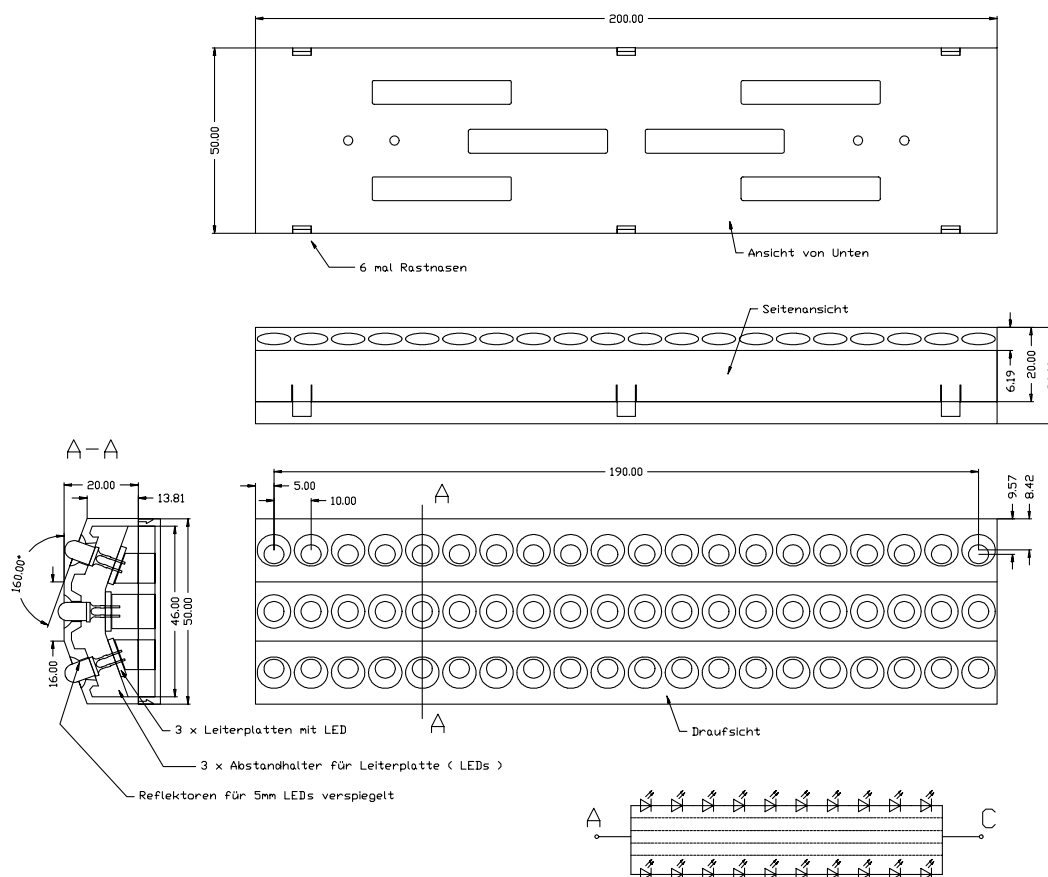
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 127 - R	91270	640	red	---	10	60
WU - M - 127 - PG	91271	560	pure-green	---	10	60
WU - M - 127 - YG	91272	570	yellow-green	---	10	60
WU - M - 127 - Y	91273	590	yellow	---	10	60
WU - M - 127 - O	91274	620	orange	---	10	60
WU - M - 127 - A	91275	605	amber	---	10	60
WU - M - 127 - B	91276	465	blue	---	10	60
WU - M - 127 - IR	91278	870	infrared	---	20	120
WU - M - 127 - SO	91279	620	super-orange	---	10	60
WU - M - 127 - SG	912710	530	super-green	---	10	60
WU - M - 127 - SY	912711	590	super-yellow	---	10	60
WU - M - 127 - W	912712	---	white	---	10	60
WU - M - 127 - SA	912713	605	super-amber	---	10	60
WU - M - 127 - SB	912714	470	super-blue	---	10	60

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-127-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	120	120	120	120	120	120	120	120	120	120	120	120	240	120	mA
U_F typ.	18.0	26.0	22.0	20.0	21.0	22.0	38.0	35.0	22.0	20.0	22.0	35.0	13.0	35.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	50	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - M - 129 -...

LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
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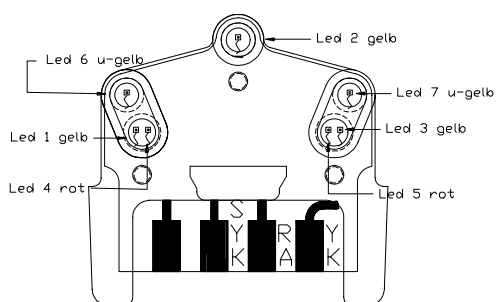
LED-Back Lights for LCD-Displays
and other technical light applications



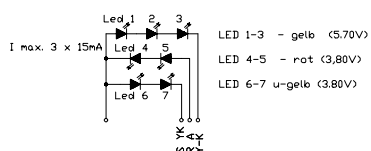
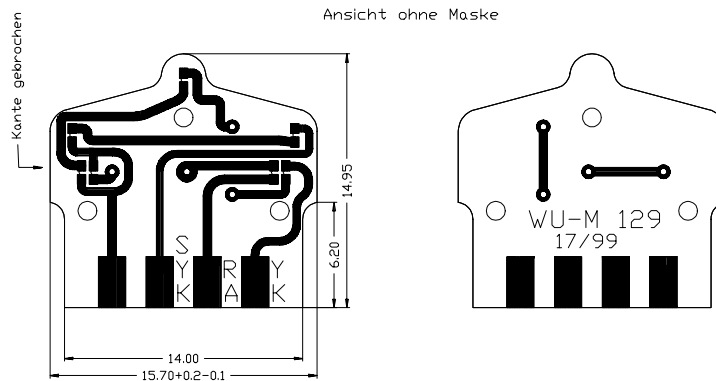
Herstellung in Deutschland

Made in Germany

Ansicht mit Maske



Ansicht ohne Maske



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 129 - R	91290	640	red	---	10	20
WU - M - 129 - PG	91291	560	pure-green	---	10	20
WU - M - 129 - YG	91292	570	yellow-green	---	10	20
WU - M - 129 - Y	91293	590	yellow	---	10	20
WU - M - 129 - O	91294	620	orange	---	10	20
WU - M - 129 - A	91295	605	amber	---	10	20
WU - M - 129 - B	91296	465	blue	---	10	20
WU - M - 129 - IR	91298	870	infrared	---	20	40
WU - M - 129 - SO	91299	620	super-orange	---	10	20
WU - M - 129 - SG	912910	530	super-green	---	10	20
WU - M - 129 - SY	912911	590	super-yellow	---	10	20
WU - M - 129 - W	912912	---	white	---	10	20
WU - M - 129 - SA	912913	605	super-amber	---	10	20
WU - M - 129 - SB	912914	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-129-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	3.6	5.2	4.4	4.0	4.2	4.4	7.6	7.0	4.4	4.0	4.4	7.0	2.6	7.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	10	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - M - 130 -...

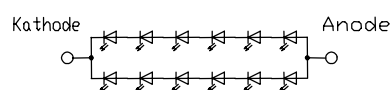
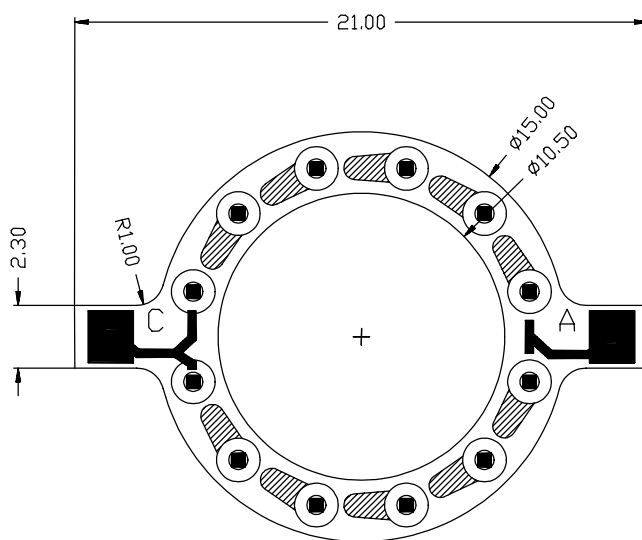
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 130 - R	91300	640	red	---	10	20
WU - M - 130 - PG	91301	560	pure-green	---	10	20
WU - M - 130 - YG	91302	570	yellow-green	---	10	20
WU - M - 130 - Y	91303	590	yellow	---	10	20
WU - M - 130 - O	91304	620	orange	---	10	20
WU - M - 130 - A	91305	605	amber	---	10	20
WU - M - 130 - B	91306	465	blue	---	10	20
WU - M - 130 - IR	91308	870	infrared	---	20	40
WU - M - 130 - SO	91309	620	super-orange	---	10	20
WU - M - 130 - SG	913010	530	super-green	---	10	20
WU - M - 130 - SY	913011	590	super-yellow	---	10	20
WU - M - 130 - W	913012	---	white	---	10	20
WU - M - 130 - SA	913013	605	super-amber	---	10	20
WU - M - 130 - SB	913014	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-130-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	10.8	15.6	13.2	12.0	12.6	13.2	22.8	21.0	13.2	12.0	13.2	21.0	7.8	21.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	30	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

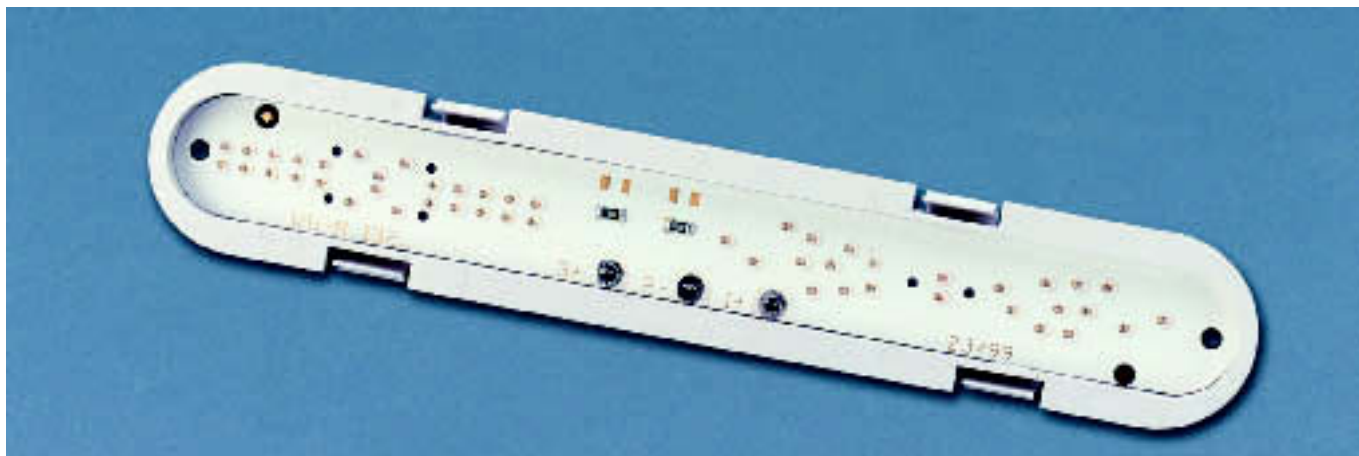


COB - Technologie

WU - M - 132 -...

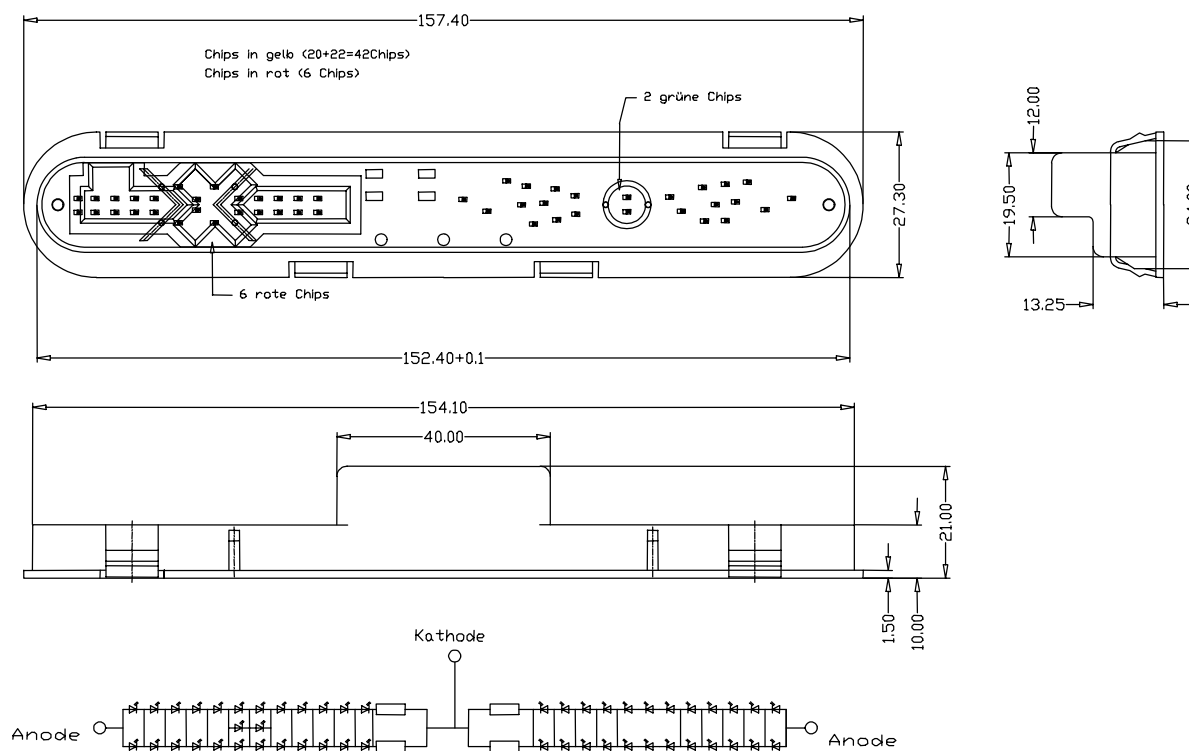
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

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Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 132 - R	91320	640	red	---	10	40
WU - M - 132 - PG	91321	560	pure-green	---	10	40
WU - M - 132 - YG	91322	570	yellow-green	---	10	40
WU - M - 132 - Y	91323	590	yellow	---	10	40
WU - M - 132 - O	91324	620	orange	---	10	40
WU - M - 132 - A	91325	605	amber	---	10	40
WU - M - 132 - B	91326	465	blue	---	10	40
WU - M - 132 - IR	91328	870	infrared	---	20	80
WU - M - 132 - SO	91329	620	super-orange	---	10	40
WU - M - 132 - SG	913210	530	super-green	---	10	40
WU - M - 132 - SY	913211	590	super-yellow	---	10	40
WU - M - 132 - W	913212	---	white	---	10	40
WU - M - 132 - SA	913213	605	super-amber	---	10	40
WU - M - 132 - SB	913214	470	super-blue	---	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-132-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	160	80	mA
U_F typ.	21.6	31.2	26.4	24.0	25.2	26.4	45.6	42.0	26.4	24.0	26.4	42.0	15.6	42.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	---	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



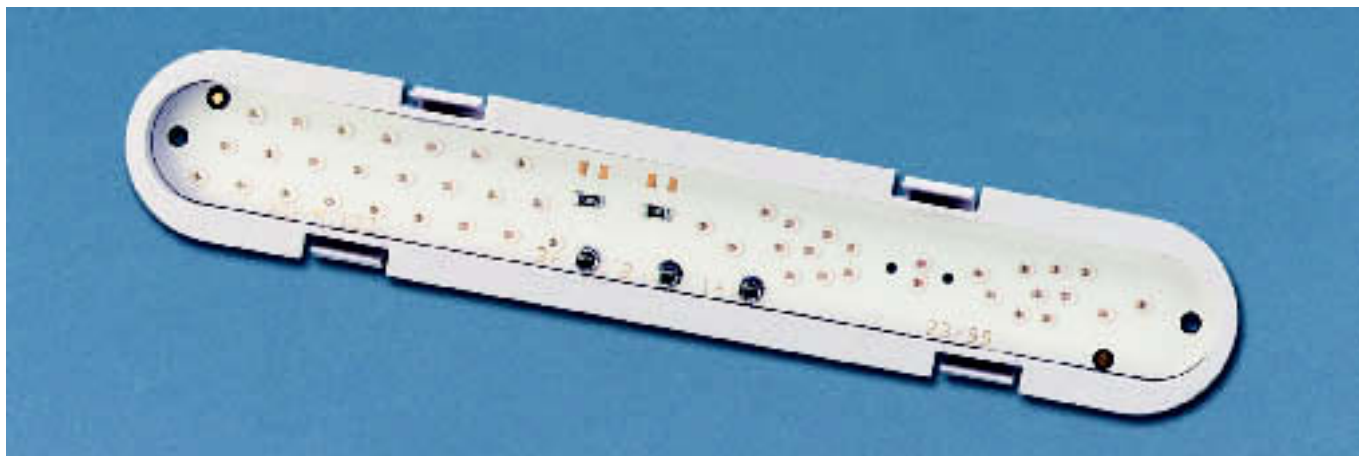
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COB - Technologie

WU - M - 133 -...

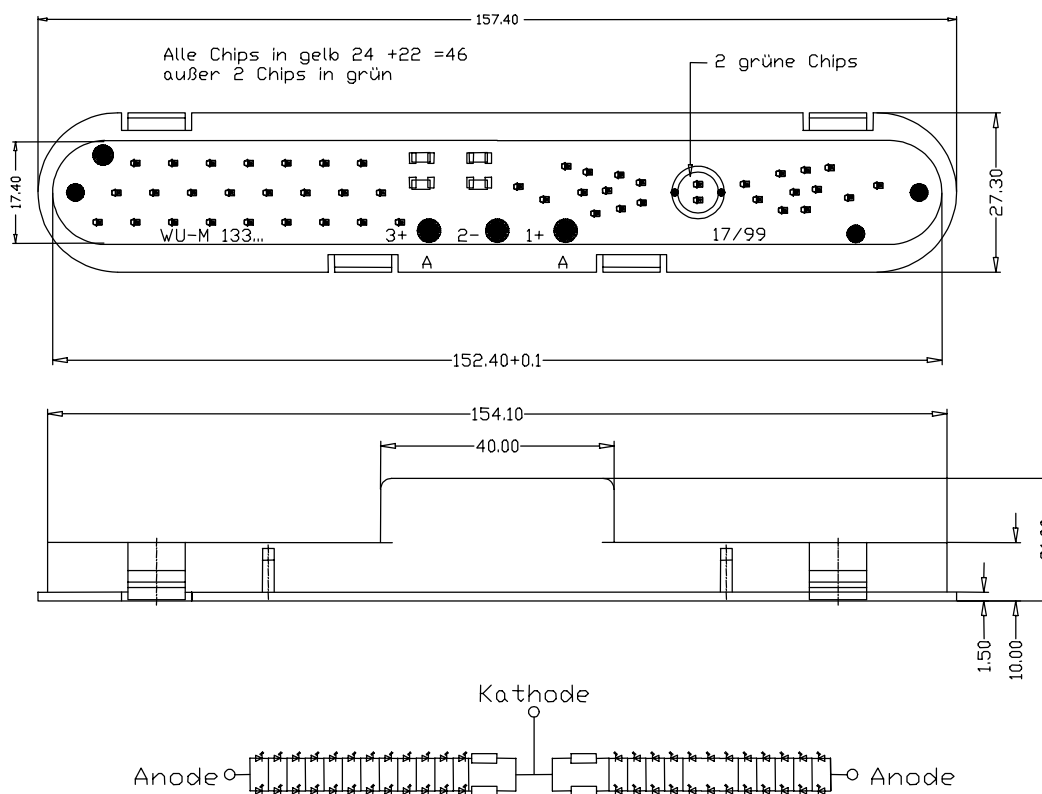
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

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Unit: [mm] Tolerance: ±0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 133 - R	91330	640	red	---	10	40
WU - M - 133 - PG	91331	560	pure-green	---	10	40
WU - M - 133 - YG	91332	570	yellow-green	---	10	40
WU - M - 133 - Y	91333	590	yellow	---	10	40
WU - M - 133 - O	91334	620	orange	---	10	40
WU - M - 133 - A	91335	605	amber	---	10	40
WU - M - 133 - B	91336	465	blue	---	10	40
WU - M - 133 - IR	91338	870	infrared	---	20	80
WU - M - 133 - SO	91339	620	super-orange	---	10	40
WU - M - 133 - SG	913310	530	super-green	---	10	40
WU - M - 133 - SY	913311	590	super-yellow	---	10	40
WU - M - 133 - W	913312	---	white	---	10	40
WU - M - 133 - SA	913313	605	super-amber	---	10	40
WU - M - 133 - SB	913314	470	super-blue	---	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-133-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	160	80	mA
U_F typ.	21.6	31.2	26.4	24.0	25.2	26.4	45.6	42.0	26.4	24.0	26.4	42.0	15.6	42.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter			Unit
Power Dissipation	P_D	U_F typ. x I_F per Module	mW
Reverse Voltage	U_R	---	V
Operating Temperature	$T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature	$T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - M - 134 -...

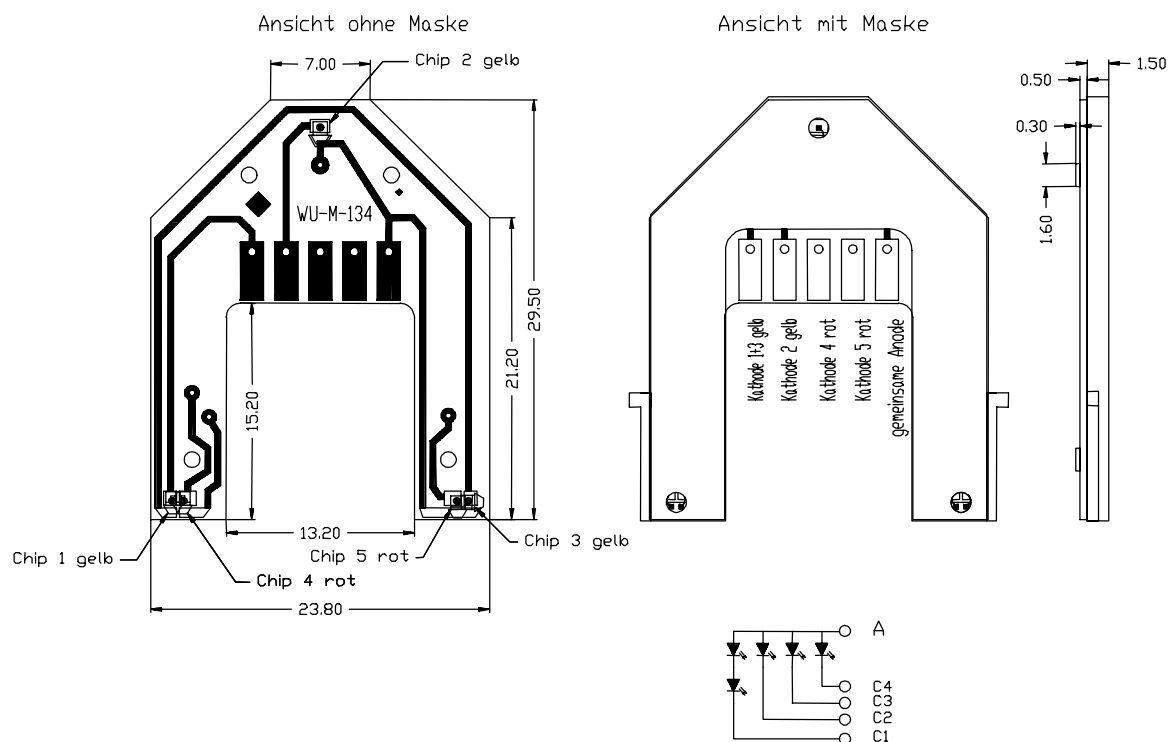
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 134 - R	91340	640	red	---	10	40
WU - M - 134 - PG	91341	560	pure-green	---	10	40
WU - M - 134 - YG	91342	570	yellow-green	---	10	40
WU - M - 134 - Y	91343	590	yellow	---	10	40
WU - M - 134 - O	91344	620	orange	---	10	40
WU - M - 134 - A	91345	605	amber	---	10	40
WU - M - 134 - B	91346	465	blue	---	10	40
WU - M - 134 - IR	91348	870	infrared	---	20	80
WU - M - 134 - SO	91349	620	super-orange	---	10	40
WU - M - 134 - SG	913410	530	super-green	---	10	40
WU - M - 134 - SY	913411	590	super-yellow	---	10	40
WU - M - 134 - W	913412	---	white	---	10	40
WU - M - 134 - SA	913413	605	super-amber	---	10	40
WU - M - 134 - SB	913414	470	super-blue	---	10	40

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-134-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	80	80	80	80	80	80	80	80	80	80	80	80	160	80	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - M - 135 -...

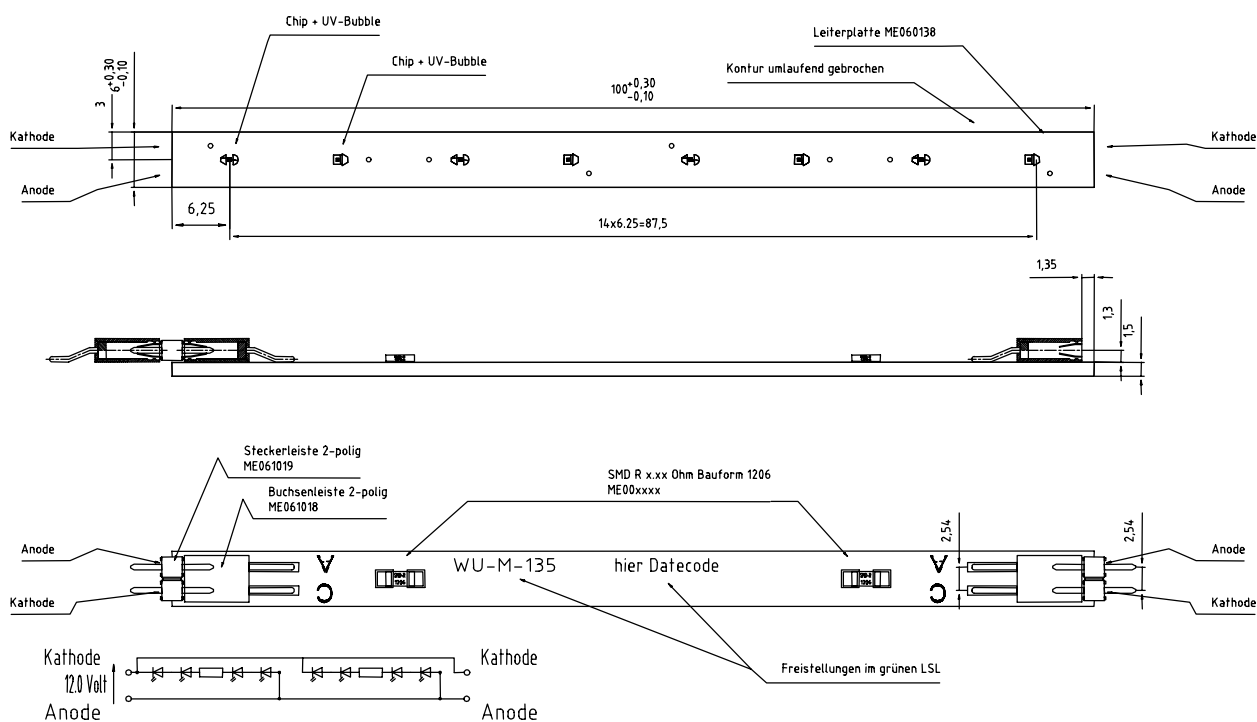
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 135 - R	91350	640	red	---	10	20
WU - M - 135 - PG	91351	560	pure-green	---	10	20
WU - M - 135 - YG	91352	570	yellow-green	---	10	20
WU - M - 135 - Y	91353	590	yellow	---	10	20
WU - M - 135 - O	91354	620	orange	---	10	20
WU - M - 135 - A	91355	605	amber	---	10	20
WU - M - 135 - B	91356	465	blue	---	10	20
WU - M - 135 - IR	91358	870	infrared	---	20	40
WU - M - 135 - SO	91359	620	super-orange	---	10	20
WU - M - 135 - SG	913510	530	super-green	---	10	20
WU - M - 135 - SY	913511	590	super-yellow	---	10	20
WU - M - 135 - W	913512	---	white	---	10	20
WU - M - 135 - SA	913513	605	super-amber	---	10	20
WU - M - 135 - SB	913514	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-135-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	14.0	12.0	12.0	12.0	14.0	12.0	14.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R		V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



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COB - Technologie

WU - M - 136 - ...

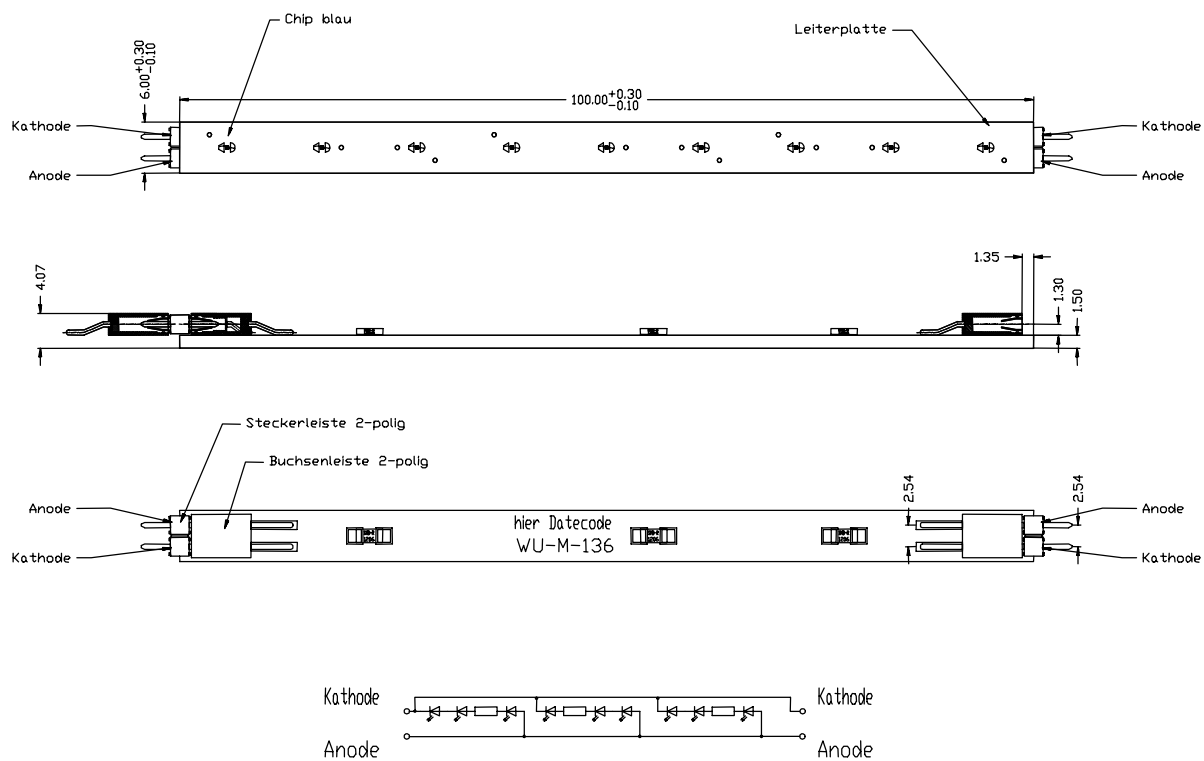
LED-Hintergrundbeleuchtung
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lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 136 - R	91360	640	red	---	10	30
WU - M - 136 - PG	91361	560	pure-green	---	10	30
WU - M - 136 - YG	91362	570	yellow-green	---	10	30
WU - M - 136 - Y	91363	590	yellow	---	10	30
WU - M - 136 - O	91364	620	orange	---	10	30
WU - M - 136 - A	91365	605	amber	---	10	30
WU - M - 136 - B	91366	465	blue	---	10	30
WU - M - 136 - IR	91368	870	infrared	---	20	60
WU - M - 136 - SO	91369	620	super-orange	---	10	30
WU - M - 136 - SG	913610	530	super-green	---	10	30
WU - M - 136 - SY	913611	590	super-yellow	---	10	30
WU - M - 136 - W	913612	---	white	---	10	30
WU - M - 136 - SA	913613	605	super-amber	---	10	30
WU - M - 136 - SB	913614	470	super-blue	---	10	30

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-136-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	60	60	60	60	60	60	60	60	60	60	60	60	120	60	mA
U_F typ.	5.4	7.8	6.6	6.0	6.3	6.6	11.4	10.5	6.6	6.0	6.6	10.5	3.9	10.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



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COB - Technologie

WU - M - 142 -...

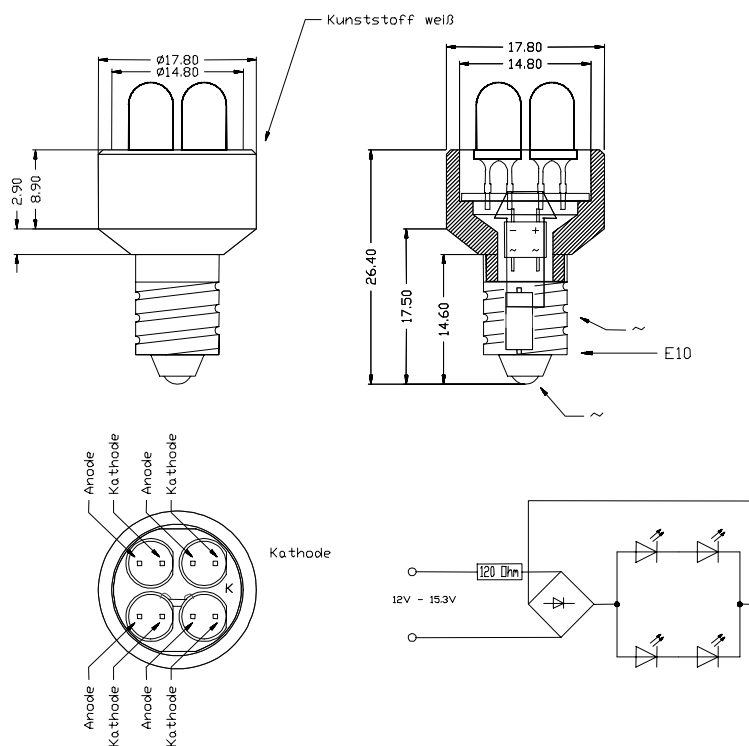
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für LCD-Anzeigen und andere
lichttechnische Anwendungen

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and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 142 - R	91420	640	red	---	10	20
WU - M - 142 - PG	91421	560	pure-green	---	10	20
WU - M - 142 - YG	91422	570	yellow-green	---	10	20
WU - M - 142 - Y	91423	590	yellow	---	10	20
WU - M - 142 - O	91424	620	orange	---	10	20
WU - M - 142 - A	91425	605	amber	---	10	20
WU - M - 142 - B	91426	465	blue	---	10	20
WU - M - 142 - IR	91428	870	infrared	---	---	---
WU - M - 142 - SO	91429	620	super-orange	---	10	20
WU - M - 142 - SG	914210	530	super-green	---	10	20
WU - M - 142 - SY	914211	590	super-yellow	---	10	20
WU - M - 142 - W	914212	---	white	---	10	20
WU - M - 142 - SA	914213	605	super-amber	---	10	20
WU - M - 142 - SB	914214	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-142-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	---	40	mA
U_F typ.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	---	12.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	---	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R		V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

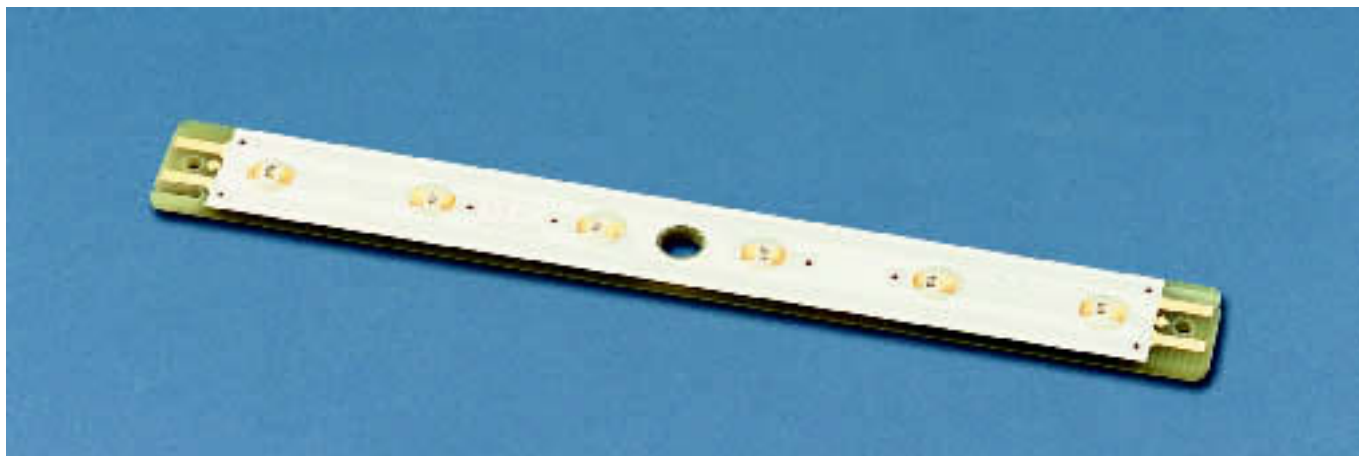


COB - Technologie

WU - L - 146 -...

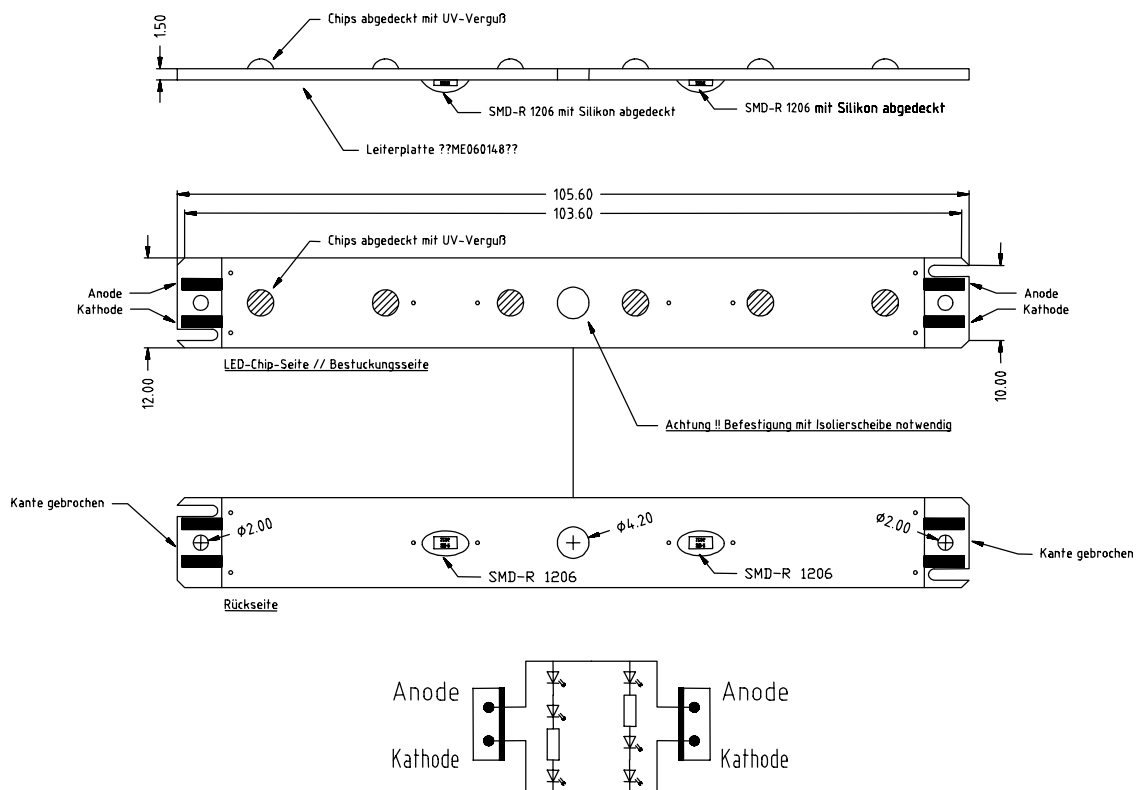
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - L - 146 - R	91460	640	red	---	10	20
WU - L - 146 - PG	91461	560	pure-green	---	10	20
WU - L - 146 - YG	91462	570	yellow-green	---	10	20
WU - L - 146 - Y	91463	590	yellow	---	10	20
WU - L - 146 - O	91464	620	orange	---	10	20
WU - L - 146 - A	91465	605	amber	---	10	20
WU - L - 146 - B	91466	465	blue	---	10	20
WU - L - 146 - IR	91468	870	infrared	---	20 W/m $\leq$	40
WU - L - 146 - SO	91469	620	super-orange	---	10	20
WU - L - 146 - SG	914610	530	super-green	---	10	20
WU - L - 146 - SY	914611	590	super-yellow	---	10	20
WU - L - 146 - W	914612	---	white	---	10	20
WU - L - 146 - SA	914613	605	super-amber	---	10	20
WU - L - 146 - SB	914614	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU- L -146-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R		V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

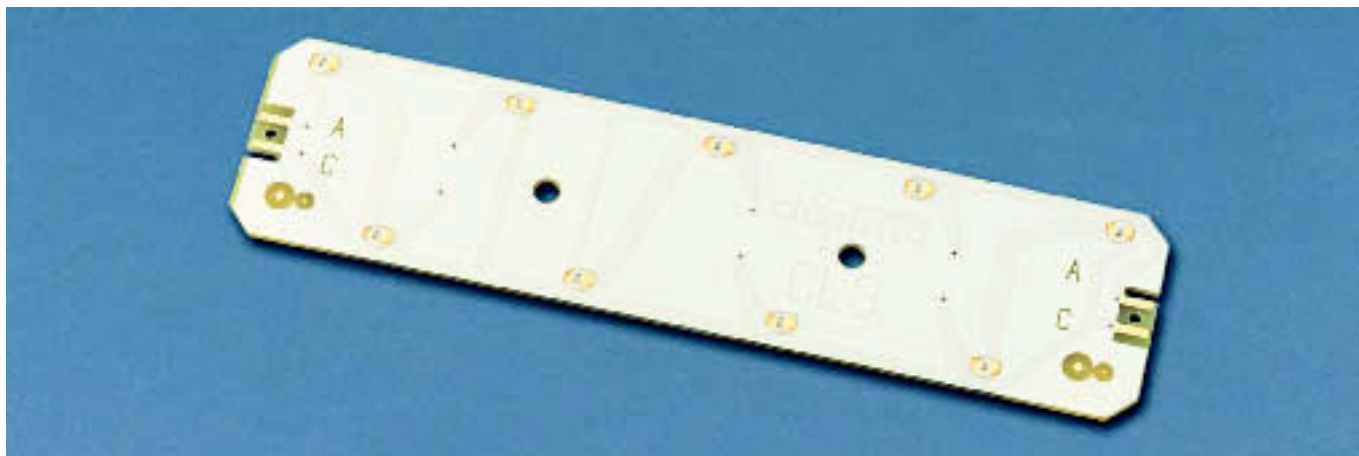


COB - Technologie

WU - L - 147 -...

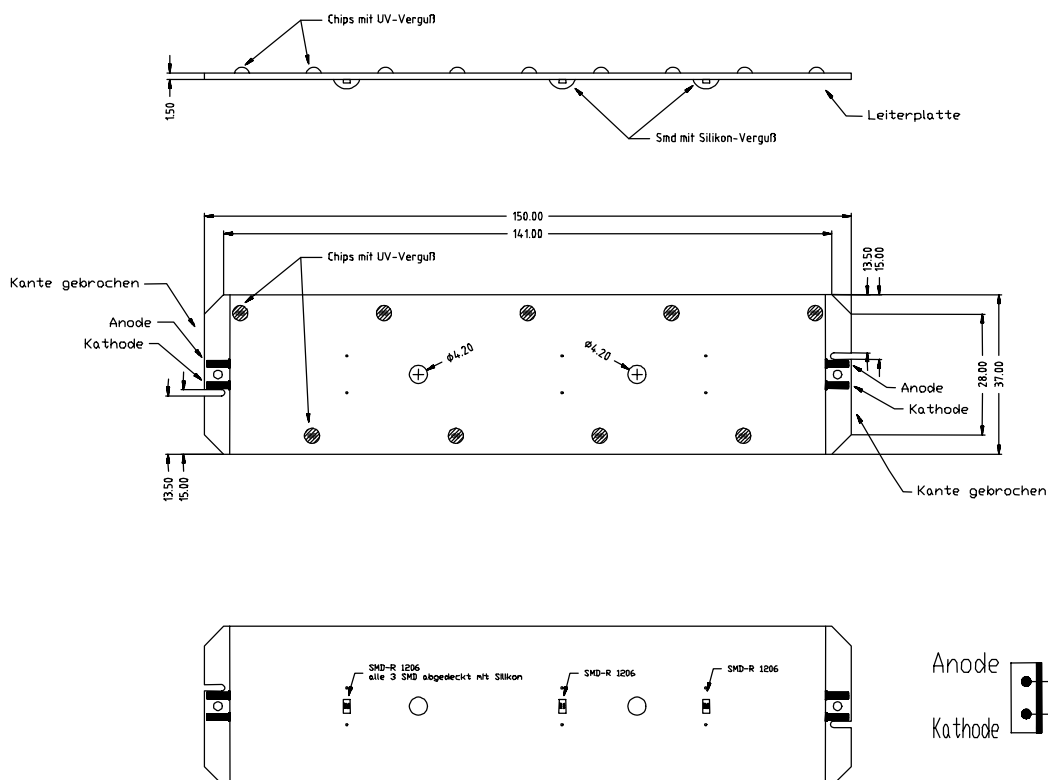
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - L - 147 - R	91470	640	red	---	10	30
WU - L - 147 - PG	91471	560	pure-green	---	10	30
WU - L - 147 - YG	91472	570	yellow-green	---	10	30
WU - L - 147 - Y	91473	590	yellow	---	10	30
WU - L - 147 - O	91474	620	orange	---	10	30
WU - L - 147 - A	91475	605	amber	---	10	30
WU - L - 147 - B	91476	465	blue	---	10	30
WU - L - 147 - IR	91478	870	infrared	---	20	60
WU - L - 147 - SO	91479	620	super-orange	---	10	30
WU - L - 147 - SG	914710	530	super-green	---	10	30
WU - L - 147 - SY	914711	590	super-yellow	---	10	30
WU - L - 147 - W	914712	---	white	---	10	30
WU - L - 147 - SA	914713	605	super-amber	---	10	30
WU - L - 147 - SB	914714	470	super-blue	---	10	30

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-L-147-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	60	60	60	60	60	60	60	60	60	60	60	60	120	60	mA
U_F typ.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R		V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



COB - Technologie

WU - L - 150 -...

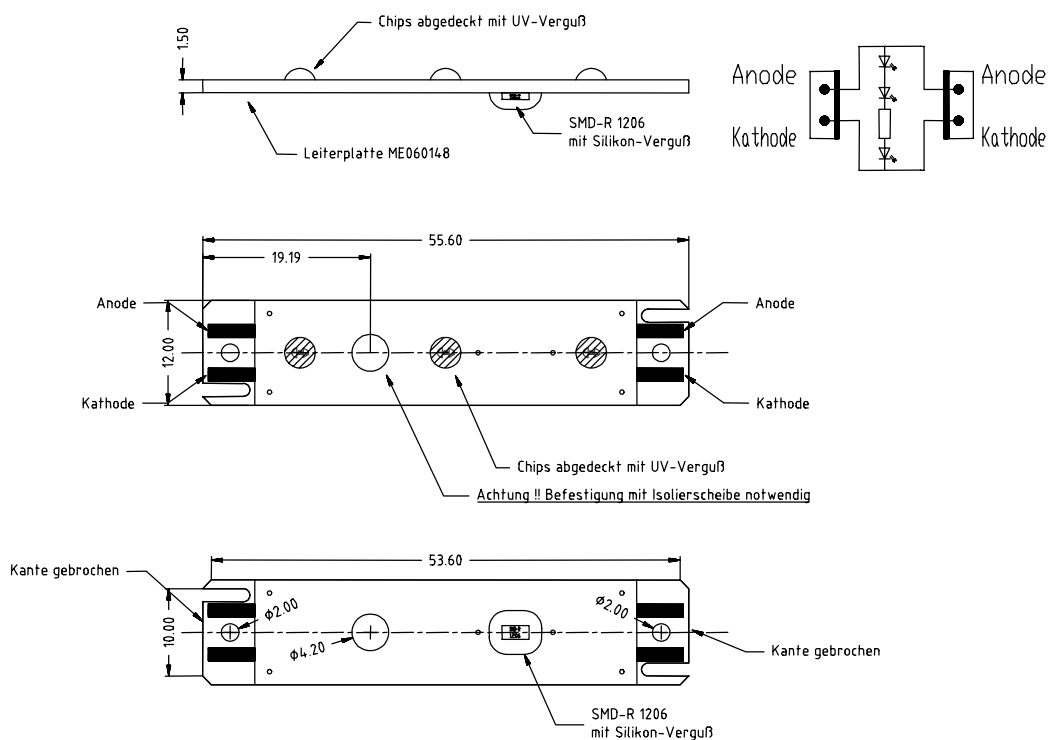
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - L - 150 - R	91500	640	red	---	10	10
WU - L - 150 - PG	91501	560	pure-green	---	10	10
WU - L - 150 - YG	91502	570	yellow-green	---	10	10
WU - L - 150 - Y	91503	590	yellow	---	10	10
WU - L - 150 - O	91504	620	orange	---	10	10
WU - L - 150 - A	91505	605	amber	---	10	10
WU - L - 150 - B	91506	465	blue	---	10	10
WU - L - 150 - IR	91508	870	infrared	---	20	20
WU - L - 150 - SO	91509	620	super-orange	---	10	10
WU - L - 150 - SG	915010	530	super-green	---	10	10
WU - L - 150 - SY	915011	590	super-yellow	---	10	10
WU - L - 150 - W	915012	---	white	---	10	10
WU - L - 150 - SA	915013	605	super-amber	---	10	10
WU - L - 150 - SB	915014	470	super-blue	---	10	10

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-L-150-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	20	20	20	20	20	20	20	20	20	20	20	20	40	20	mA
U_F typ.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter			Unit
Power Dissipation	P_D	U_F typ. x I_F per Module	mW
Reverse Voltage	U_R	15	V
Operating Temperature	$T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature	$T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

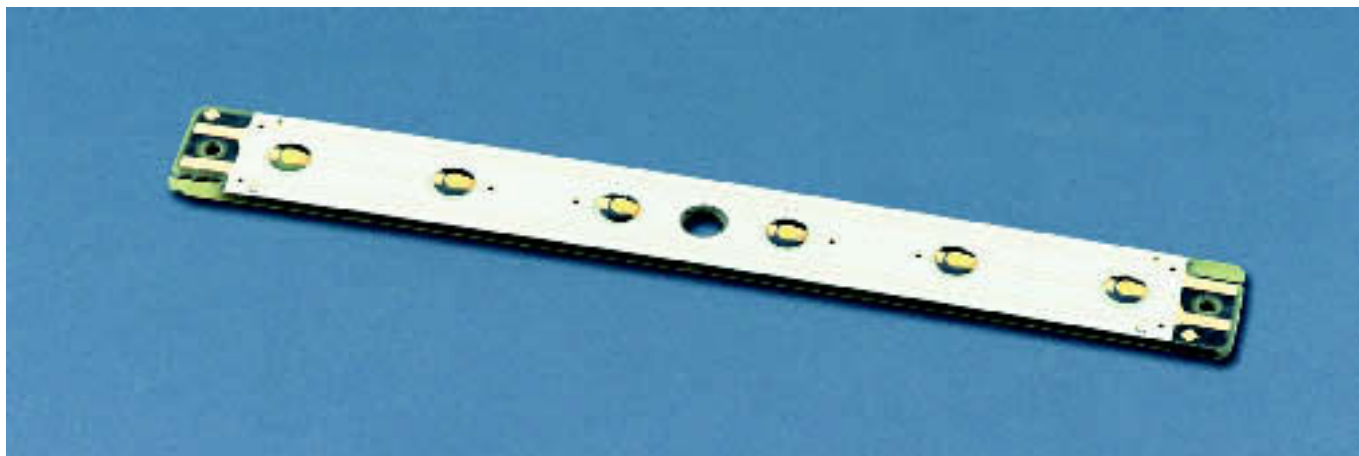


COB - Technologie

WU - L - 157 -...

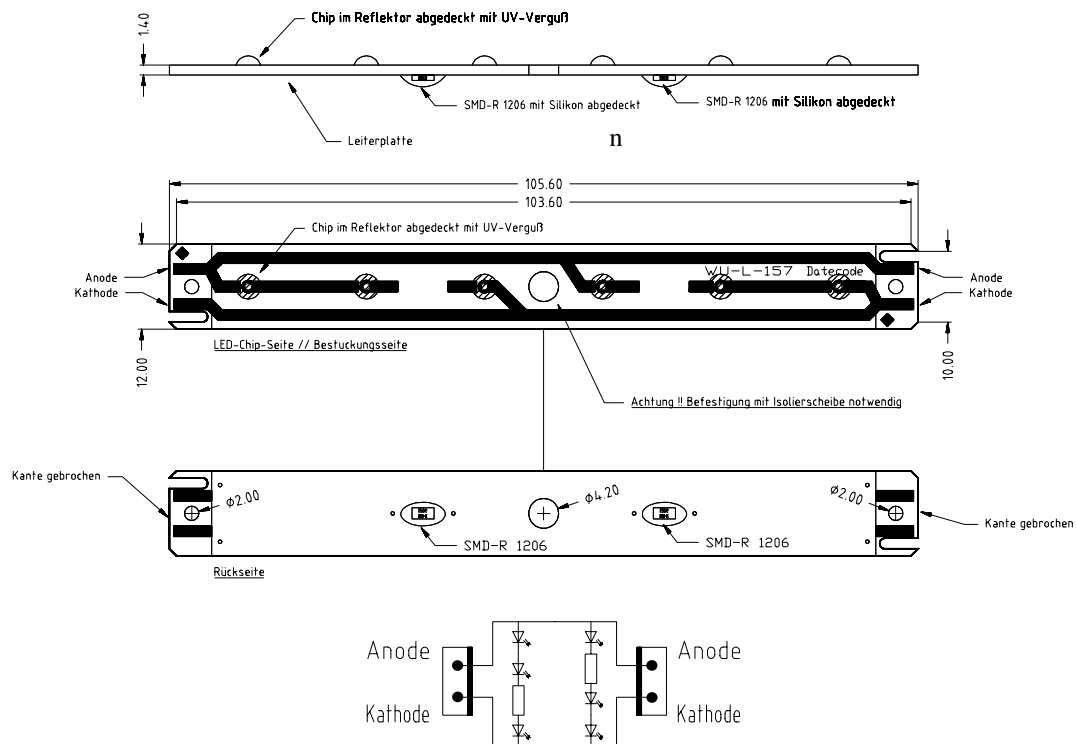
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - L - 157 - R	91570	640	red	---	10	20
WU - L - 157 - PG	91571	560	pure-green	---	10	20
WU - L - 157 - YG	91572	570	yellow-green	---	10	20
WU - L - 157 - Y	91573	590	yellow	---	10	20
WU - L - 157 - O	91574	620	orange	---	10	20
WU - L - 157 - A	91575	605	amber	---	10	20
WU - L - 157 - B	91576	465	blue	---	10	20
WU - L - 157 - IR	91578	870	infrared	---	20	40
WU - L - 157 - SO	91579	620	super-orange	---	10	20
WU - L - 157 - SG	915710	530	super-green	---	10	20
WU - L - 157 - SY	915711	590	super-yellow	---	10	20
WU - L - 157 - W	915712	---	white	---	10	20
WU - L - 157 - SA	915713	605	super-amber	---	10	20
WU - L - 157 - SB	915714	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-L-157-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	100	40	mA
U_F typ.	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	15	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



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COB - Technologie

WU - M - 158 -...

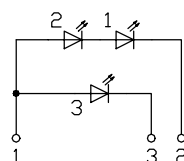
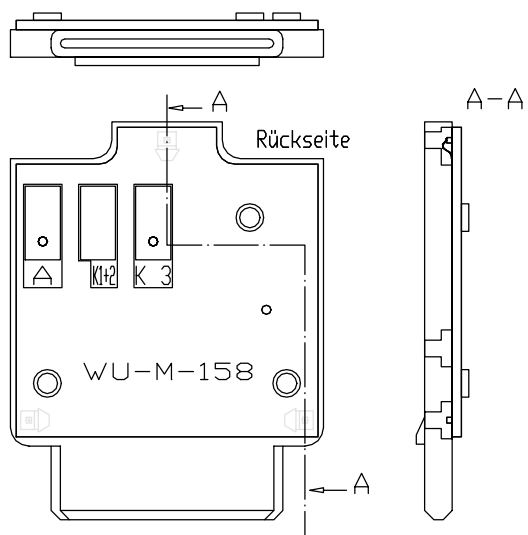
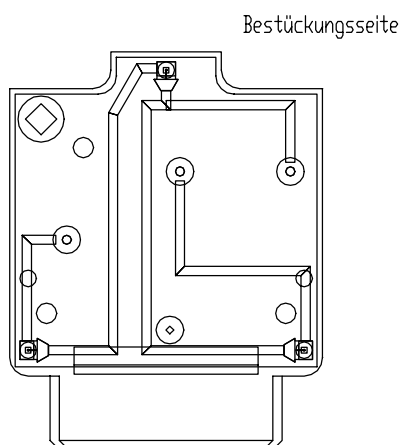
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 158 - R	91580	640	red	---	10	20
WU - M - 158 - PG	91581	560	pure-green	---	10	20
WU - M - 158 - YG	91582	570	yellow-green	---	10	20
WU - M - 158 - Y	91583	590	yellow	---	10	20
WU - M - 158 - O	91584	620	orange	---	10	20
WU - M - 158 - A	91585	605	amber	---	10	20
WU - M - 158 - B	91586	465	blue	---	10	20
WU - M - 158 - IR	91588	870	infrared	---	20	40
WU - M - 158 - SO	91589	620	super-orange	---	10	20
WU - M - 158 - SG	915810	530	super-green	---	10	20
WU - M - 158 - SY	915811	590	super-yellow	---	10	20
WU - M - 158 - W	915812	---	white	---	10	20
WU - M - 158 - SA	915813	605	super-amber	---	10	20
WU - M - 158 - SB	915814	470	super-blue	---	10	20

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-158-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	40	40	40	40	40	40	40	40	40	40	40	40	80	40	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter			Unit
Power Dissipation	P_D	U_F typ. x I_F per Module	mW
Reverse Voltage	U_R	20	V
Operating Temperature	$T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature	$T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

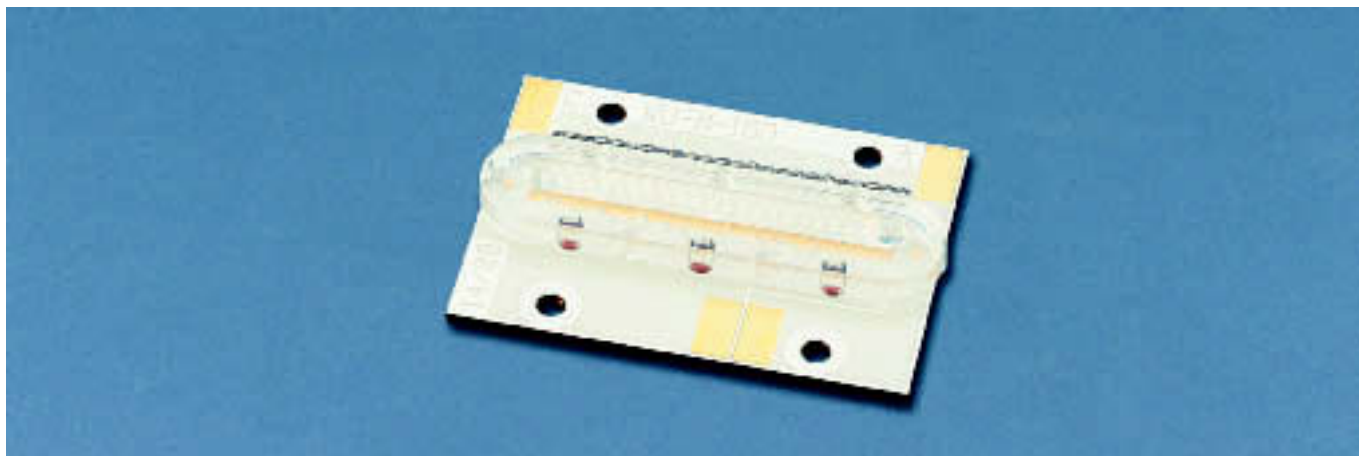


COB - Technologie

WU - M - 160 -...

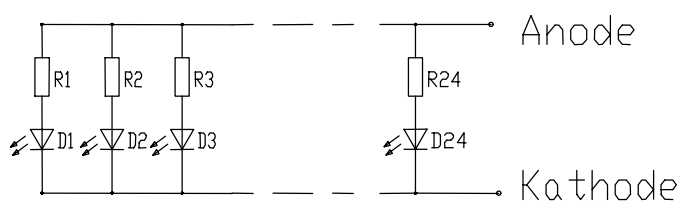
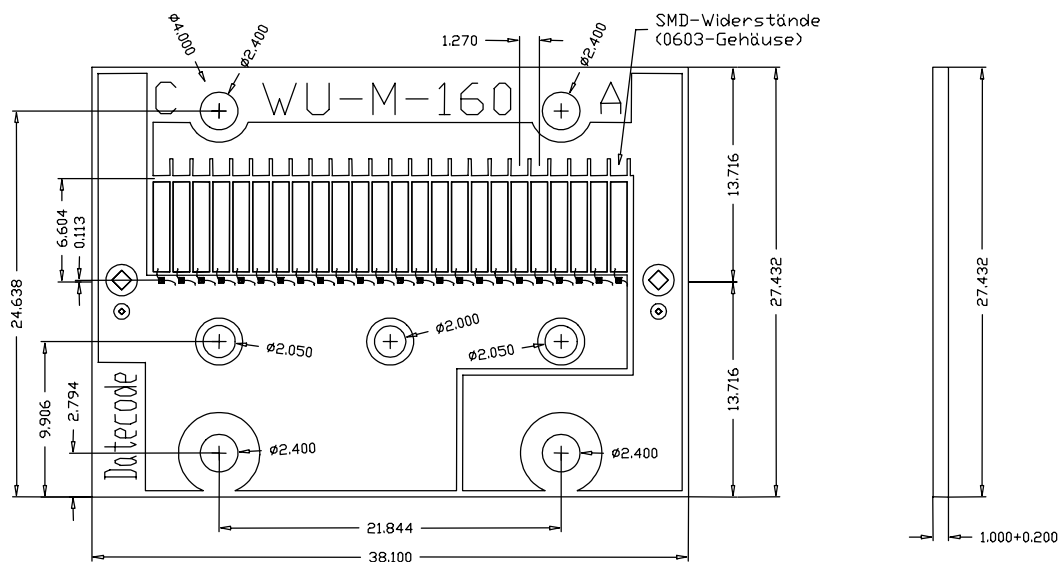
LED-Hintergrundbeleuchtung
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LED-Back Lights for LCD-Displays
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Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 160 - R	91600	640	red	---	10	240
WU - M - 160 - PG	91601	560	pure-green	---	10	240
WU - M - 160 - YG	91602	570	yellow-green	---	10	240
WU - M - 160 - Y	91603	590	yellow	---	10	240
WU - M - 160 - O	91604	620	orange	---	10	240
WU - M - 160 - A	91605	605	amber	---	10	240
WU - M - 160 - B	91606	465	blue	---	10	240
WU - M - 160 - IR	91608	870	infrared	---	20	480
WU - M - 160 - SO	91609	620	super-orange	---	10	240
WU - M - 160 - SG	916010	530	super-green	---	10	240
WU - M - 160 - SY	916011	590	super-yellow	---	10	240
WU - M - 160 - W	916012	---	white	---	10	240
WU - M - 160 - SA	916013	605	super-amber	---	10	240
WU - M - 160 - SB	916014	470	super-blue	---	10	240

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-160-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	480	480	480	480	480	480	480	480	480	480	480	480	1200	480	mA
U_F typ.	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



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COB - Technologie

WU - M - 161 -...

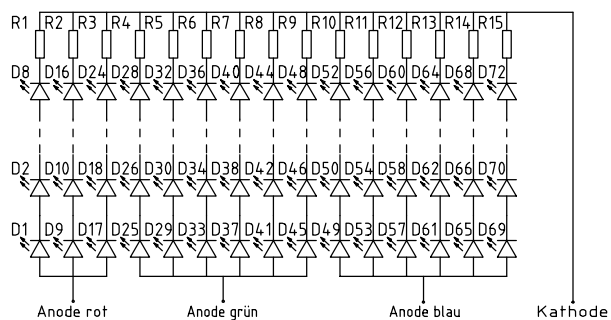
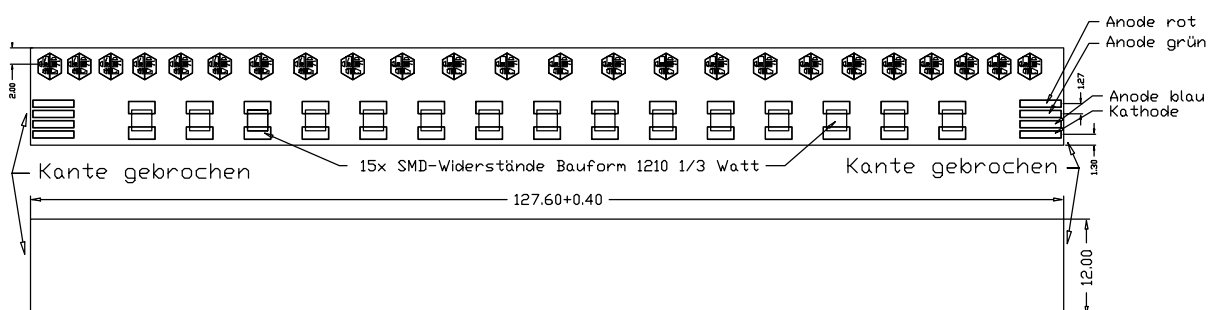
LED-Hintergrundbeleuchtung
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and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 161 - R	91610	640	red	---	10	---
WU - M - 161 - PG	91611	560	pure-green	---	10	---
WU - M - 161 - YG	91612	570	yellow-green	---	10	---
WU - M - 161 - Y	91613	590	yellow	---	10	---
WU - M - 161 - O	91614	620	orange	---	10	---
WU - M - 161 - A	91615	605	amber	---	10	---
WU - M - 161 - B	91616	465	blue	---	10	---
WU - M - 161 - IR	91618	870	infrared	---	20	---
WU - M - 161 - SO	91619	620	super-orange	---	10	---
WU - M - 161 - SG	916110	530	super-green	---	10	---
WU - M - 161 - SY	916111	590	super-yellow	---	10	---
WU - M - 161 - W	916112	---	white	---	10	---
WU - M - 161 - SA	916113	605	super-amber	---	10	---
WU - M - 161 - SB	916114	470	super-blue	---	10	---

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-161-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	mA
U_F typ.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	---	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	$^\circ\text{C}$
Storage Temperature $T_{Sto.}$	- 40 - + 80	$^\circ\text{C}$

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).

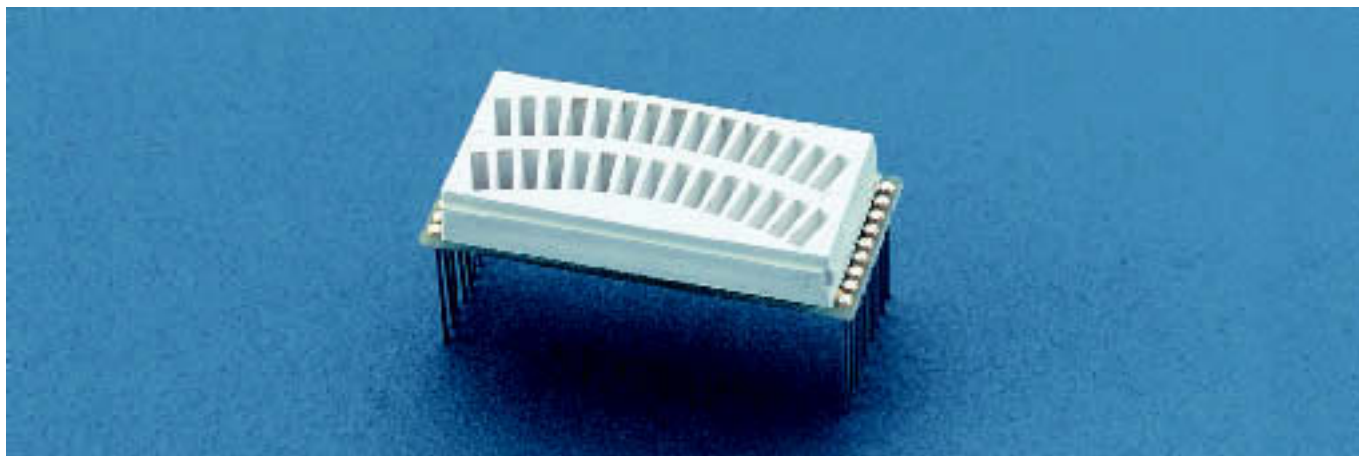


COB - Technologie

WU - M - 162 -...

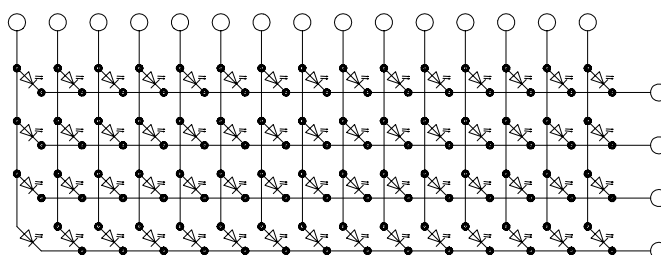
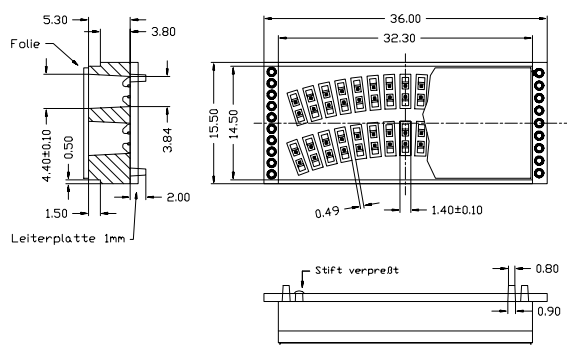
LED-Hintergrundbeleuchtung
für LCD-Anzeigen und andere
lichttechnische Anwendungen

LED-Back Lights for LCD-Displays
and other technical light applications



Herstellung in Deutschland

Made in Germany



Unit: [mm] Tolerance: ± 0.25

Type	Art. No.	Wavelength λ_V [nm]	Emitting Colour	L_V [cd / m ²]	Forward Current I_F [mA] at $T_a = 25^\circ\text{C}$	
				typ.	I_F per Die	I_F per Module
WU - M - 162 - R	91620	640	red	---	10	---
WU - M - 162 - PG	91621	560	pure-green	---	10	---
WU - M - 162 - YG	91622	570	yellow-green	---	10	---
WU - M - 162 - Y	91623	590	yellow	---	10	---
WU - M - 162 - O	91624	620	orange	---	10	---
WU - M - 162 - A	91625	605	amber	---	10	---
WU - M - 162 - B	91626	465	blue	---	10	---
WU - M - 162 - IR	91628	870	infrared	---	20	---
WU - M - 162 - SO	91629	620	super-orange	---	10	---
WU - M - 162 - SG	916210	530	super-green	---	10	---
WU - M - 162 - SY	916211	590	super-yellow	---	10	---
WU - M - 162 - W	916212	---	white	---	10	---
WU - M - 162 - SA	916213	605	super-amber	---	10	---
WU - M - 162 - SB	916214	470	super-blue	---	10	---

Optical and Electrical Characteristics at $T_a = 25^\circ\text{C}$

Type / WU-M-162-	R	PG	YG	Y	O	A	B	SB	SO	SY	SA	SG	IR	W	Unit
Parameters / Module															
I_F max. per Die	20	20	20	20	20	20	20	20	20	20	20	20	50	20	mA
U_F typ. per Die	1.8	2.6	2.2	2.0	2.1	2.2	3.8	3.5	2.2	2.0	2.2	3.5	1.3	3.5	V
λ_V peak. typ.	650	555	565	590	630	605	470	475	630	595	610	525	870	---	nm
λ_V dom. typ.	640	560	570	588	620	605	465	470	620	590	605	530	---	---	nm
Chromatic coordinates ± 0.04														X=0.29 Y=0.32	
$\Delta\lambda$ typ.	20	25	30	35	40	40	50	35	20	20	25	50	---	---	nm

Absolute Maximum Ratings

Parameter	Unit	
Power Dissipation P_D	U_F typ. x I_F per Module	mW
Reverse Voltage U_R	5	V
Operating Temperature $T_{Opr.}$	- 20 - + 80	°C
Storage Temperature $T_{Sto.}$	- 40 - + 80	°C

Weitere technische Details auf Anfrage.

Vorgenannte Leuchtdichten und Farben sind Standardwerte und auf Wunsch variabel (Farbmischung).

Further technical information after request.

All luminous intensities are standard values, other values available upon request (mixture of colours).



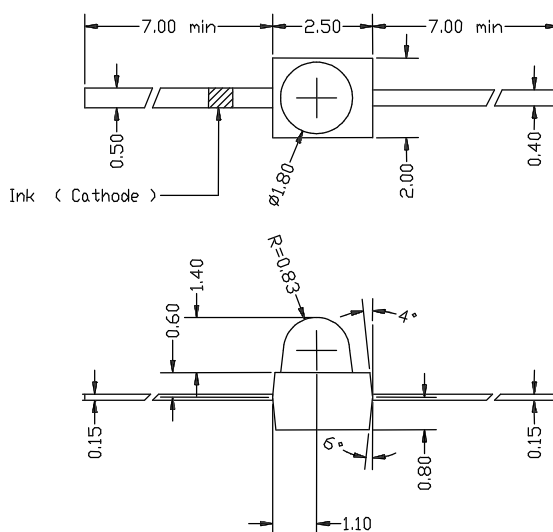
Optoelektronik

Subminiatur LEDs Axial LED 1,8mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-17HD	e005492	GaP	700	red-diffused	1,2 - 2,0	74
WU-2-17GD	e006748	GaP	567	green-diffused	6,0 - 10,0	74
WU-2-17YD	e006749	GaAsP/ GaP	585	yellow-diffused	5,0 - 8,0	74
WU-2-17ED	e006750	GaAsP/ GaP	635	orange-diffused	7,0 - 12,0	74
WU-2-17ID	e006751	GaAsP/ GaP	635	red-diffused	7,0 - 12,0	74
WU-2-17GC	e006752	GaP	567	waterclear	10,0 - 16,0	36
WU-2-17YC	e006753	GaAsP/ GaP	585	waterclear	8,0 - 14,0	36
WU-2-17EC	e006754	GaAsP/ GaP	635	waterclear	12,0 - 20,0	36
WU-2-17SRD-UR	e005493	GaAlAs/GaAs	660	red-diffused	42,0 - 70,0	74
WU-2-17SGD-HE	e005494	GaP	567	green-diffused	8,0 - 13,0	74
WU-2-17SYD-UR	e005495	InGaAlP/GaAs	595	yellow-diffused	95,0 - 160,0	74
WU-2-17SED-UR	e005496	InGaAlP/GaAs	620	orange-diffused	95,0 - 160,0	74
WU-2-17SRC-UR	e005497	GaAlAs/GaAs	660	waterclear	142,0 - 236,0	36
WU-2-17SGC-HE	e005498	GaP	567	waterclear	20,0 - 34,0	36
WU-2-17SYC-UR	e005499	InGaAlP/GaAs	595	waterclear	315,0 - 520,0	36
WU-2-17SEC-UR	e005500	InGaAlP/GaAs	620	waterclear	315,0 - 520,0	36

Package Dimensions

WU-2-17



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



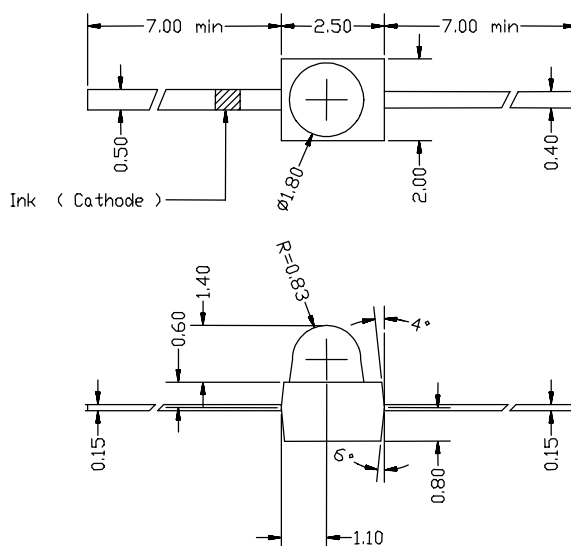
Optoelektronik

Subminiatur LEDs Axial LED 1,8mm Round Low current-Type

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=2\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-70GD/LC	e006454	GaP	567	green-diffused	0,5 - 1,1	74
WU-2-70YD/LC	e006455	GaAsP/ GaP	585	yellow-diffused	0,4 - 0,9	74
WU-2-70ED/LC	e006456	GaAsP/ GaP	635	orange-diffused	0,5 - 1,3	74
WU-2-70ID/LC	e006457	GaAsP/ GaP	635	red-diffused	0,5 - 1,3	74
WU-2-70GC/LC	e006458	GaP	567	waterclear	0,8 - 1,9	36
WU-2-70YC/LC	e006459	GaAsP/ GaP	585	waterclear	0,6 - 1,5	36
WU-2-70EC/LC	e006460	GaAsP/ GaP	635	waterclear	0,9 - 2,2	36
WU-2-70SRD/LC	e005737	GaAlAs/GaAs	660	red-diffused	2,1 - 3,5	74
WU-2-70SGD/LC	e005782	GaP	567	green-diffused	0,8 - 1,5	74
WU-2-70SYD/LC	e005783	InGaAlP/GaAs	595	yellow-diffused	4,8 - 8,0	74
WU-2-70SED/LC	e005784	InGaAlP/GaAs	620	orange-diffused	4,8 - 8,0	74
WU-2-70SRC/LC	e005785	GaAlAs/GaAs	660	waterclear	7,1 - 11,8	36
WU-2-70SGC/LC	e005786	GaP	567	waterclear	7,0 - 4,0	36
WU-2-70SYC/LC	e005787	InGaAlP/GaAs	595	waterclear	15,0 - 20,0	36
WU-2-70SEC/LC	e005788	InGaAlP/GaAs	620	waterclear	15,0 - 20,0	36

Package Dimensions

WU-2-70



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

Subminiatur LEDs Axial LED 1,8mm Round Z-Bend-Forming

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-17-09HD	e005699	GaP	700	red-diffused	1,2 - 2,0	74
WU-2-17-09YD	e005704	GaAsP/GaP	585	yellow-diffused	6,0 - 10,0	74
WU-2-17-09GD	e005705	GaP	567	green-diffused	5,9 - 10,0	74
WU-2-17-09ED	e005701	GaAsP/GaP	635	orange-diffused	7,0 - 12,0	74
WU-2-17-09ID	e005789	GaAsP/GaP	635	red-diffused	7,0 - 12,0	74

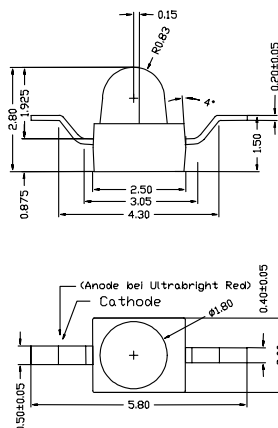
WU-2-17-09HC	e005706	GaP	700	waterclear	2,0 - 3,4	36
WU-2-17-09YC	e005711	GaAsP/GaP	585	waterclear	8,0 - 14,0	36
WU-2-17-09GC	e005712	GaP	567	waterclear	10,0 - 16,0	36
WU-2-17-09EC	e005708	GaAsP/GaP	635	waterclear	12,0 - 20,0	36

WU-2-17-09SRD-UR	e005700	GaAlAs/GaAlAs	660	red-diffused	42,0 - 70,0	74
WU-2-17-09SGD-HE	e005791	GaP	567	green-diffused	8,0 - 13,0	74
WU-2-17-09SED-UR	e005702	InGaAlP/GaAs	620	orange-diffused	63,0 - 105,0	74
WU-2-17-09SYD-UR	e005703	InGaAlP/GaAs	593	yellow-diffused	95,0 - 160,0	74

WU-2-17-09SRC-UR	e005707	GaAlAs/GaAlAs	660	waterclear	142,0 - 236,0	36
WU-2-17-09SGC-HE	e005792	GaP	567	waterclear	20,0 - 34,0	36
WU-2-17-09SEC-UR	e005709	InGaAlP/GaAs	620	waterclear	212,0 - 354,0	36
WU-2-17-09SYC-UR	e005710	InGaAlP/GaAs	593	waterclear	315,0 - 520,0	36

Package Dimensions

WU-2-17-09



1. All dimensions are in [mm], Tolerance is $\pm 0.25mm$ unless otherwise noted.



Optoelektronik

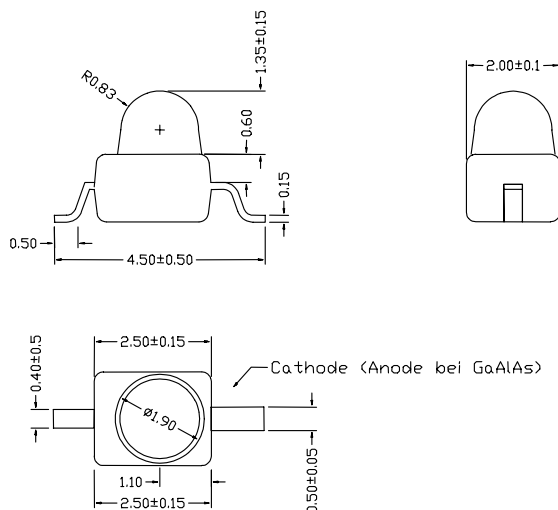
Subminiatur LEDs Axial LED 1,9mm Round Gull-Wing-Forming

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-17-03ID	e005720	GaAsP/GaP	625	red-diffused	8,0 - 20,0	60
WU-1-17-03SGD	e005723	GaP	565	green-diffused	3,2 - 12,5	60
WU-1-17-03YD	e005726	GaAsP/GaP	590	yellow-diffused	3,2 - 12,5	60
WU-1-17-03SRD	e005729	GaAlAs	660	red-diffused	30,0 - 100,0	60
WU-1-17-03SYD	e005772	InGaAlP	595	yellow-diffused	80,0 - 200,0	60

WU-1-17-03EC	e005722	GaAsP/GaP	625	waterclear	20,0 - 100,0	30
WU-1-17-03SGC	e005725	GaP	565	waterclear	20,0 - 70,0	30
WU-1-17-03YC	e005728	GaAsP/GaP	590	waterclear	20,0 - 70,0	30
WU-1-17-03SRC	e005188	GaAlAs	660	waterclear	200,0 - 1.000,0	30
WU-1-17-03SYC	e005773	InGaAlP	595	waterclear	700,0 - 1.300,0	30

Package Dimensions

WU-1-17-03Serie



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



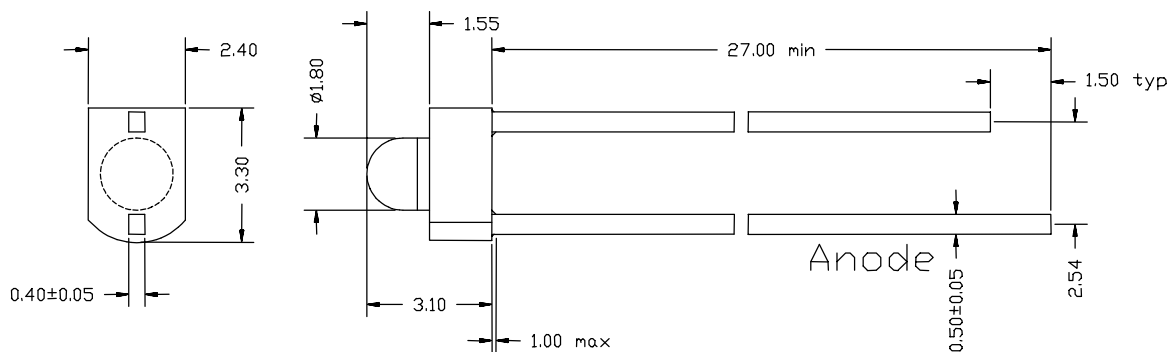
Optoelektronik

Subminiatur LEDs Radial LED 1,8mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10mA$ (20mA*) Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-19HD	e006118	GaP	700	red-diffused	0,5 - 3,2	70
WU-1-19GD	e006119	GaP	565	green-diffused	5,0 - 20,0	70
WU-1-19ND	e006942	GaAsP/ GaP	610	orange-diffused	8,0 - 40,0	70
WU-1-19YD	e006120	GaAsP/ GaP	590	yellow-diffused	3,0 - 20,0	70
WU-1-19ED	e006121	GaAsP/ GaP	625	orange-diffused	8,0 - 32,0	70
WU-1-19ID	e006053	GaAsP/ GaP	625	red-diffused	8,0 - 32,0	70
WU-1-19SRD	e006101	GaAlAs	660	red-diffused	70,0 - 300,0*	70
WU-1-19SGD	e005794	GaP	565	green-diffused	20,0 - 40,0*	70
WU-1-19SYD	e005795	InGaAlP	590	yellow-diffused	70,0 - 200,0*	70
WU-1-19SRC	e006196	GaAlAs	660	waterclear	100,0 - 500,0*	30
WU-1-19SGC	e005029	GaP	565	waterclear	40,0 - 80,0*	30
WU-1-19SYC	e005501	InGaAlP	590	waterclear	100,0 - 400,0*	30
WU-1-19SRT	e005796	GaAlAs	660	red-transparent	100,0 - 500,0*	30
WU-1-19SGT	e005030	GaP	565	green-transparent	40,0 - 80,0*	30
WU-1-19SYT	e005797	InGaAlP	590	yellow-transparent	100,0 - 400,0*	30

Package Dimensions

WU-1-19



1. All dimensions are in [mm], Tolerance is ±0.25mm unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



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LED 3mm Standard Round

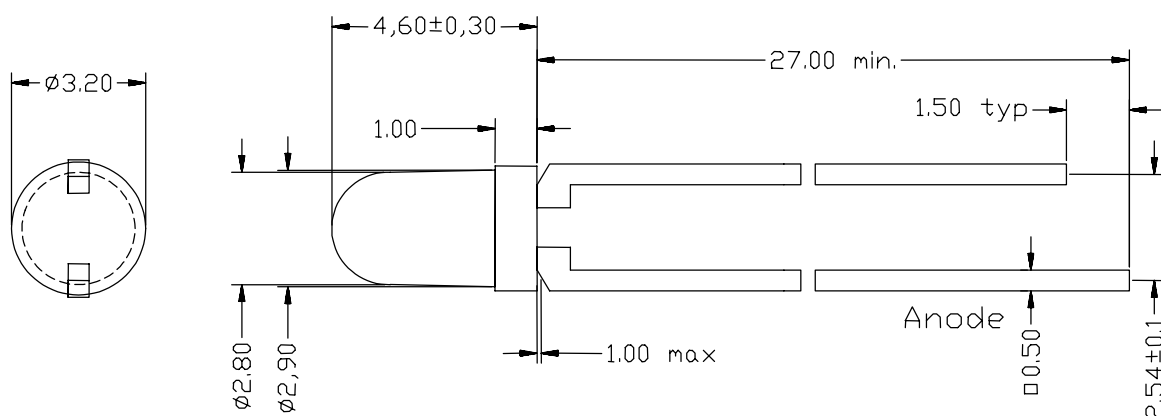
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(20\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-30HD	e006043	GaP	700	red-diffused	1,3 - 5,0	60
WU-1-30GD	e006605	GaP	565	green-diffused	8,0 - 32,0	60
WU-1-30PGD	e006883	GaP	555	pure-green-diffused	2,0 - 8,0	60
WU-1-30YD	e006606	GaAsP/ GaP	590	yellow-diffused	8,0 - 32,0	60
WU-1-30ND	e006656	GaAsP/ GaP	610	pure-orange-diffused	8,0 - 50,0	60
WU-1-30ED	e006922	GaAsP/ GaP	625	orange-diffused	8,0 - 50,0	60
WU-1-30ID	e006607	GaAsP/ GaP	625	red-diffused	8,0 - 50,0	60
WU-1-30BD	e006888	GaN	430	blue-diffused	12,5* - 40,0*	60

WU-1-30GC	e005060	GaP	565	waterclear	20,0 - 80,0	50
WU-1-30PGC	e005724	GaP	555	waterclear	3,2 - 20,0	50
WU-1-30YC	e006042	GaAsP/ GaP	590	waterclear	10,0 - 50,0	50
WU-1-30NC	e006642	GaAsP/ GaP	610	waterclear	20,0 - 125,0	50
WU-1-30EC	e006134	GaAsP/ GaP	625	waterclear	20,0 - 125,0	50
WU-1-30BC	e006812	GaN	430	waterclear	20,0* - 90,0*	20

WU-1-30IT	e006081	GaAsP/ GaP	625	red-transparent	12,5 - 40,0	60
WU-1-30GT	e006123	GaP	565	green-transparent	20,0 - 80,0	50
WU-1-30PGT	e006655	GaP	555	pure-green-transp.	3,2 - 20,0	50
WU-1-30YT	e006122	GaAsP/ GaP	590	yellow-transparent	10,0 - 50,0	50
WU-1-30NT	e006831	GaAsP/ GaP	610	pure-orange-transp.	20,0 - 125,0	50
WU-1-30ET	e006142	GaAsP/ GaP	625	orange-transparent	20,0 - 125,0	50
WU-1-30BT	e006810	GaN	430	blue-transparent	20,0* - 60,0*	20

Package Dimensions

WU-1-30



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 3mm Round

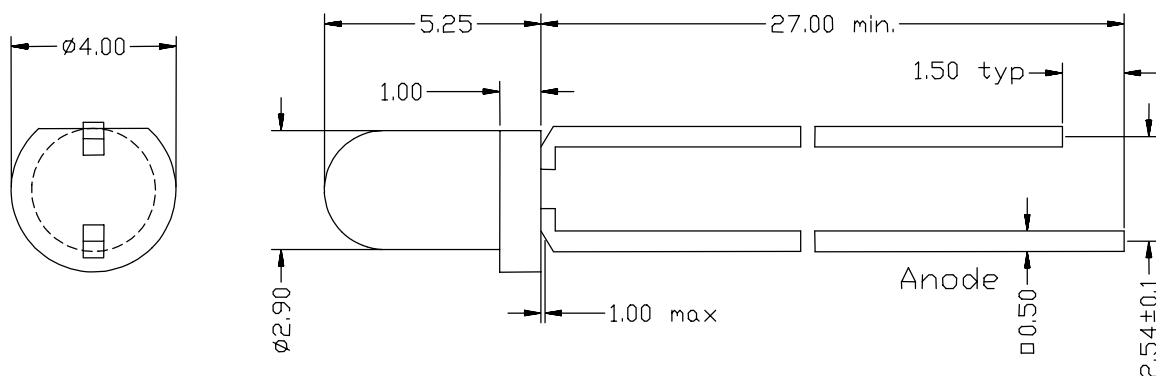
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-31HD-SL	e006144	GaP	700	red-diffused	2,0 - 5,0	60
WU-1-31GD-SL	e006145	GaP	565	green-diffused	5,0 - 32,0	60
WU-1-31YD-SL	e006146	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	60
WU-1-31ED-SL	e006147	GaAsP/ GaP	625	orange-diffused	8,0 - 50,0	60
WU-1-31ID-SL	e006148	GaAsP/ GaP	625	red-diffused	8,0 - 50,0	60

WU-1-31HC-SL	e006150	GaP	700	waterclear	2,0 - 8,0	30
WU-1-31GC-SL	e006151	GaP	565	waterclear	20,0 - 80,0	30
WU-1-31YC-SL	e006152	GaAsP/ GaP	590	waterclear	30,0 - 60,0	30
WU-1-31EC-SL	e006153	GaAsP/ GaP	625	waterclear	20,0 - 125,0	30

WU-1-31HT-SL	e006155	GaP	700	red-transparent	2,0 - 8,0	30
WU-1-31GT-SL	e006156	GaP	565	green-transparent	20,0 - 80,0	30
WU-1-31YT-SL	e006157	GaAsP/ GaP	590	yellow-transparent	30,0 - 60,0	30
WU-1-31ET-SL	e006158	GaAsP/ GaP	625	orange-transparent	20,0 - 125,0	30
WU-1-31IT-SL	e006159	GaAsP/ GaP	625	red-transparent	20,0 - 125,0	30

Package Dimensions

WU-1-31



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 3mm Round

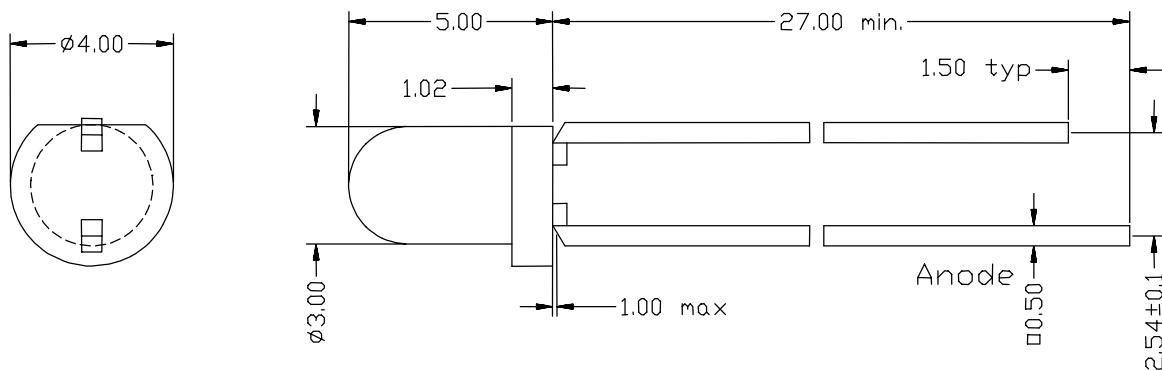
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-32HD	e006161	GaP	700	red-diffused	2,0 - 5,0	60
WU-1-32GD	e006162	GaP	565	green-diffused	5,0 - 32,0	60
WU-1-32YD	e006163	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	60
WU-1-32ND	e005502	GaAsP/ GaP	610	pure-orange-diffused	8,0 - 50,0	60
WU-1-32ED	e006164	GaAsP/ GaP	625	orange-diffused	8,0 - 50,0	60
WU-1-32ID	e006165	GaAsP/ GaP	625	red-diffused	8,0 - 50,0	60

WU-1-32HC	e006167	GaP	700	waterclear	2,0 - 7,0	50
WU-1-32GC	e006168	GaP	565	waterclear	20,0 - 80,0	50
WU-1-32YC	e006169	GaAsP/ GaP	590	waterclear	10,0 - 50,0	50
WU-1-32NC	e005503	GaAsP/ GaP	610	waterclear	20,0 - 125,0	50
WU-1-32EC	e006170	GaAsP/ GaP	625	waterclear	20,0 - 125,0	50

WU-1-32HT	e006172	GaP	700	red-transparent	2,0 - 7,0	50
WU-1-32GT	e006173	GaP	565	green-transparent	20,0 - 80,0	50
WU-1-32YT	e006174	GaAsP/ GaP	590	yellow-transparent	10,0 - 50,0	50
WU-1-32NT	e005504	GaAsP/ GaP	610	pure-orange-transp.	20,0 - 125,0	50
WU-1-32ET	e006175	GaAsP/ GaP	625	orange-transparent	20,0 - 125,0	50
WU-1-32IT	e006176	GaAsP/ GaP	625	red-transparent	20,0 - 125,0	50

Package Dimensions

WU-1-32



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



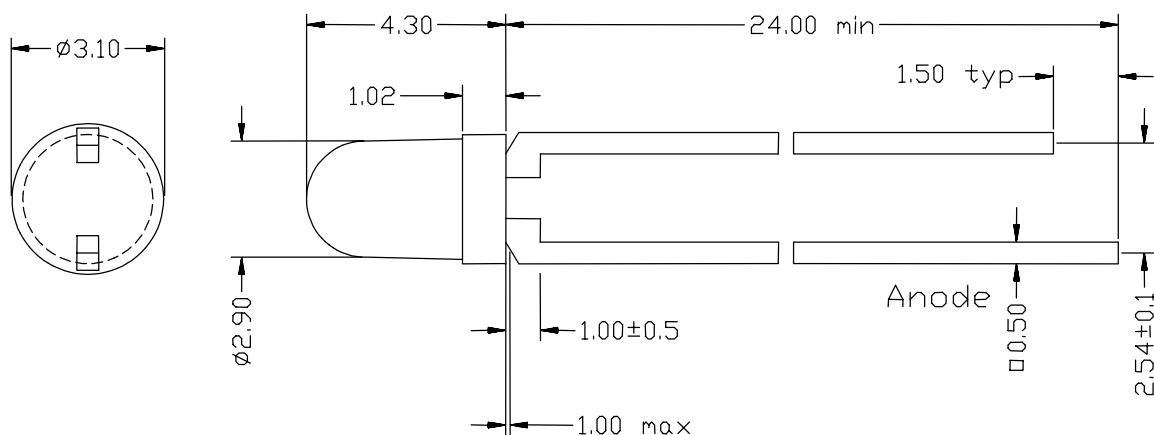
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-33HD	e006190	GaP	700	red-diffused	2,7 - 3,2	60
WU-2-33GD	e006191	GaP	567	green-diffused	12,0 - 15,0	60
WU-2-33YD	e006192	GaAsP/ GaP	585	yellow-diffused	12,0 - 14,0	60
WU-2-33ED	e006178	GaAsP/ GaP	635	orange-diffused	10,0 - 17,0	60
WU-2-33ID	e006193	GaAsP/ GaP	635	red-diffused	10,0 - 17,0	60

WU-2-33HC	e006180	GaP	700	waterclear	9,5 - 12,0	40
WU-2-33GC	e006181	GaP	567	waterclear	39,0 - 51,0	40
WU-2-33YC	e006182	GaAsP/ GaP	585	waterclear	39,0 - 47,0	40
WU-2-33EC	e006183	GaAsP/ GaP	635	waterclear	35,0 - 59,0	40

WU-2-33HT	e006185	GaP	700	red-transparent	9,5 - 12,0	40
WU-2-33GT	e006186	GaP	567	green-transparent	39,0 - 51,0	40
WU-2-33YT	e006187	GaAsP/ GaP	585	yellow-transparent	39,0 - 47,0	40
WU-2-33ET	e006188	GaAsP/ GaP	635	orange-transparent	35,0 - 59,0	40
WU-2-33IT	e006189	GaAsP/ GaP	635	red-transparent	35,0 - 59,0	40

Package Dimensions

WU-2-33



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



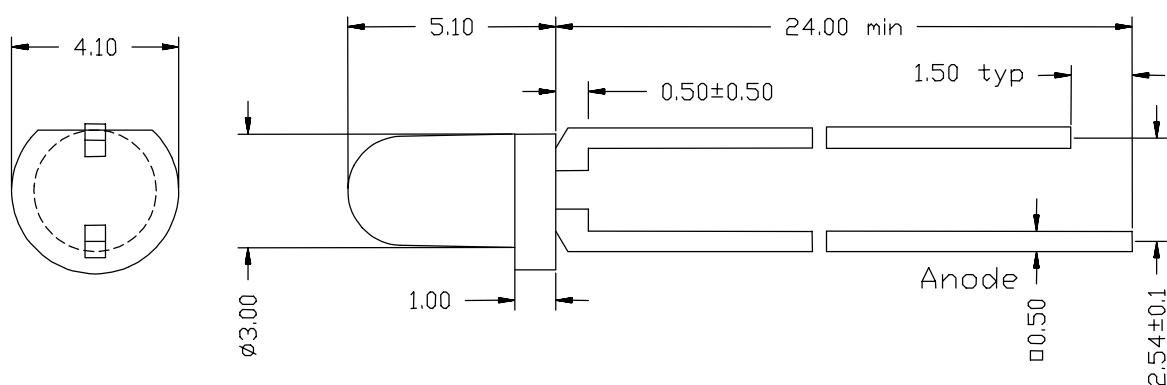
Optoelektronik

LED 3mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_V [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_V [°]
WU-2-34HD	e006365	GaP	700	red-diffused	2,0 - 5,0	56
WU-2-34GD	e006366	GaP	567	green-diffused	8,0 - 13,3	56
WU-2-34YD	e006367	GaAsP/ GaP	585	yellow-diffused	7,0 - 11,0	56
WU-2-34ED	e006203	GaAsP/ GaP	635	orange-diffused	9,3 - 15,5	56
WU-2-34ID	e006204	GaAsP/ GaP	635	red-diffused	9,3 - 15,5	56
WU-2-34HC	e006206	GaP	700	waterclear	5,5 - 9,2	36
WU-2-34GC	e006207	GaP	567	waterclear	27,0 - 45,0	36
WU-2-34YC	e006208	GaAsP/ GaP	585	waterclear	23,0 - 38,0	36
WU-2-34EC	e006209	GaAsP/ GaP	635	waterclear	32,0 - 53,0	36
WU-2-34HT	e006211	GaP	700	red-transparent	5,5 - 9,2	36
WU-2-34GT	e006212	GaP	567	green-transparent	27,0 - 45,0	36
WU-2-34YT	e006213	GaAsP/ GaP	585	yellow-transparent	23,0 - 38,0	36
WU-2-34ET	e006214	GaAsP/ GaP	635	orange-transparent	32,0 - 53,0	36
WU-2-34IT	e006215	GaAsP/ GaP	635	red-transparent	32,0 - 53,0	36

Package Dimensions

WU-2-34



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 3mm Round

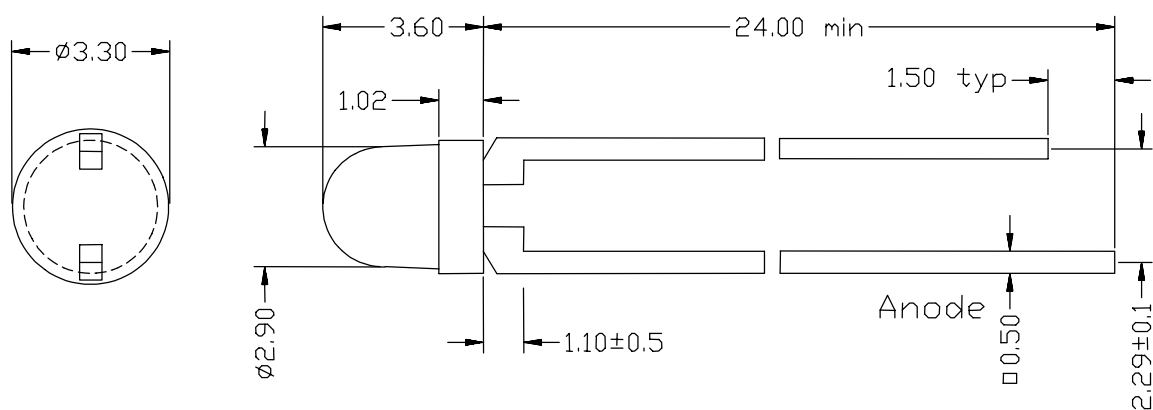
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-35HD	e006237	GaP	700	red-diffused	1,9 - 3,2	100
WU-2-35GD	e006238	GaP	567	green-diffused	5,0 - 8,3	100
WU-2-35YD	e006239	GaAsP/ GaP	585	yellow-diffused	4,2 - 6,9	100
WU-2-35ED	e006240	GaAsP/ GaP	635	orange-diffused	5,9 - 9,8	100
WU-2-35ID	e006241	GaAsP/ GaP	635	red-diffused	5,9 - 9,8	100

WU-2-35HC	e006243	GaP	700	waterclear	6,7 - 11,2	90
WU-2-35GC	e006244	GaP	567	waterclear	6,7 - 11,2	90
WU-2-35YC	e006245	GaAsP/ GaP	585	waterclear	17,0 - 28,2	90
WU-2-35EC	e006246	GaAsP/ GaP	635	waterclear	19,8 - 33,1	90

WU-2-35HT	e006248	GaP	700	red-transparent	6,7 - 11,2	90
WU-2-35GT	e006249	GaP	567	green-transparent	6,7 - 11,2	90
WU-2-35YT	e006250	GaAsP/ GaP	585	yellow-transparent	17,0 - 28,2	90
WU-2-35ET	e006251	GaAsP/ GaP	635	orange-transparent	19,8 - 33,1	90
WU-2-35IT	e006252	GaAsP/ GaP	635	red-transparent	19,8 - 33,1	90

Package Dimensions

WU-2-35



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



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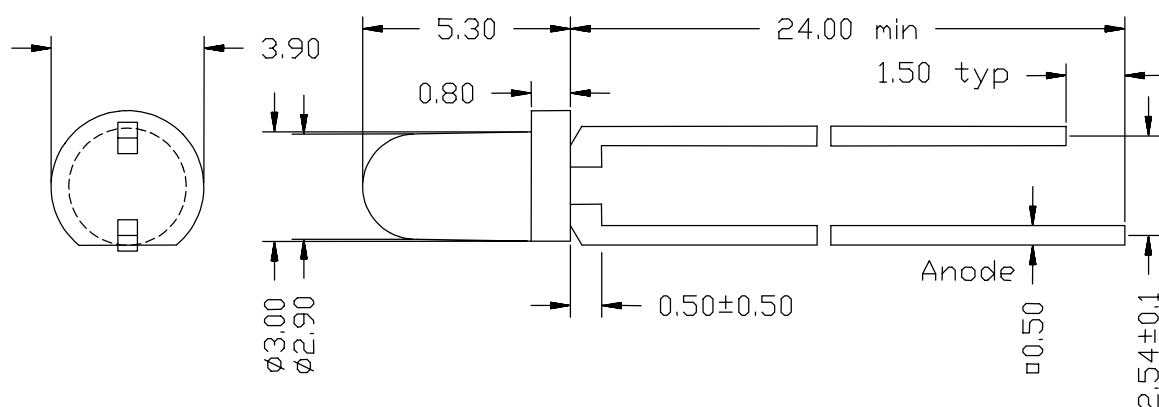
LED 3mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-36HD	e006217	GaP	700	red-diffused	1,6 - 2,7	34
WU-2-36GD	e006218	GaP	567	green-diffused	8,0 - 13,3	34
WU-2-36YD	e006231	GaAsP/ GaP	585	yellow-diffused	6,6 - 11,0	34
WU-2-36ED	e006219	GaAsP/ GaP	635	orange-diffused	9,3 - 15,5	34
WU-2-36ID	e006200	GaAsP/ GaP	635	red-diffused	9,3 - 15,5	34

WU-2-36SRD	e006234	GaAlAs	660	red-diffused	40,0 - 70,0	34
WU-2-36SRC	e005505	GaAlAs	660	waterclear	185,0 - 310,0	24

Package Dimensions

WU-2-36



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



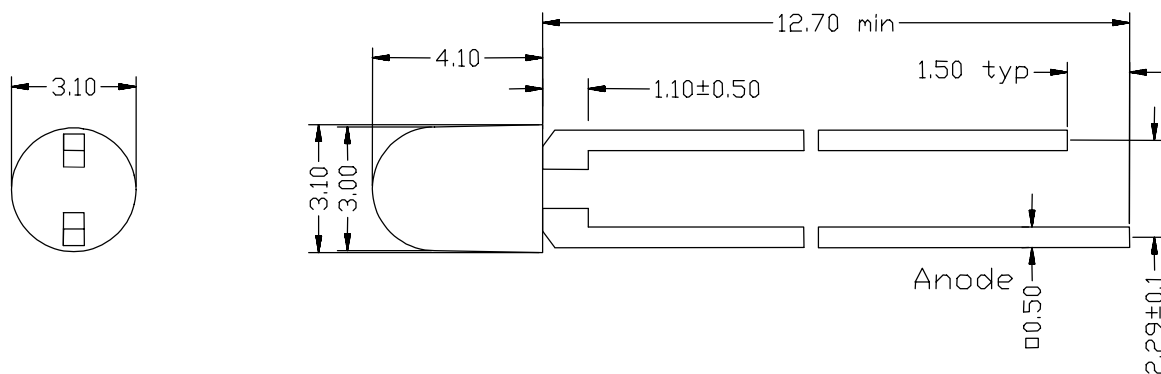
Optoelektronik

LED 3,1mm Round Without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-38RD	e006253	GaAsP	655	red-diffused	0,2 - 0,5	84
WU-2-38HD	e006254	GaP	700	red-diffused	0,3 - 0,8	84
WU-2-38GD	e006255	GaP	567	green-diffused	1,5 - 3,7	84
WU-2-38YD	e006256	GaAsP / GaP	585	yellow-diffused	1,2 - 3,1	84
WU-2-38ED	e006257	GaAsP / GaP	635	orange-diffused	1,7 - 4,3	84
WU-2-38ID	e006258	GaAsP / GaP	635	red-diffused	1,7 - 4,3	84
WU-2-38RC	e006259	GaAsP	655	waterclear	0,7 - 1,7	74
WU-2-38HC	e006260	GaP	700	waterclear	1,1 - 2,7	74
WU-2-38GC	e006261	GaP	567	waterclear	5,0 - 12,6	74
WU-2-38YC	e006262	GaAsP / GaP	585	waterclear	4,2 - 10,5	74
WU-2-38EC	e006263	GaAsP / GaP	635	waterclear	5,8 - 14,6	74
WU-2-38RT	e006264	GaAsP	655	red-transparent	0,7 - 1,7	74
WU-2-38HT	e006265	GaP	700	red-transparent	1,1 - 2,7	74
WU-2-38GT	e006266	GaP	567	green-transparent	5,0 - 12,6	74
WU-2-38YT	e006267	GaAsP / GaP	585	yellow-transparent	4,2 - 10,5	74
WU-2-38ET	e006268	GaAsP / GaP	635	orange-transparent	5,8 - 14,6	74
WU-2-38IT	e006269	GaAsP / GaP	635	red-transparent	5,8 - 14,6	74

Package Dimensions

WU-2-38



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



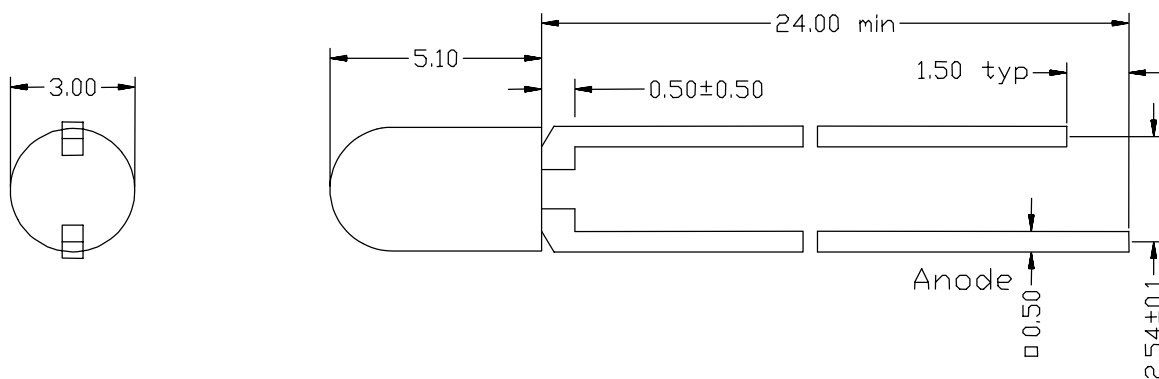
Optoelektronik

LED 3mm Round Without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-39RD	e006270	GaAsP	655	red-diffused	0,3 - 0,8	70
WU-2-39HD	e006271	GaP	700	red-diffused	0,5 - 1,2	70
WU-2-39GD	e006272	GaP	567	green-diffused	2,4 - 5,9	70
WU-2-39YD	e006273	GaAsP / GaP	585	yellow-diffused	2,0 - 4,9	70
WU-2-39ED	e006274	GaAsP / GaP	635	orange-diffused	2,8 - 6,9	70
WU-2-39ID	e006275	GaAsP / GaP	635	red-diffused	2,8 - 6,9	70
WU-2-39RC	e006276	GaAsP	655	waterclear	1,1 - 2,7	48
WU-2-39HC	e006277	GaP	700	waterclear	1,6 - 4,1	48
WU-2-39GC	e006278	GaP	567	waterclear	8,0 - 20,0	48
WU-2-39YC	e006279	GaAsP / GaP	585	waterclear	6,7 - 16,7	48
WU-2-39EC	e006280	GaAsP / GaP	635	waterclear	9,4 - 23,5	48
WU-2-39RT	e006281	GaAsP	655	red-transparent	1,1 - 2,7	48
WU-2-39HT	e006282	GaP	700	red-transparent	1,6 - 4,1	48
WU-2-39GT	e006283	GaP	567	green-transparent	8,0 - 20,0	48
WU-2-39YT	e006284	GaAsP / GaP	585	yellow-transparent	6,7 - 16,7	48
WU-2-39ET	e006285	GaAsP / GaP	635	orange-transparent	9,4 - 23,5	48
WU-2-39IT	e006286	GaAsP / GaP	635	red-transparent	9,4 - 23,5	48

Package Dimensions

WU-2-39



1. All dimensions are in [mm], Tolerance is ±0.25mm unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



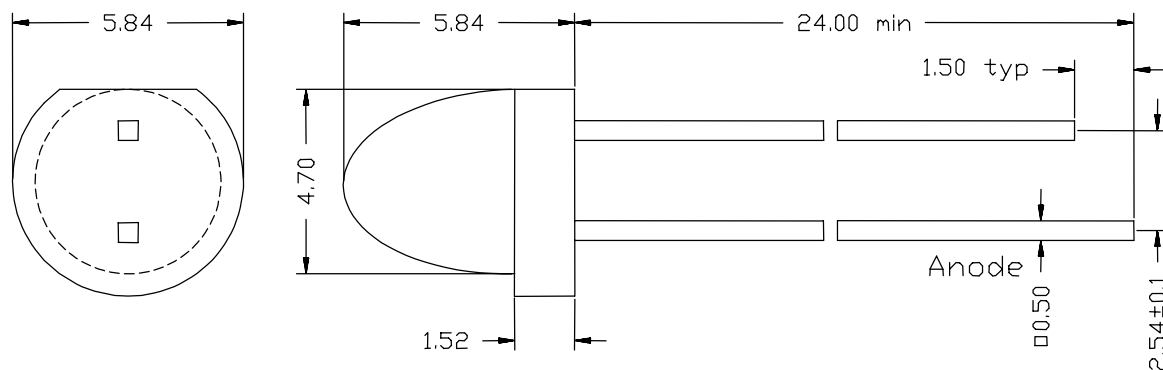
Optoelektronik

LED 4,7mm Round Low Profile

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-40RD	e006287	GaAsP	655	red-diffused	0,6 - 1,5	36
WU-2-40HD	e006288	GaP	700	red-diffused	0,9 - 2,3	36
WU-2-40GD	e006289	GaP	567	green-diffused	2,4 - 5,9	36
WU-2-40YD	e006290	GaAsP / GaP	585	yellow-diffused	1,9 - 4,8	36
WU-2-40ED	e006291	GaAsP / GaP	635	orange-diffused	2,7 - 6,8	36
WU-2-40ID	e006292	GaAsP / GaP	635	red-diffused	2,7 - 6,8	36
WU-2-40RC	e006293	GaAsP	655	waterclear	2,0 - 5,1	30
WU-2-40HC	e006294	GaP	700	waterclear	3,1 - 7,8	30
WU-2-40GC	e006295	GaP	567	waterclear	8,0 - 20,1	30
WU-2-40YC	e006296	GaAsP / GaP	585	waterclear	6,5 - 16,3	30
WU-2-40EC	e006297	GaAsP / GaP	635	waterclear	9,2 - 23,1	30
WU-2-40RT	e006298	GaAsP	655	red-transparent	2,0 - 5,1	30
WU-2-40HT	e006299	GaP	700	red-transparent	3,1 - 7,8	30
WU-2-40GT	e006301	GaP	567	green-transparent	8,0 - 20,1	30
WU-2-40YT	e006302	GaAsP / GaP	585	yellow-transparent	6,5 - 16,3	30
WU-2-40ET	e006303	GaAsP / GaP	635	orange-transparent	9,2 - 23,1	30
WU-2-40IT	e006304	GaAsP / GaP	635	red-transparent	9,2 - 23,1	30

Package Dimensions

WU-2-40



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



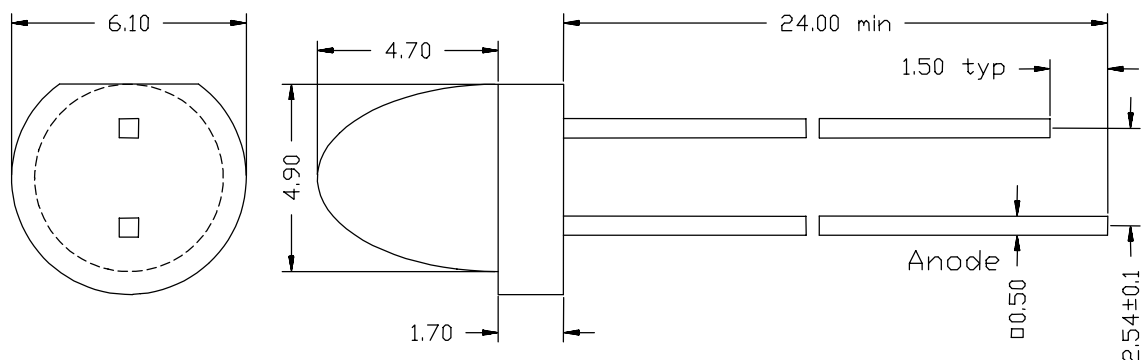
Optoelektronik

LED 4,9mm Round Tapered Type

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-41RD	e006306	GaAsP	655	red-diffused	0,7 - 1,7	48
WU-2-41HD	e006307	GaP	700	red-diffused	1,0 - 2,6	48
WU-2-41GD	e006308	GaP	567	green-diffused	5,0 - 12,6	48
WU-2-41YD	e006309	GaAsP / GaP	585	yellow-diffused	4,2 - 10,4	48
WU-2-41ED	e006310	GaAsP / GaP	635	orange-diffused	5,8 - 14,6	48
WU-2-41ID	e006311	GaAsP / GaP	635	red-diffused	5,8 - 14,6	48
WU-2-41RC	e006312	GaAsP	655	waterclear	2,3 - 5,8	30
WU-2-41HC	e006313	GaP	700	waterclear	3,5 - 8,8	30
WU-2-41GC	e006314	GaP	567	waterclear	17,1 - 42,8	30
WU-2-41YC	e006315	GaAsP / GaP	585	waterclear	14,2 - 35,4	30
WU-2-41EC	e006316	GaAsP / GaP	635	waterclear	19,8 - 49,6	30
WU-2-41RT	e006317	GaAsP	655	red-transparent	2,3 - 5,8	30
WU-2-41HT	e006318	GaP	700	red-transparent	3,5 - 8,8	30
WU-2-41GT	e006319	GaP	567	green-transparent	17,1 - 42,8	30
WU-2-41YT	e006320	GaAsP / GaP	585	yellow-transparent	14,2 - 35,4	30
WU-2-41ET	e006321	GaAsP / GaP	635	orange-transparent	19,8 - 49,6	30
WU-2-41IT	e006322	GaAsP / GaP	635	red-transparent	19,8 - 49,6	30

Package Dimensions

WU-2-41



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



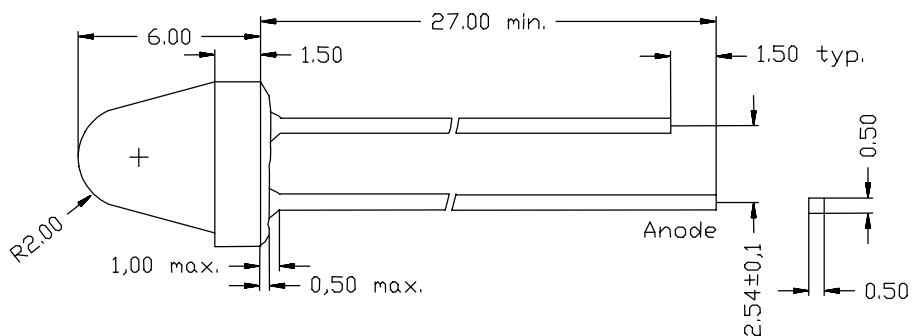
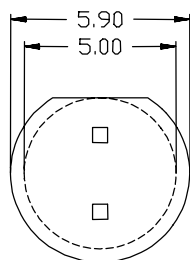
Optoelektronik

LED 5mm Round Tapered Type

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(20\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-50ID	e006323	GaAsP / GaP	625	red-diffused	12,5 - 50,0	60
WU-1-50GD	e006324	GaP	565	green-diffused	5,0 - 20,0	60
WU-1-50YD	e006325	GaAsP / GaP	590	yellow-diffused	5,0 - 20,0	60
WU-1-50SRD	e006326	GaAlAs	660	red-diffused	100,0 - 500,0*	60
WU-1-50SRC	e006327	GaAlAs	660	waterclear	200,0 - 700,0*	30
WU-1-50IT	e006328	GaAsP / GaP	625	red-transparent	32,0 - 125,0	30
WU-1-50GT	e006329	GaP	565	green-transparent	20,0 - 80,0	30
WU-1-50YT	e006330	GaAsP / GaP	590	yellow-transparent	20,0 - 80,0	30
WU-1-50SRT	e006331	GaAlAs	660	red-transparent	200,0 - 700,0*	30

Package Dimensions

WU-1-50



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



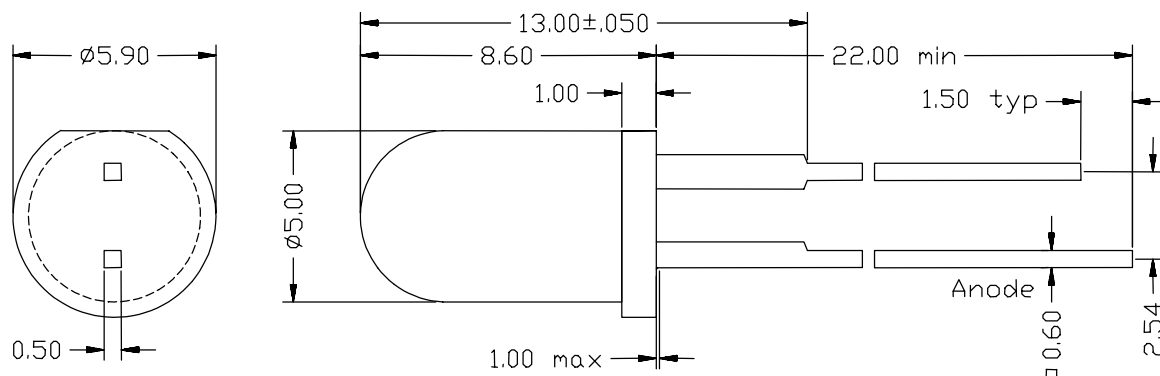
Optoelektronik

LED 5mm Round With Stand-Off

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(20\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-51RD	e006332	GaAsP	660	red-diffused	0,3 - 1,3	60
WU-1-51HD	e006333	GaP	700	red-diffused	0,8 - 2,0	60
WU-1-51GD	e006334	GaP	565	green-diffused	3,2 - 8,0	60
WU-1-51YD	e006335	GaAsP / GaP	590	yellow-diffused	3,2 - 8,0	60
WU-1-51ED	e006336	GaAsP / GaP	625	orange-diffused	12,5 - 20,0	60
WU-1-51ID	e006337	GaAsP / GaP	625	red-diffused	12,5 - 20,0	60
WU-1-51SRD/B	e006338	GaAlAs	660	red-diffused	100,0 - 200,0*	60
WU-1-51SGD	e005798	GaP	565	green-diffused	20,0 - 60,0*	60
WU-1-51SYD	e005799	InGaAlP	595	yellow-diffused	100,0 - 200,0*	60

Package Dimensions

WU-1-51



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 5mm Round With Stand-Off / Short Leads

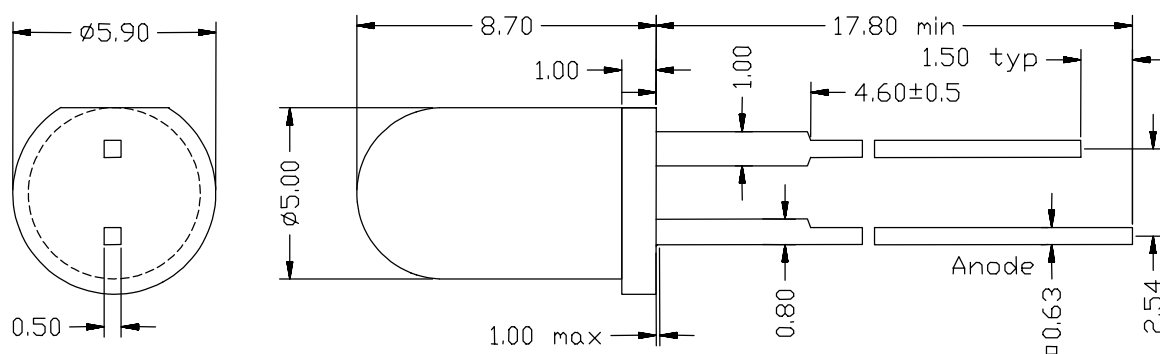
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-52RD	e006339	GaAsP	655	red-diffused	0,7 - 1,1	68
WU-2-52HD	e006340	GaP	700	red-diffused	1,1 - 1,8	68
WU-2-52PGD	e005449	GaP	555	pure-green-diffused	1,6 - 2,7	68
WU-2-52GD	e006341	GaP	567	green-diffused	5,0 - 8,3	68
WU-2-52YD	e006342	GaAsP/GaP	585	yellow-diffused	4,2 - 7,0	68
WU-2-52ND	e005446	GaAsP/GaP	610	pure-orange-diffused	5,8 - 9,7	68
WU-2-52ED	e006343	GaAsP/GaP	635	orange-diffused	5,8 - 9,7	68
WU-2-52ID	e006344	GaAsP/GaP	635	red-diffused	5,8 - 9,7	68

WU-2-52RC	e006345	GaAsP	655	waterclear	2,3 - 3,8	48
WU-2-52HC	e006346	GaP	700	waterclear	3,7 - 6,1	48
WU-2-52PGC	e005450	GaP	555	waterclear	5,7 - 9,5	48
WU-2-52GC	e006347	GaP	567	waterclear	17,0 - 28,4	48
WU-2-52YC	e006348	GaAsP/GaP	585	waterclear	14,2 - 23,6	48
WU-2-52NC	e005447	GaAsP/GaP	610	waterclear	19,7 - 32,9	48
WU-2-52EC	e006349	GaAsP/GaP	635	waterclear	19,7 - 32,9	48

WU-2-52RT	e006350	GaAsP	655	red-transparent	2,3 - 3,8	48
WU-2-52HT	e006351	GaP	700	red-transparent	3,7 - 6,1	48
WU-2-52PGT	e005451	GaP	555	pure-green-transp.	5,7 - 9,5	48
WU-2-52GT	e006352	GaP	567	green-transparent	17,0 - 28,4	48
WU-2-52YT	e006353	GaAsP/GaP	585	yellow-transparent	14,2 - 23,6	48
WU-2-52NT	e005448	GaAsP/GaP	610	pure-orange-transp.	19,7 - 32,9	48
WU-2-52ET	e006354	GaAsP/GaP	635	orange-transparent	19,7 - 32,9	48
WU-2-52IT	e006356	GaAsP/GaP	635	red-transparent	19,7 - 32,9	48

Package Dimensions

WU-2-52



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 5mm Standard Round

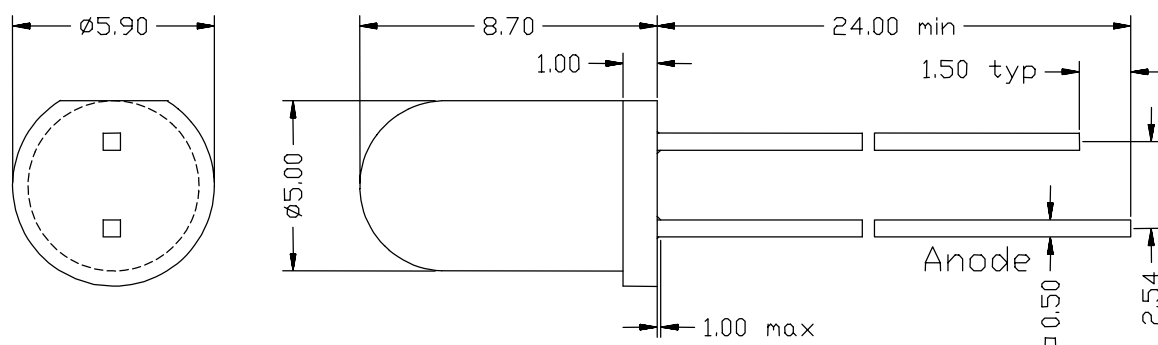
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-53HD	e006368	GaP	700	red-diffused	4,3 - 5,3	60
WU-2-53GD	e006369	GaP	567	green-diffused	17,5 - 21,0	60
WU-2-53PGD	e005438	GaP	555	pure-green-diffused	3,2 - 5,4	60
WU-2-53YD	e006363	GaAsP/GaP	585	yellow-diffused	17,5 - 21,0	60
WU-2-53ND	e005439	GaAsP/GaP	610	pure-orange-diffused	13,9 - 23,1	60
WU-2-53ED	e006359	GaAsP/GaP	635	orange-diffused	18,0 - 22,0	60
WU-2-53ID	e006300	GaAsP/GaP	635	red-diffused	18,0 - 22,0	60

WU-2-53HC	e006361	GaP	700	waterclear	14,0 - 17,0	22
WU-2-53GC	e006228	GaP	567	waterclear	53,0 - 68,0	22
WU-2-53PGC	e005440	GaP	555	waterclear	11,1 - 18,5	22
WU-2-53YC	e006229	GaAsP/GaP	585	waterclear	55,2 - 69,0	22
WU-2-53NC	e005441	GaAsP/GaP	610	waterclear	47,3 - 78,8	22
WU-2-53EC	e006230	GaAsP/GaP	635	waterclear	65,0 - 80,0	22

WU-2-53HT	e006364	GaP	700	red-transparent	14,0 - 17,0	22
WU-2-53GT	e006223	GaP	567	green-transparent	53,0 - 68,0	22
WU-2-53PGT	e005442	GaP	555	pure-green-transp.	11,1 - 18,5	22
WU-2-53YT	e006224	GaAsP/GaP	585	yellow-transparent	55,2 - 69,0	22
WU-2-53NT	e005443	GaAsP/GaP	610	pure-orange-transp.	47,3 - 78,8	22
WU-2-53ET	e006225	GaAsP/GaP	635	orange-transparent	65,0 - 80,0	22
WU-2-53IT	e006222	GaAsP/GaP	635	red-transparent	65,0 - 80,0	22

Package Dimensions

WU-2-53



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 5mm Round Standard and Stand-Off-Type

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ (20mA*) Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-54HD	e006038	GaP	700	red-diffused	2,0 - 8,0	60
WU-1-54PGD	e006618	GaP	555	pure-green-diffused	2,0 - 8,0	60
WU-1-54GD	e006084	GaP	565	green-diffused	5,0 - 32,0	60
WU-1-54YD	e006089	GaAsP/ GaP	590	yellow-diffused	5,0 - 32,0	60
WU-1-54ND	e005894	GaAsP/ GaP	610	pure-orange-diffused	12,5 - 80,0	60
WU-1-54ED	e006050	GaAsP/ GaP	625	orange-diffused	12,5 - 80,0	60
WU-1-54ID	e006110	GaAsP/ GaP	625	red-diffused	12,5 - 80,0	60
WU-1-54BD	e006814	GaN	430	blue-diffused	20,0* - 60,0*	60

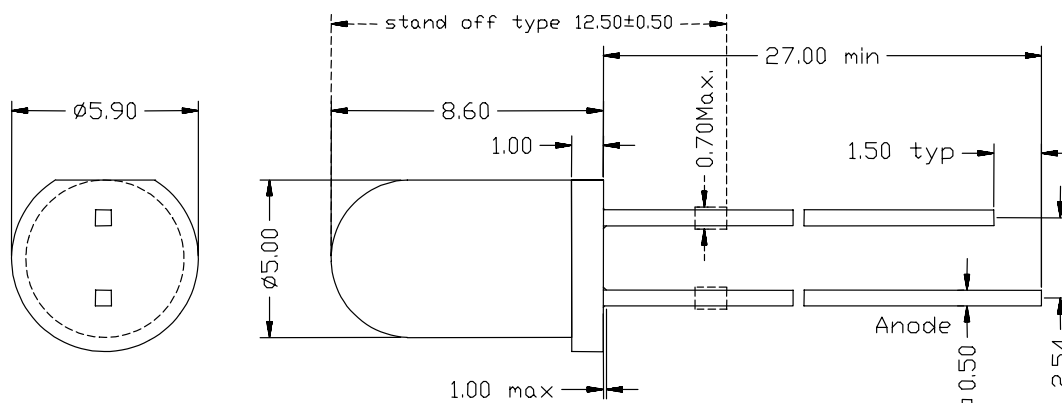
WU-1-54EC	e006030	GaAsP/ GaP	625	waterclear	50,0 - 200,0	30
WU-1-54GC	e006029	GaP	565	waterclear	20,0 - 150,0	30
WU-1-54PGC	e005444	GaP	555	waterclear	5,0 - 32,0	30
WU-1-54YC	e006080	GaAsP/ GaP	590	waterclear	20,0 - 80,0	30
WU-1-54NC	e006959	GaAsP/ GaP	610	waterclear	50,0 - 200,0	30
WU-1-54BC	e006815	GaN	430	waterclear	40,0* - 150,0*	16

WU-1-54IT	e006086	GaAsP/ GaP	625	red-transparent	50,0 - 200,0	30
WU-1-54PGT	e005445	GaP	555	pure-green-transp.	5,0 - 32,0	30
WU-1-54GT	e006124	GaP	565	green-transparent	20,0 - 150,0	30
WU-1-54YT	e006079	GaAsP/ GaP	590	yellow-transparent	20,0 - 80,0	30
WU-1-54NT	e005943	GaAsP/ GaP	610	pure-orange-transp.	50,0 - 200,0	30

WU-1-54HD12,5	e006378	GaP	700	red-diffused	2,0 - 8,0	60
WU-1-54GD12,5	e006381	GaP	565	green-diffused	5,0 - 32,0	60
WU-1-54YD12,5	e006382	GaAsP/ GaP	590	yellow-diffused	5,0 - 32,0	60
WU-1-54ED12,5	e006384	GaAsP/ GaP	625	orange-diffused	12,5 - 80,0	60
WU-1-54ID12,5	e006388	GaAsP/ GaP	625	red-diffused	12,5 - 80,0	60

Package Dimensions

WU-1-54



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



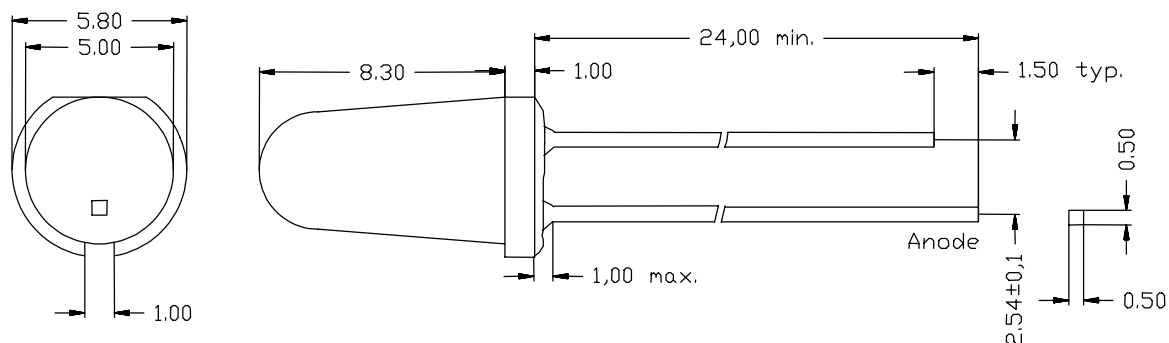
Optoelektronik

LED 5mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-56RD	e006389	GaAsP	655	red-diffused	0,7 - 1,8	22
WU-2-56HD	e006391	GaP	700	red-diffused	1,1 - 2,7	22
WU-2-56GD	e006392	GaP	567	green-diffused	5,3 - 13,3	22
WU-2-56YD	e006393	GaAsP / GaP	585	yellow-diffused	4,4 - 11,0	22
WU-2-56ED	e006394	GaAsP / GaP	635	orange-diffused	6,2 - 15,5	22
WU-2-56ID	e006395	GaAsP / GaP	635	red-diffused	6,2 - 15,5	22
WU-2-56RC	e006396	GaAsP	655	waterclear	2,4 - 6,1	14
WU-2-56HC	e006397	GaP	700	waterclear	3,7 - 9,2	14
WU-2-56GC	e006398	GaP	567	waterclear	18,1 - 45,2	14
WU-2-56YC	e006399	GaAsP / GaP	585	waterclear	15,0 - 37,4	14
WU-2-56EC	e006401	GaAsP / GaP	635	waterclear	21,1 - 52,7	14
WU-2-56RT	e006403	GaAsP	655	red-transparent	2,4 - 6,1	14
WU-2-56HT	e006411	GaP	700	red-transparent	3,7 - 9,2	14
WU-2-56GT	e006412	GaP	567	green-transparent	18,1 - 45,2	14
WU-2-56YT	e006413	GaAsP / GaP	585	yellow-transparent	15,0 - 37,4	14
WU-2-56ET	e006414	GaAsP / GaP	635	orange-transparent	21,1 - 52,7	14
WU-2-56IT	e006415	GaAsP / GaP	635	red-transparent	21,1 - 52,7	14

Package Dimensions

WU-2-56



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



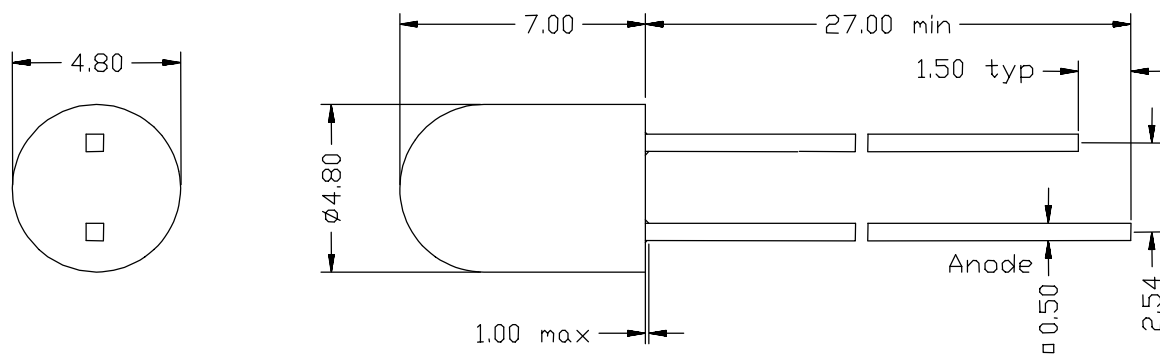
Optoelektronik

LED 4,8mm Round Without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ (20mA*) Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
WU-1-57RDA	e006721	GaAsP	655	red-diffused	0,8 - 2,0	60
WU-1-57HDA	e006722	GaP	700	red-diffused	2,0 - 5,0	60
WU-1-57GDA	e006723	GaP	565	green-diffused	5,0 - 20,0	60
WU-1-57YDA	e006724	GaAsP / GaP	590	yellow-diffused	5,0 - 20,0	60
WU-1-57EDA	e006725	GaAsP / GaP	625	orange-diffused	12,5 - 32,0	60
WU-1-57IDA	e006726	GaAsP / GaP	625	red-diffused	12,5 - 32,0	60
WU-1-57SRDA	e006727	GaAlAs	660	red-diffused	100,0 - 300,0*	60
WU-1-57SGDA	e005800	GaP	565	green-diffused	20,0 - 60,0*	60
WU-1-57SYDA	e005801	InGaAlP	595	yellow-diffused	100,0 - 300,0*	60

Package Dimensions

WU-1-57



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 4,8mm Round Without Flange

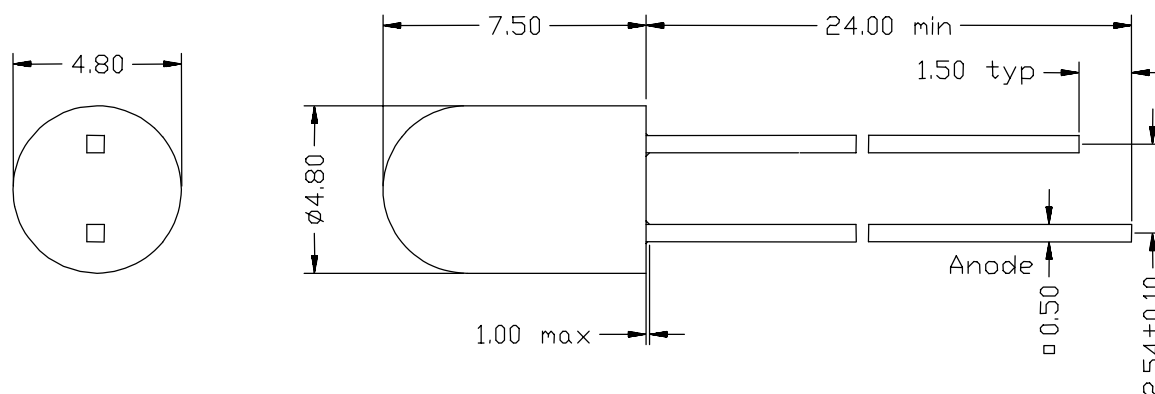
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-58RD	e006416	GaAsP	655	red-diffused	1,6 - 2,7	38
WU-2-58HD	e006870	GaP	700	red-diffused	4,3 - 5,3	38
WU-2-58GD	e006871	GaP	567	green-diffused	17,5 - 21,0	38
WU-2-58YD	e006872	GaAsP / GaP	585	yellow-diffused	17,5 - 21,0	38
WU-2-58ED	e006873	GaAsP / GaP	635	orange-diffused	18,0 - 22,0	38
WU-2-58ID	e006417	GaAsP / GaP	635	red-diffused	18,0 - 22,0	38

WU-2-58RC	e006418	GaAsP	655	waterclear	5,5 - 9,2	26
WU-2-58HC	e006419	GaP	700	waterclear	14,0 - 17,0	26
WU-2-58GC	e006421	GaP	567	waterclear	53,0 - 68,0	26
WU-2-58YC	e006422	GaAsP / GaP	585	waterclear	55,2 - 69,0	26
WU-2-58EC	e006423	GaAsP / GaP	635	waterclear	65,0 - 80,0	26

WU-2-58RT	e006424	GaAsP	655	red-transparent	5,5 - 9,2	26
WU-2-58HT	e006425	GaP	700	red-transparent	14,0 - 17,0	26
WU-2-58GT	e006426	GaP	567	green-transparent	53,0 - 68,0	26
WU-2-58YT	e006427	GaAsP / GaP	585	yellow-transparent	55,2 - 69,0	26
WU-2-58ET	e006428	GaAsP / GaP	635	orange-transparent	65,0 - 80,0	26
WU-2-58IT	e006429	GaAsP / GaP	635	red-transparent	65,0 - 80,0	26

Package Dimensions

WU-2-58



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



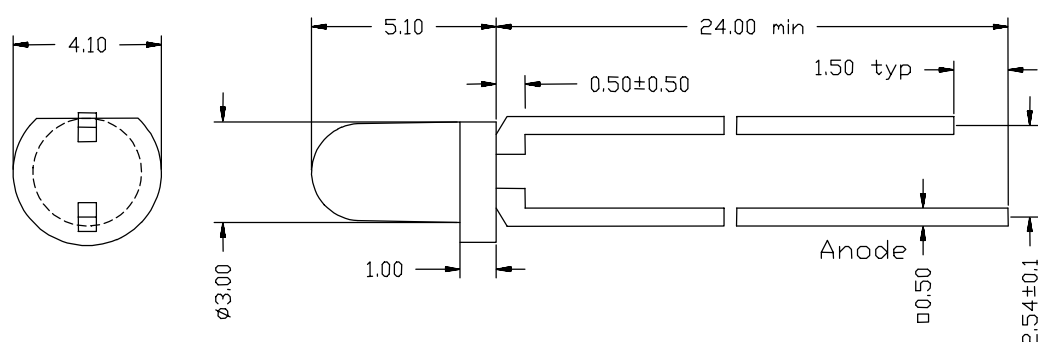
Optoelektronik

BLUE and WHITE LEDs 3mm and 5mm Round

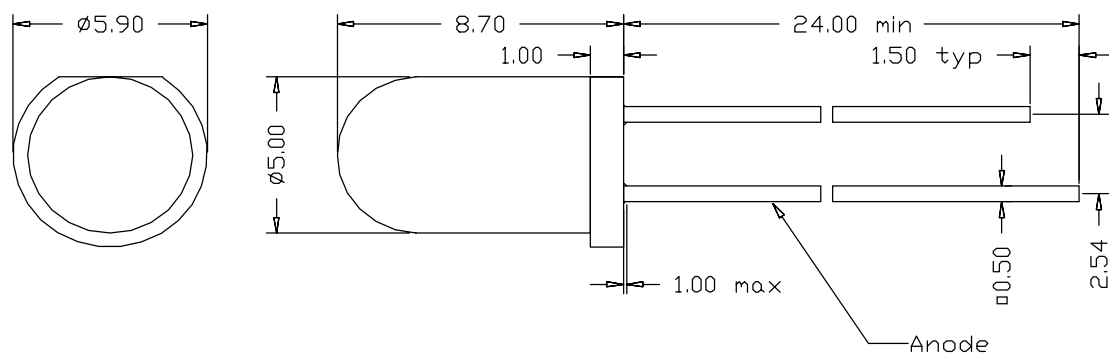
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-736SWC	e004530	InGaN/Sapphire	white	waterclear	825 - 1500	22
WU-2-761SWC	e004520	InGaN/Sapphire	white	waterclear	1650 - 1500	15
WU-2-736BC	e004536	InGaN/Sapphire	465	waterclear	550 - 1000	22
WU-2-761BC	e004537	InGaN/Sapphire	465	waterclear	1000 - 1500	15

Package Dimensions

WU-2-736



WU-2-761



1. All dimensions are in [mm], Tolerance is ± 0.25 mm unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

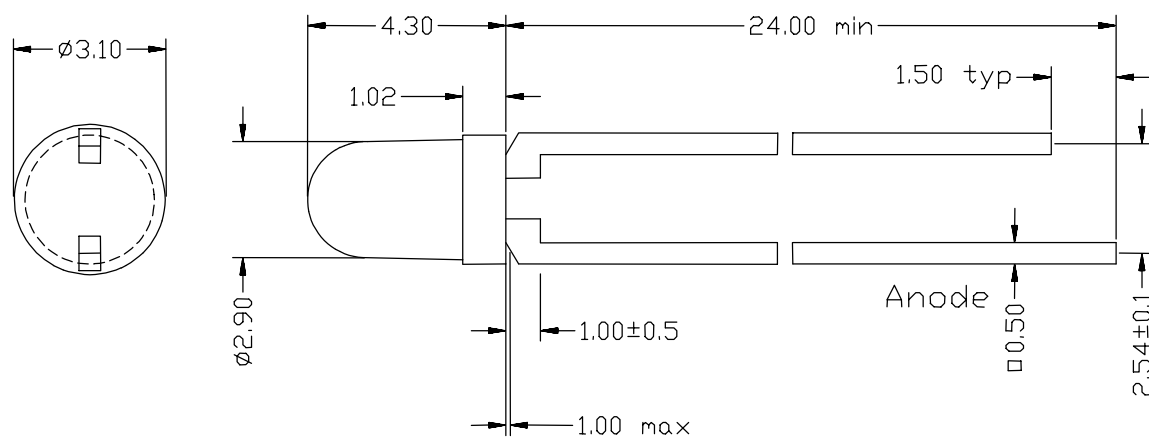
LED 3mm and 5mm Round Low Current

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=2\text{mA}$ Typ.	Viewing Angle Degrees ϕ_v [°]
WU-2-67HD/LC	e006438	GaP	700	red-diffused	1,2	60
WU-2-67GD/LC	e006439	GaP	567	green-diffused	1,6	60
WU-2-67YD/LC	e006440	GaAsP/ GaP	590	yellow-diffused	1,4	60
WU-2-67ED/LC	e006441	GaAsP/ GaP	635	orange-diffused	1,3	60
WU-2-67ID/LC	e006442	GaAsP/ GaP	635	red-diffused	1,4	60

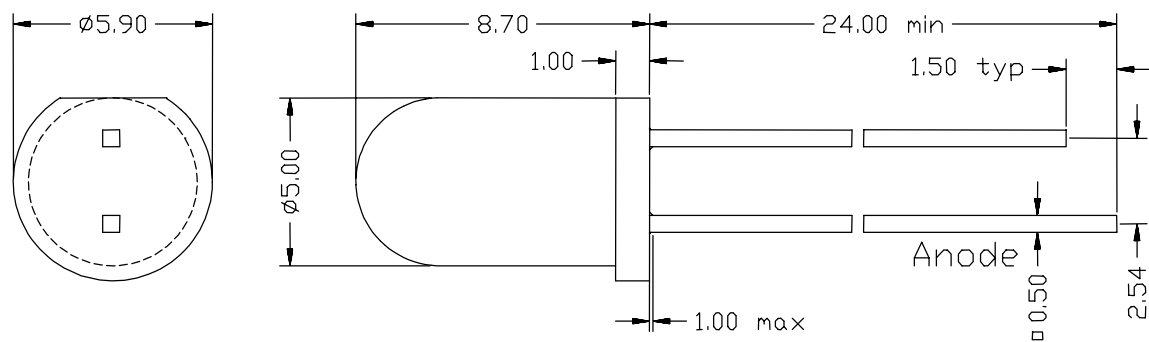
WU-2-69HD/LC	e006449	GaP	700	red-diffused	2,0	60
WU-2-69GD/LC	e006450	GaP	567	green-diffused	2,6	60
WU-2-69YD/LC	e006451	GaAsP/ GaP	590	yellow-diffused	2,3	60
WU-2-69ED/LC	e006452	GaAsP/ GaP	635	orange-diffused	2,3	60
WU-2-69ID/LC	e006453	GaAsP/ GaP	635	red-diffused	2,5	60

Package Dimensions

WU-2-67



WU-2-69



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

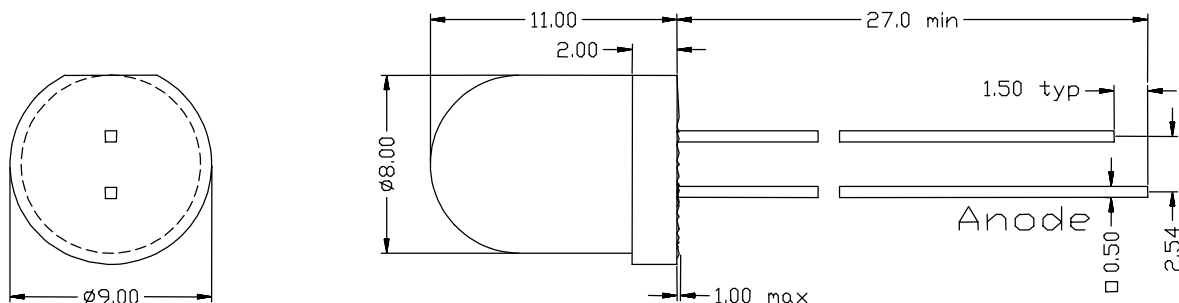
LED 8mm and 10mm Standard Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-104ID	e006919	GaAsP/ GaP	625	red-diffused	40,0 - 150,0	60
WU-1-104GD	e006105	GaP	565	green-diffused	20,0 - 70,0	60
WU-1-104YD	e006931	GaAsP/ GaP	590	yellow-diffused	20,0 - 70,0	60
WU-1-104ED	e006561	GaAsP/ GaP	625	orange-diffused	40,0 - 150,0	60

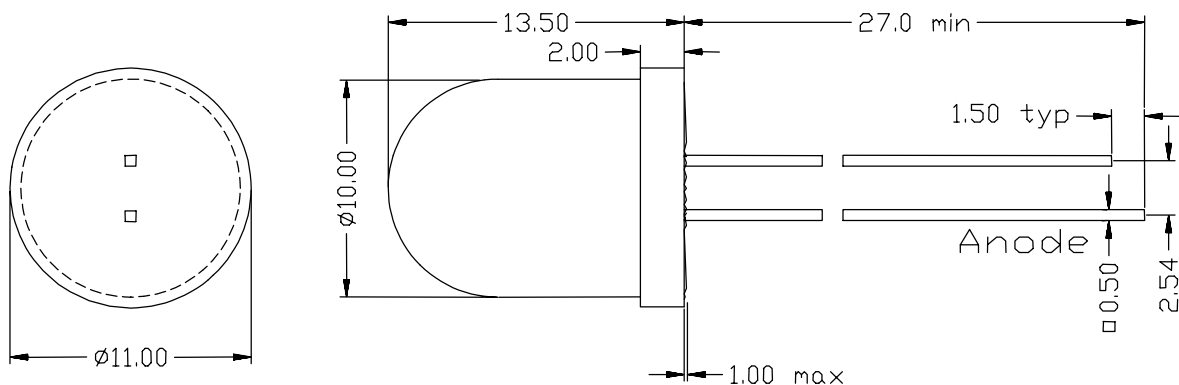
WU-1-106ID	e006602	GaAsP/ GaP	625	red-diffused	40,0 - 150,0	60
WU-1-106GD	e006604	GaP	565	green-diffused	20,0 - 70,0	60
WU-1-106YD	e006918	GaAsP/ GaP	590	yellow-diffused	20,0 - 70,0	60
WU-1-106ED	e006566	GaAsP/ GaP	625	orange-diffused	40,0 - 150,0	60

Package Dimensions

WU-1-104



WU-1-106



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 20mm Round

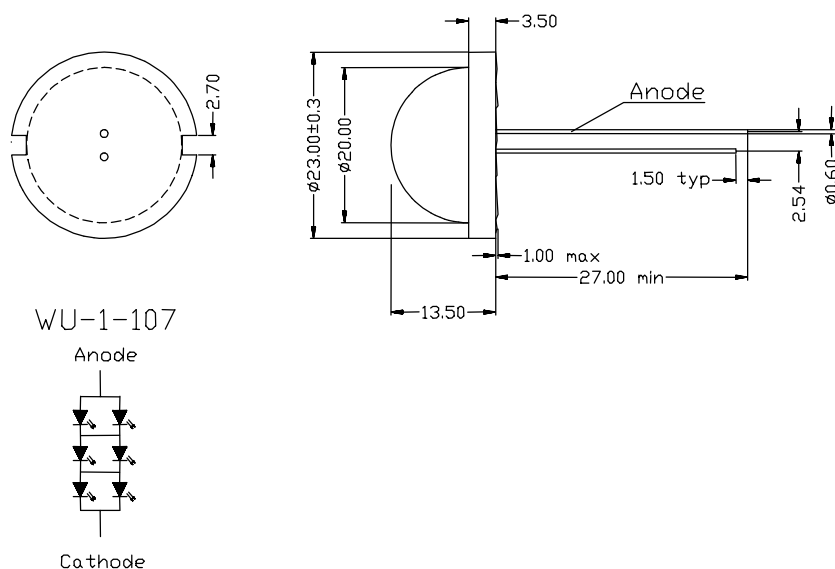
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ (20mA*) Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-107ID	e006015	GaAsP/ GaP	625	red-diffused	10,0 - 22,0	120
WU-1-107GD	e006016	GaP	565	green-diffused	5,0 - 11,0	120
WU-1-107YD	e006017	GaAsP/ GaP	590	yellow-diffused	10,0 - 20,0	120
WU-1-107ED	e006018	GaAsP/ GaP	625	orange-diffused	10,0 - 20,0	120
WU-1-107SGD	e006567	GaP	565	green-diffused	40,0 - 75,0*	120
WU-1-107SRD	e006568	GaAlAs	660	red-diffused	50,0 - 80,0*	120
WU-1-107SYD	e005802	InGaAlP	595	yellow-diffused	100,0 - 150,0*	120

New: Blue

WU-1-107BD	e005516	GaN	430	blue-diffused	20,0 - 60,0*	120
WU-1-107BWD	e005517	GaN	430	white-diffused	40,0 - 80,0*	120

Package Dimensions

WU-1-107



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

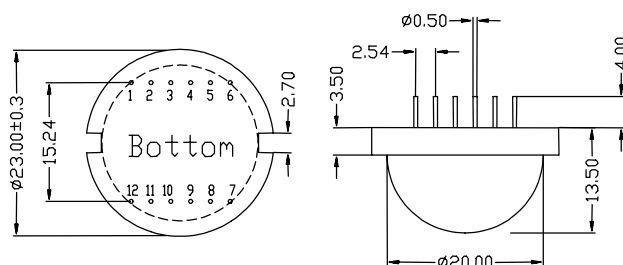
LED 20mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ (20mA*) Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-108ID	e006569	GaAsP/ GaP	625	red-diffused	10,0 - 22,0	120
WU-1-108GD	e006570	GaP	565	green-diffused	5,0 - 11,0	120
WU-1-108YD	e006571	GaAsP/ GaP	590	yellow-diffused	10,0 - 20,0	120
WU-1-108ED	e006572	GaAsP/ GaP	625	orange-diffused	10,0 - 20,0	120
WU-1-108SGD	e006573	GaP	565	green-diffused	40,0 - 75,0*	120
WU-1-108SRD	e006574	GaAlAs	660	red-diffused	50,0 - 80,0*	120
WU-1-108SYD	e005803	InGaAlP	595	yellow-diffused	100,0 - 150,0*	120

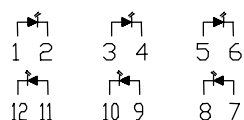
WU-1-109ID	e006575	GaAsP/ GaP	625	red-diffused	10,0 - 22,0	120
WU-1-109GD	e006576	GaP	565	green-diffused	5,0 - 11,0	120
WU-1-109YD	e006577	GaAsP/ GaP	590	yellow-diffused	10,0 - 20,0	120
WU-1-109ED	e006578	GaAsP/ GaP	625	orange-diffused	10,0 - 20,0	120
WU-1-109SGD	e006579	GaP	565	green-diffused	40,0 - 75,0*	120
WU-1-109SRD	e005946	GaAlAs	660	red-diffused	50,0 - 80,0*	120
WU-1-109SYD	e005804	InGaAlP	595	yellow-diffused	100,0 - 150,0*	120

Package Dimensions

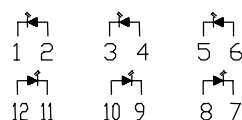
WU-1-108/WU-1-109



WU-1-108



WU-1-109



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

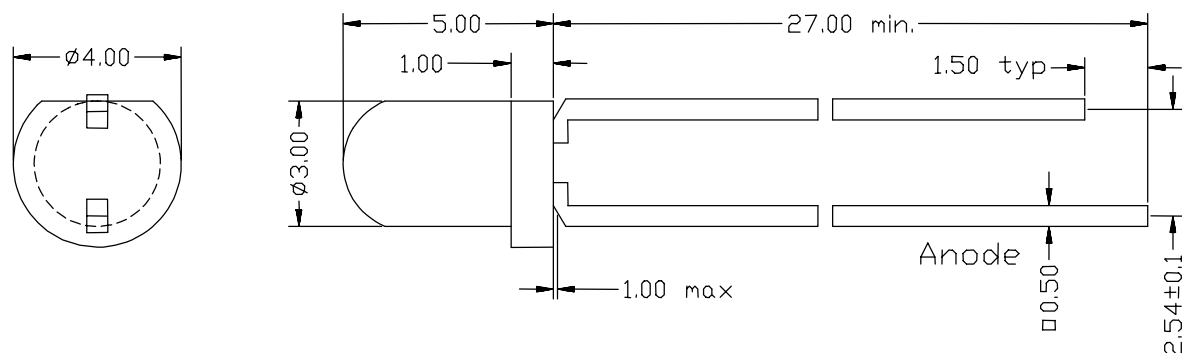
Blinking LEDs Round 3mm and 5mm

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $U_F=9-12V$ $I_F=[30-60mA]$ $f=2,5-1,5Hz$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-73BHD	e006465	GaP	700	red-diffused	1,3 - 3,2	60
WU-1-73BGD	e006466	GaP	565	green-diffused	5,0 - 20,0	60
WU-1-73BYD	e006467	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	60
WU-1-73BID	e006468	GaAsP/ GaP	625	red-diffused	12,5 - 32,0	60
WU-1-73BSRD/B	e006469	GaAlAs	660	red-diffused	100,0 - 300,0	60

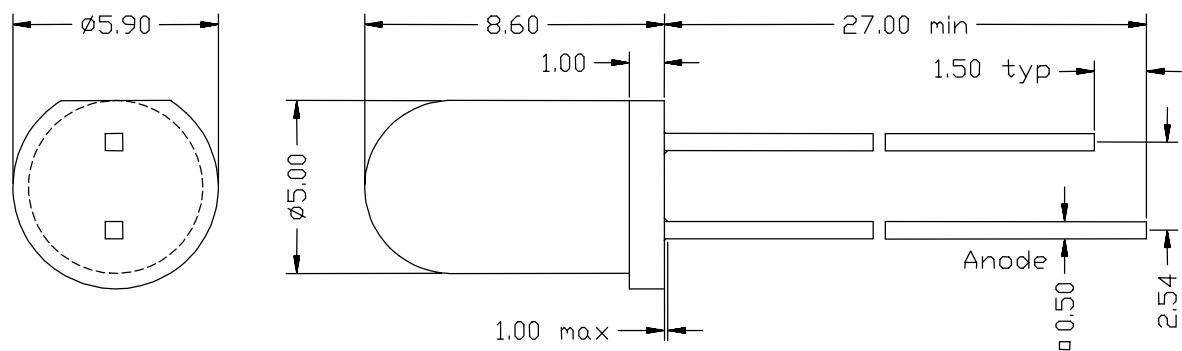
WU-1-74BHD	e006470	GaP	700	red-diffused	2,0 - 8,0	60
WU-1-74BGD	e006471	GaP	565	green-diffused	5,0 - 32,0	60
WU-1-74BYD	e006472	GaAsP/ GaP	590	yellow-diffused	5,0 - 32,0	60
WU-1-74BID	e006048	GaAsP/ GaP	625	red-diffused	20,0 - 80,0	60
WU-1-74BSRD/B	e006473	GaAlAs	660	red-diffused	100,0 - 300,0	60

Package Dimensions

WU-1-73



WU-1-74



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads



Optoelektronik

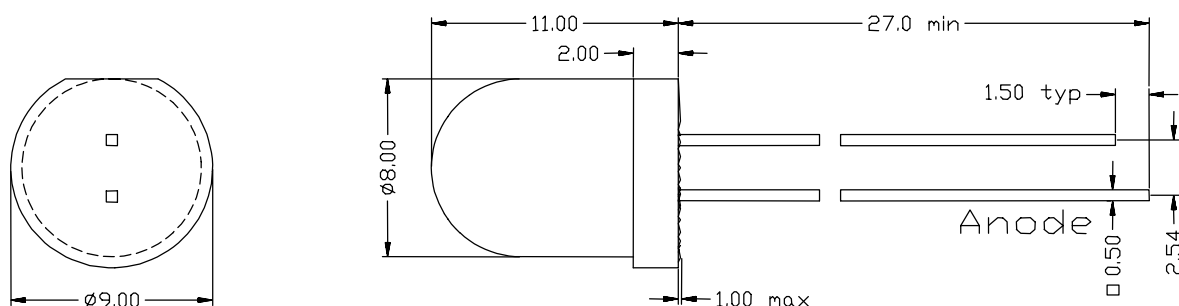
Blinking LEDs Round 8mm and 10mm

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $U_F=9-12V$ $I_F=30-60mA$ $f=2,5-1,5Hz$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-75BID	e006474	GaAsP/GaP	625	red-diffused	20,0 - 100,0	60
WU-1-75BGD	e006475	GaP	565	green-diffused	20,0 - 70,0	60
WU-1-75BYD	e006476	GaAsP/GaP	590	yellow-diffused	20,0 - 70,0	60
WU-1-75BSRD/B	e006477	GaAlAs	660	red-diffused	100,0 - 400,0	60
WU-1-75BSRC/B	e006478	GaAlAs	660	waterclear	500,0 - 1000,0	40

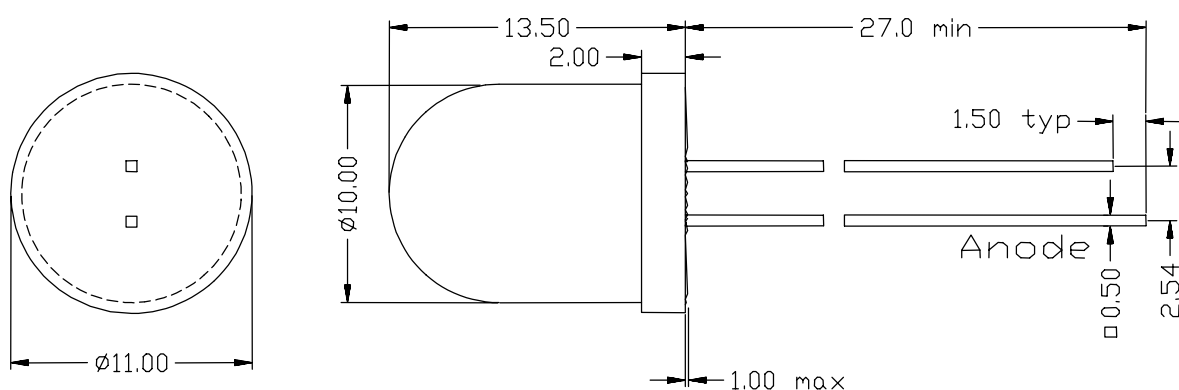
WU-1-76BID	e006479	GaAsP/GaP	625	red-diffused	20,0 - 100,0	60
WU-1-76BGD	e006480	GaP	565	green-diffused	20,0 - 70,0	60
WU-1-76BYD	e006481	GaAsP/GaP	590	yellow-diffused	20,0 - 70,0	60
WU-1-76BSRD/B	e006482	GaAlAs	660	red-diffused	100,0 - 400,0	60
WU-1-76BSRC/B	e006483	GaAlAs	660	waterclear	500,0 - 1000,0	40

Package Dimensions

WU-1-75



WU-1-76



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads



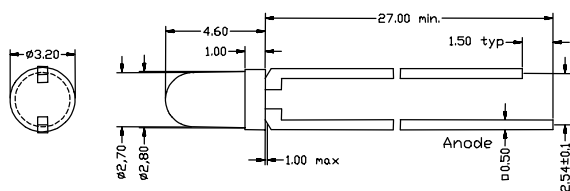
Optoelektronik

Resistor LED's Round 3mm and 5mm

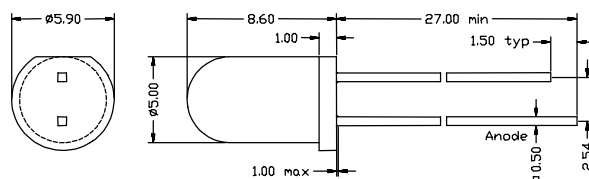
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $U_F=5V/12V^*$ $I_F=10mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-77ID/5V	e006728	GaAsP/ GaP	625	red-diffused	8,0 - 50,0	60
WU-1-77GD/5V	e006729	GaP	565	green-diffused	8,0 - 32,0	60
WU-1-77SGD/5V	e006730	GaP	565	green-diffused	12,5 - 32,0	60
WU-1-77YD/5V	e006731	GaAsP/ GaP	590	yellow-diffused	8,0 - 32,0	60
WU-1-77SRD/5V	e006732	GaAlAs	660	red-diffused	70,0 - 300,0	60
WU-1-78ID/12V	e006733	GaAsP/ GaP	625	red-diffused	8,0 - 50,0*	60
WU-1-78GD/12V	e006734	GaP	565	green-diffused	8,0 - 32,0*	60
WU-1-78SGD/12V	e006735	GaP	565	green-diffused	12,5 - 32,0*	60
WU-1-78YD/12V	e006736	GaAsP/ GaP	590	yellow-diffused	8,0 - 32,0*	60
WU-1-78SRD/12V	e006737	GaAlAs	660	red-diffused	70,0 - 300,0*	60
WU-1-79ID/5V	e006738	GaAsP/ GaP	625	red-diffused	12,5 - 80,0	60
WU-1-79GD/5V	e006739	GaP	565	green-diffused	5,0 - 32,0	60
WU-1-79SGD/5V	e006740	GaP	565	green-diffused	12,5 - 32,0	60
WU-1-79YD/5V	e006741	GaAsP/GaP	590	yellow-diffused	5,0 - 32,0	60
WU-1-79SRD/5V	e006742	GaAlAs	660	red-diffused	100,0 - 500,0	60
WU-1-80ID/12V	e006743	GaAsP/ GaP	625	red-diffused	12,5 - 80,0*	60
WU-1-80GD/12V	e006744	GaP	565	green-diffused	5,0 - 32,0*	60
WU-1-80SGD/12V	e006745	GaP	565	green-diffused	12,5 - 32,0*	60
WU-1-80YD/12V	e006746	GaAsP/ GaP	590	yellow-diffused	5,0 - 32,0*	60
WU-1-80SRD/12V	e006747	GaAlAs	660	red-diffused	100,0 - 500,0*	60

Package Dimensions

WU-1-77/78



WU-1-79/80



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads



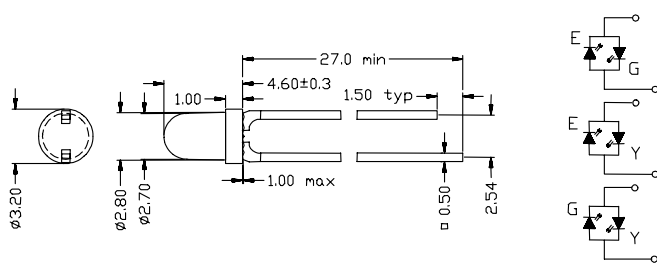
Optoelektronik

LED 3mm and 5mm Round Bi-Colour / 2 Leads

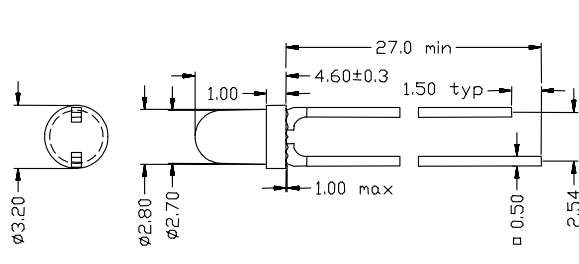
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-81EGW	e006126	GaAsP/ GaP GaP	625 565	white-diffused	8,0 - 40,0 8,0 - 40,0	60 60
WU-1-81EYW	e006614	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	8,0 - 40,0 5,0 - 20,0	60 60
WU-1-81GYW	e006087	GaP GaAsP/ GaP	565 590	white-diffused	8,0 - 40,0 5,0 - 20,0	60 60
WU-1-82IID	e006923	GaAsP/ GaP GaAsP/ GaP	625 625	red-diffused	8,0 - 40,0 8,0 - 40,0	60 60
WU-1-82GGD	e006920	GaP GaP	565 565	green-diffused	5,0 - 20,0 5,0 - 20,0	60 60
WU-1-82YYD	e006921	GaAsP/ GaP GaAsP/ GaP	590 590	yellow-diffused	5,0 - 20,0 5,0 - 20,0	60 60
WU-1-83EGW	e006037	GaAsP/ GaP GaP	625 565	white-diffused	20,0 - 50,0 12,5 - 40,0	60 60
WU-1-83EYW	e006484	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	20,0 - 50,0 5,0 - 20,0	60 60
WU-1-83GYW	e006485	GaP GaAsP/ GaP	565 590	white-diffused	12,5 - 40,0 5,0 - 20,0	60 60

Package Dimensions

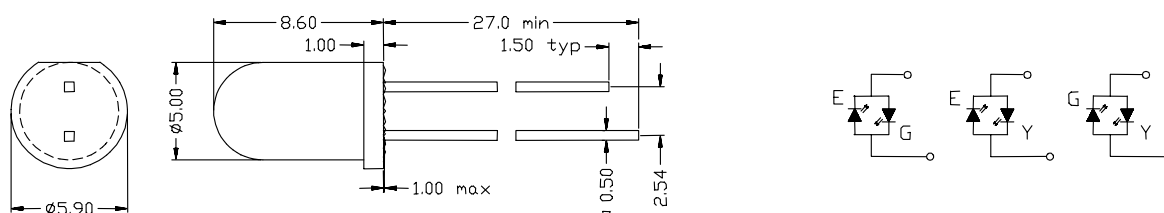
WU-1-81



WU-1-82



WU-1-83



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



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LED 5mm, 8mm and 10mm Round / Bi-Colour / 2 Leads

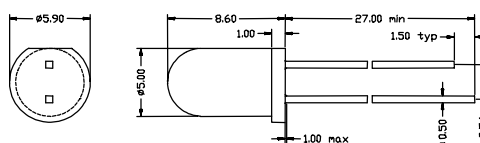
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-84IID	e006759	GaAsP/ GaP GaAsP/ GaP	625 625	red-diffused	8,0 - 40,0 8,0 - 40,0	60 60
WU-1-84GGD	e006760	GaP GaP	565 565	green-diffused	5,0 - 20,0 5,0 - 20,0	60 60
WU-1-84YYD	e006761	GaAsP/ GaP GaAsP/ GaP	590 590	yellow-diffused	5,0 - 20,0 5,0 - 20,0	60 60
WU-1-84SRSRD	e006762	GaAlAs GaAlAs	660 660	red-diffused	80,0 - 200,0 80,0 - 200,0	60 60

WU-1-85EGW	e006763	GaAsP/ GaP GaP	625 565	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-85EYW	e006764	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-85GYW	e006765	GaP GaAsP/ GaP	565 590	white-diffused	20,0 - 60,0 20,0 - 60,0	50 50

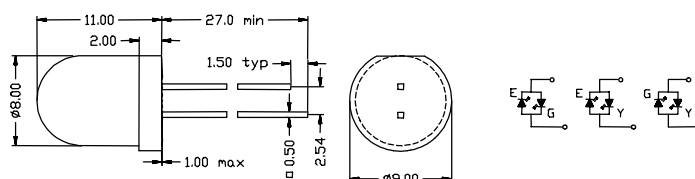
WU-1-86EGW	e006766	GaAsP/ GaP GaP	625 565	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-86EYW	e006767	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-86GYW	e006768	GaP GaAsP/ GaP	565 590	white-diffused	20,0 - 60,0 20,0 - 60,0	50 50

Package Dimensions

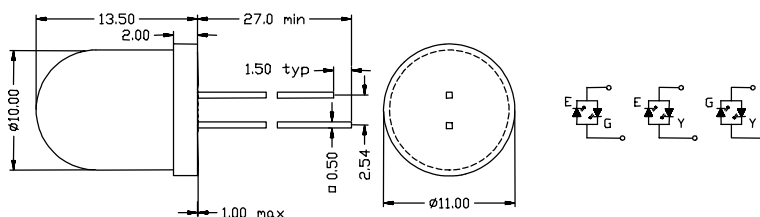
WU-1-84



WU-1-85



WU-1-86



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

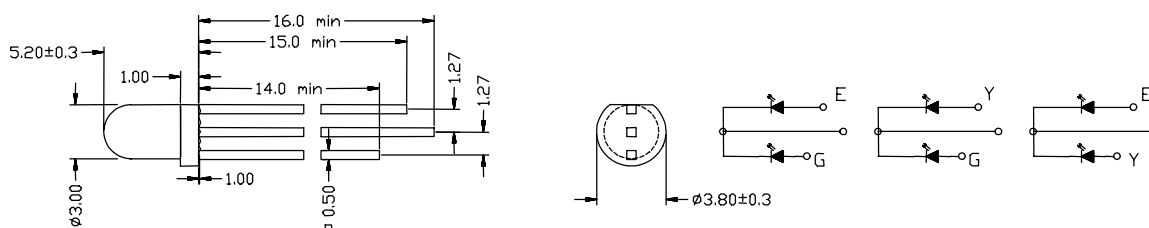
LED 3mm Round Multi-Colour / 3 Leads

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(20\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-3-89EGW	e006448	GaAsP/ GaP GaP	635 565	white-diffused	12,0 - 20,0 8,0 - 12,5	142 142
WU-3-89YGW	e006487	GaAsP/ GaP GaP	585 565	white-diffused	8,0 - 12,5 8,0 - 12,5	142 142
WU-3-89EYW	e006488	GaAsP/ GaP GaAsP/ GaP	635 585	white-diffused	12,0 - 20,0 8,0 - 12,5	142 142

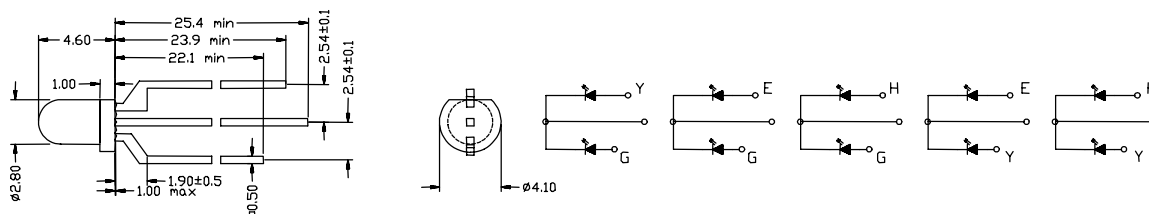
WU-1-90GYW	e006863	GaP GaAsP/ GaP	565 590	white-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60
WU-1-90EGW	e006609	GaAsP/ GaP GaP	625 565	white-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60
WU-1-90EYW	e006039	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60
WU-1-90GGD	e005025	GaP GaP	565 565	green-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60
WU-1-90YYD	e005026	GaAsP/ GaP GaAsP/ GaP	590 590	yellow-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60
WU-1-90EED	e005027	GaAsP/ GaP GaAsP/ GaP	625 625	orange-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60
WU-1-90IID	e005028	GaAsP/ GaP GaAsP/ GaP	625 625	red-diffused	20,0 - 50,0* 20,0 - 50,0*	60 60

Package Dimensions

WU-3-89



WU-1-90



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 5mm Round Multi-Colour / 3 Leads

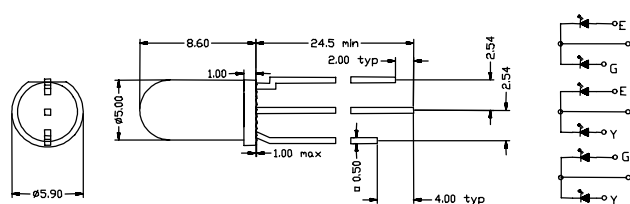
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-91EGW	e006097	GaAsP/ GaP GaP	625 565	white-diffused	20,0 - 90,0 20,0 - 70,0	60 60
WU-1-91EGW CA	e006499	GaAsP/ GaP GaP	625 565	white-diffused	3,2 - 8,0 3,2 - 8,0	60 60
WU-1-91EYW	e006098	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	20,0 - 90,0 20,0 - 60,0	60 60
WU-1-91GYW	e006654	GaP GaAsP/ GaP	565 590	white-diffused	20,0 - 70,0 20,0 - 60,0	60 60
WU-1-91SRSGW CC	e006502	GaAlAs GaP	660 565	white-diffused	100,0 - 300,0 40,0 - 80,0	60 60

WU-1-91EGC	e006504	GaAsP/ GaP GaP	625 565	waterclear	100,0 - 300,0 50,0 - 200,0	24 24
WU-1-91EYC	e006506	GaAsP/ GaP GaAsP/ GaP	625 590	waterclear	100,0 - 300,0 30,0 - 80,0	24 24
WU-1-91GYC	e006507	GaP GaAsP/ GaP	565 590	waterclear	50,0 - 200,0 30,0 - 80,0	24 24
WU-1-91SRSGC CC	e006508	GaAlAs GaP	660 565	waterclear	300,0 - 700,0 80,0 - 200,0	24 24

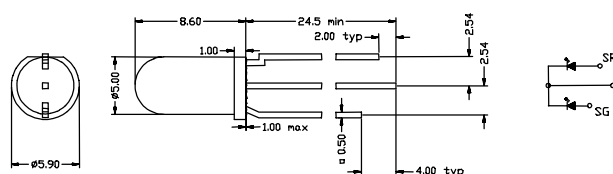
WU-3-90EGW	e005980	GaAsP/ GaP GaP	635 565	white-diffused	12,0 - 20,0 8,0 - 12,5	130 130
WU-3-90YGW	e005979	GaAsP/ GaP GaP	585 565	white-diffused	8,0 - 12,5 8,0 - 12,5	130 130

Package Dimensions

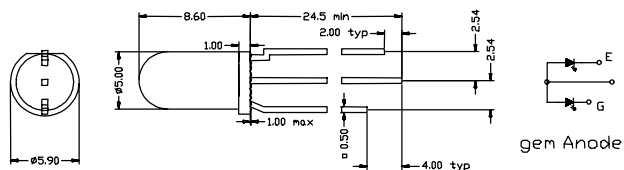
WU-1-91 EGW/EYW/GYW



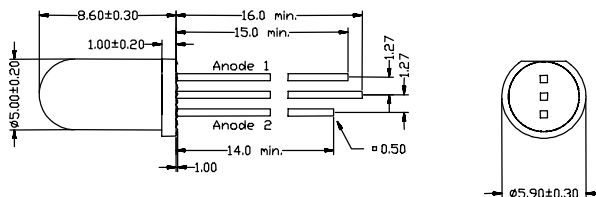
WU-1-91 SRGW-CC/SRSGC-CC



WU-1-91 EGW-CA



WU-3-90 EGW/YGW



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



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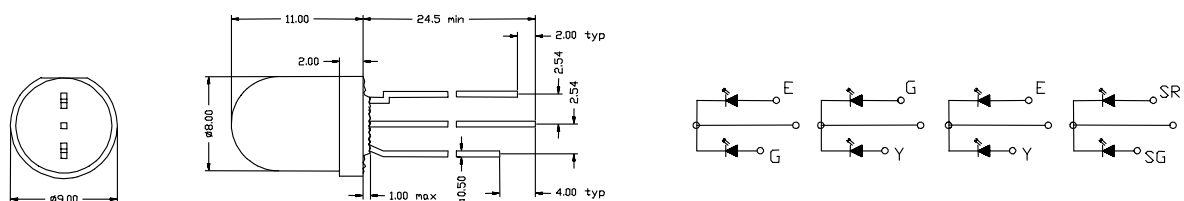
LED 8mm and 10mm Round Multi-Colour/3 Leads

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-92EGW	e006509	GaAsP/ GaP GaP	625 565	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-92GYW	e006510	GaP GaAsP/ GaP	565 590	white-diffused	20,0 - 60,0 20,0 - 60,0	50 50
WU-1-92EYW	e006511	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-92SRSGW CC	e006512	GaAlAs GaP	660 565	white-diffused	100,0 - 300,0 40,0 - 70,0	50 50

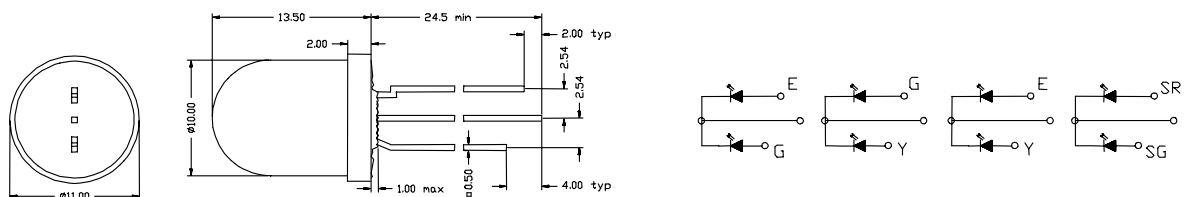
WU-1-93EGW	e006513	GaAsP/ GaP GaP	625 565	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-93GYW	e006514	GaP GaAsP/ GaP	565 590	white-diffused	20,0 - 60,0 20,0 - 60,0	50 50
WU-1-93EYW	e006515	GaAsP/ GaP GaAsP/ GaP	625 590	white-diffused	30,0 - 90,0 20,0 - 60,0	50 50
WU-1-93SRSGW CC	e006516	GaAlAs GaP	660 565	white-diffused	100,0 - 300,0 40,0 - 70,0	50 50

Package Dimensions

WU-1-92



WU-1-93



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



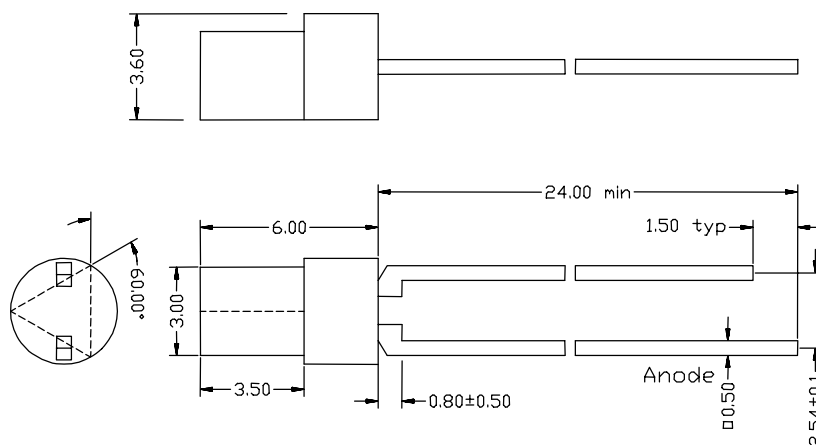
Optoelektronik

Equilateral Triangular LED 3mm

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-60HD	e006431	GaP	700	red-diffused	1,6 - 2,7	80
WU-2-60GD	e006432	GaP	567	green-diffused	4,2 - 7,0	80
WU-2-60YD	e006433	GaAsP/ GaP	585	yellow-diffused	3,5 - 5,9	80
WU-2-60ED	e006434	GaAsP/ GaP	635	orange-diffused	4,9 - 8,1	80
WU-2-60ID	e006435	GaAsP/ GaP	635	red-diffused	4,9 - 8,1	80

Package Dimensions

WU-2-60



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 3mm Round Cylindrical and Concave

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-130HDT	e006025	GaP	700	red-diffused	0,5 - 3,2	100
WU-1-130SRDT	e006523	GaAlAs	660	red-diffused	40,0 - 80,0*	100
WU-1-130EDT	e006028	GaAsP/GaP	625	orange-diffused	3,2 - 12,5	100
WU-1-130IDT	e006522	GaAsP/GaP	625	red-diffused	3,2 - 12,5	100
WU-1-130YDT	e006027	GaAsP/GaP	590	yellow-diffused	1,3 - 8,0	100
WU-1-130GDT	e006026	GaP	565	green-diffused	1,3 - 8,0	100

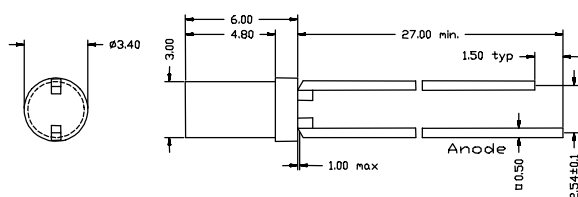
WU-1-132SRT	e006786	GaAlAs	660	red-transparent	20,0 - 80,0*	130
WU-1-132IT	e006781	GaAsP/GaP	625	red-transparent	3,2 - 12,5	130
WU-1-132NT	e006784	GaAsP/GaP	610	pure-orange-transp.	3,2 - 12,5	130
WU-1-132YT	e006783	GaAsP/GaP	590	yellow-transparent	1,3 - 5,0	130
WU-1-132GT	e006782	GaP	565	green-transparent	3,2 - 12,5	130
WU-1-132SGT	e006785	GaP	565	green-transparent	5,0 - 20,0*	130
WU-1-132PGT	e006963	GaP	555	pure-green-transp.	1,0 - 4,0	130

WU-1-133SRC	e006787	GaAlAs	660	waterclear	20,0 - 80,0*	130
WU-1-133SYC	e005452	InGaAlP	595	waterclear	25,0 - 90,0*	130

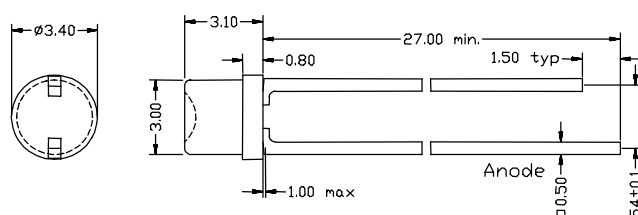
WU-1-134IT	e005472	GaAsP/GaP	625	red-transparent	3,2 - 12,5	130
WU-1-134YT	e005453	GaAsP/GaP	590	yellow-transparent	2,0 - 8,0	130
WU-1-134GT	e005574	GaP	565	green-transparent	2,0 - 8,0	130

Package Dimensions

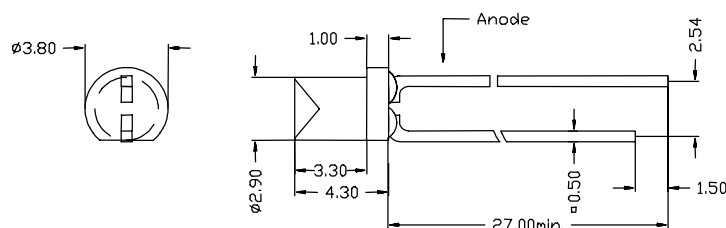
WU-1-130



WU-1-132/WU-1-133



WU-1-134



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

LED 5mm Round Cylindrical and Concave

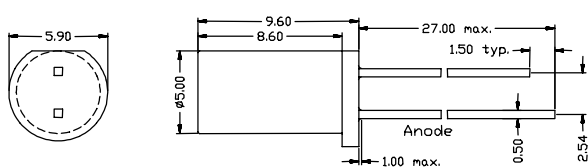
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-131HDT	e006132	GaP	700	red-diffused	0,5 - 3,2	100
WU-1-131SRDT	e005454	GaAlAs	660	red-diffused	40,0 - 80,0*	100
WU-1-131EDT	e006524	GaAsP/GaP	625	orange-diffused	3,2 - 12,5	100
WU-1-131IDT	e006525	GaAsP/GaP	625	red-diffused	3,2 - 12,5	100
WU-1-131YDT	e006133	GaAsP/GaP	590	yellow-diffused	1,3 - 8,0	100
WU-1-131GDT	e006108	GaP	565	green-diffused	1,3 - 8,0	100
WU-1-131SRSGW bi-colour	e005923	GaAlAs	660	white-diffused	12,5 - 60,0*	80
		GaP	565		5,0 - 20,0*	

WU-1-135IT	e006819	GaAsP/GaP	625	red-transparent	3,2 - 12,5	140
WU-1-135YT	e006534	GaAsP/GaP	590	yellow-transparent	2,0 - 8,0	140
WU-1-135GT	e006533	GaP	565	green-transparent	2,0 - 8,0	140

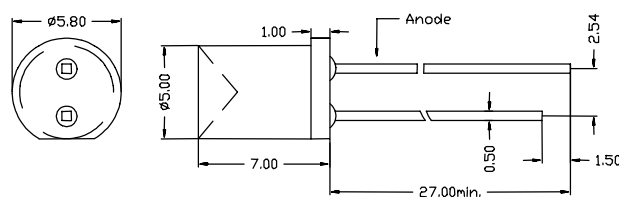
WU-1-136HDT	e005413	GaP	700	red-diffused	1,3 - 3,2	100
WU-1-136SRDT	e005414	GaAlAs	660	red-diffused	40,0 - 100,0*	100
WU-1-136EDT	e005415	GaAsP/GaP	625	orange-diffused	5,0 - 15,0	100
WU-1-136IDT	e005416	GaAsP/GaP	625	red-diffused	5,0 - 15,0	100
WU-1-136YDT	e005417	GaAsP/GaP	590	yellow-diffused	3,2 - 5,0	100
WU-1-136GDT	e005418	GaP	565	green-diffused	3,2 - 5,0	100

Package Dimensions

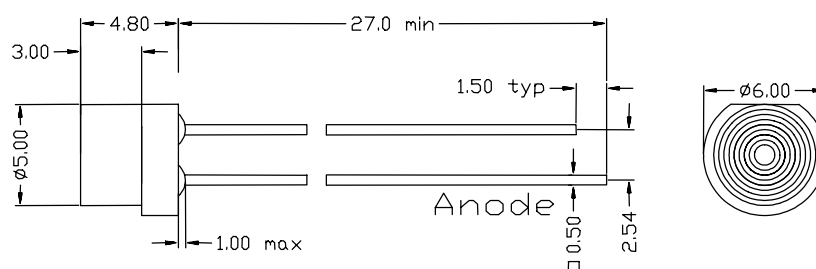
WU-1-131



WU-1-135



WU-1-136



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Rectangular LED

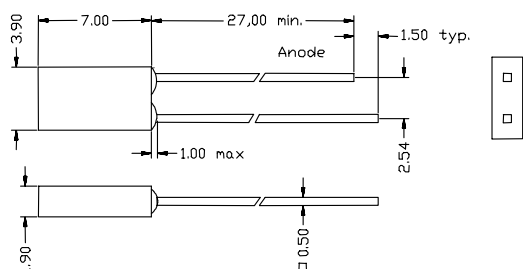
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-97HDT	e006539	GaP	700	red-diffused	0,8 - 2,0	110
WU-1-97SRDT	e006546	GaAlAs	660	red-diffused	40,0 - 70,0*	110
WU-1-97EDT	e006544	GaAsP/GaP	625	orange-diffused	3,2 - 20,0	110
WU-1-97IDT	e006545	GaAsP/GaP	625	red-diffused	3,2 - 20,0	110
WU-1-97YDT	e006543	GaAsP/GaP	590	yellow-diffused	2,0 - 8,0	110
WU-1-97GDT	e006542	GaP	565	green-diffused	2,0 - 8,0	110

WU-1-98HDT	e006085	GaP	700	red-diffused	0,5 - 2,0	110
WU-1-98SRDT	e006548	GaAlAs	660	red-diffused	40,0 - 80,0*	110
WU-1-98EDT	e006547	GaAsP/GaP	625	orange-diffused	3,2 - 12,5	110
WU-1-98IDT	e006010	GaAsP/GaP	625	red-diffused	3,2 - 12,5	110
WU-1-98YDT	e006103	GaAsP/GaP	590	yellow-diffused	2,0 - 8,0	110
WU-1-98GDT	e006102	GaP	565	green-diffused	2,0 - 8,0	110
WU-1-98SRSGWT bi-colour	e005419	GaAlAs GaP	660 565	white-diffused	30,0 - 70,0* 8,0 - 20,0*	100

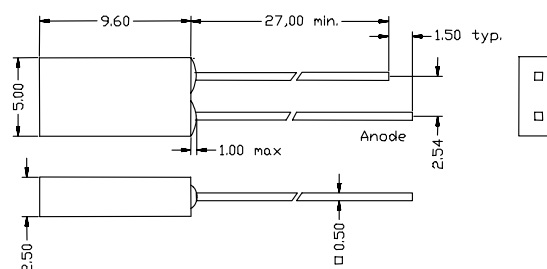
WU-1-99HDT	e006077	GaP	700	red-diffused	0,5 - 1,3	110
WU-1-99SRDT	e006551	GaAlAs	660	red-diffused	40,0 - 80,0*	110
WU-1-99SRWT	e005420	GaAlAs	660	white-diffused	40,0 - 80,0*	110
WU-1-99EDT	e006549	GaAsP/GaP	625	orange-diffused	3,2 - 12,5	110
WU-1-99IDT	e006127	GaAsP/GaP	625	red-diffused	3,2 - 12,5	110
WU-1-99YDT	e006078	GaAsP/GaP	590	yellow-diffused	1,3 - 8,0	110
WU-1-99GDT	e006076	GaP	565	green-diffused	1,3 - 8,0	110
WU-1-99SGWT	e005421	GaP	565	white-diffused	8,0 - 20,0*	110

Package Dimensions

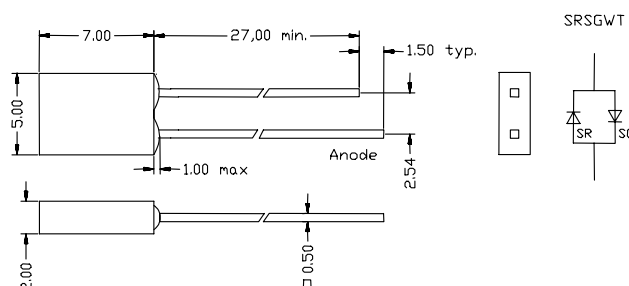
WU-1-97



WU-1-99



WU-1-98





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Rectangular LED

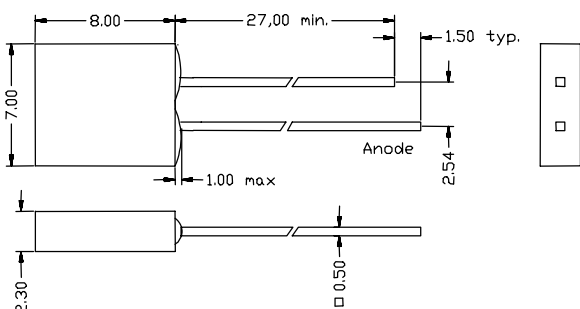
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-100HDT	e006033	GaP	700	red-diffused	0,8 - 1,0	110
WU-1-100SRDT	e006552	GaAlAs	660	red-diffused	32,0 - 80,0*	110
WU-1-100EDT	e006036	GaAsP/GaP	625	orange-diffused	3,2 - 12,5	110
WU-1-100IDT	e006032	GaAsP/GaP	625	red-diffused	3,2 - 12,5	110
WU-1-100YDT	e006035	GaAsP/GaP	590	yellow-diffused	1,3 - 8,0	110
WU-1-100GDT	e006034	GaP	565	green-diffused	1,3 - 8,0	110

WU-1-101HDT	e006106	GaP	700	red-diffused	0,5 - 2,0	110
WU-1-101SRDT	e006554	GaAlAs	660	red-diffused	30,0 - 70,0*	110
WU-1-101EDT	e006553	GaAsP/GaP	625	orange-diffused	3,2 - 12,5	110
WU-1-101IDT	e006090	GaAsP/GaP	625	red-diffused	3,2 - 12,5	110
WU-1-101YDT	e006091	GaAsP/GaP	590	yellow-diffused	1,3 - 8,0	110
WU-1-101GDT	e006092	GaP	565	green-diffused	1,3 - 8,0	110

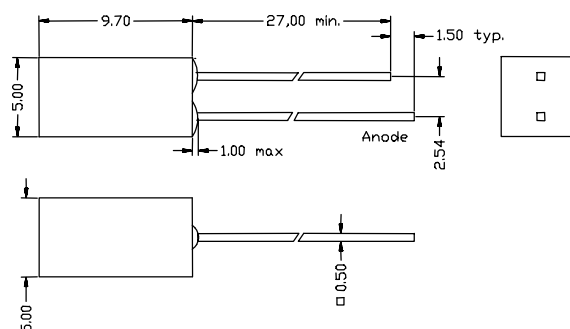
WU-1-95HDT	e006629	GaP	700	red-diffused	0,2 - 0,5	100
WU-1-95EDT	e005422	GaAsP/GaP	625	orange-diffused	2,0 - 12,5	100
WU-1-95YDT	e005423	GaAsP/GaP	590	yellow-diffused	2,0 - 8,0	100
WU-1-95GDT	e006621	GaP	565	green-diffused	2,0 - 8,0	100
WU-1-95PGDT	e005424	GaP	555	green-diffused	0,5 - 1,5	100

Package Dimensions

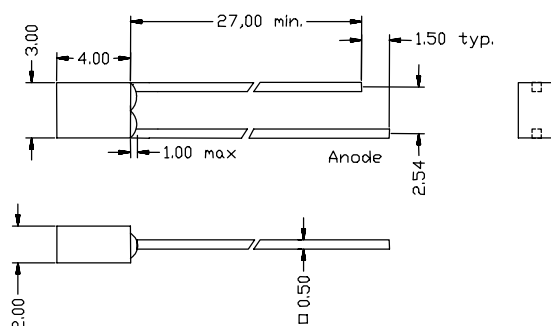
WU-1-100



WU-1-101



WU-1-95





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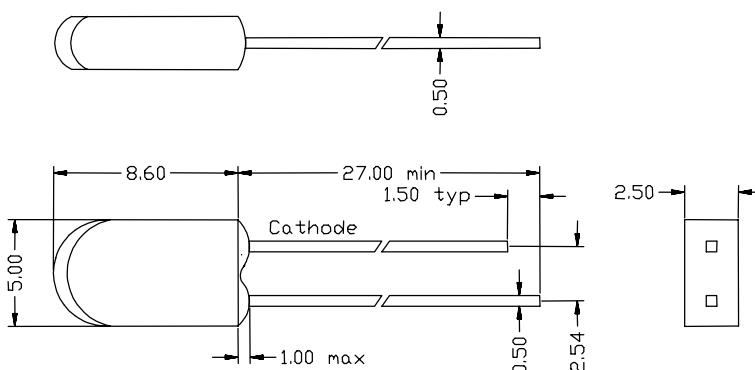
Rectangular LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-102HD	e006006	GaP	700	red-diffused	0,8 - 3,0	100
WU-1-102ED	e006557	GaAsP/GaP	625	orange-diffused	5,0 - 12,5	100
WU-1-102ID	e006558	GaAsP/GaP	625	red-diffused	5,0 - 12,5	100
WU-1-102YD	e006008	GaAsP/GaP	590	yellow-diffused	2,0 - 8,0	100
WU-1-102GD	e006007	GaP	565	green-diffused	2,0 - 8,0	100

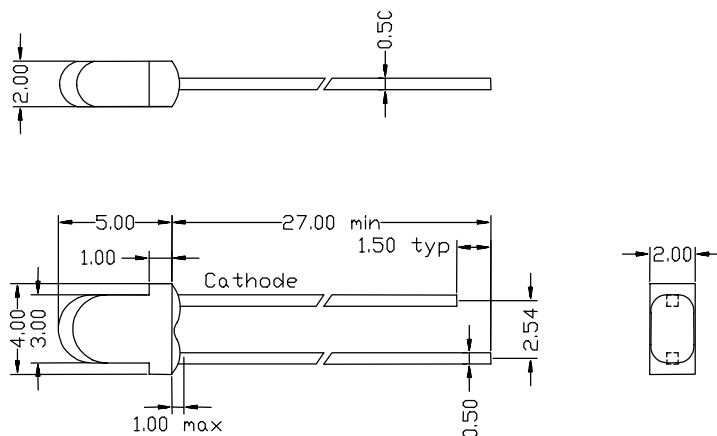
WU-1-129HD	e005425	GaP	700	red-diffused	1,3 - 5,0	100
WU-1-129ID	e005426	GaAsP/GaP	625	red-diffused	8,0 - 32,0	100
WU-1-129YD	e005427	GaAsP/GaP	590	yellow-diffused	5,0 - 20,0	100
WU-1-129GD	e005428	GaP	565	green-diffused	5,0 - 20,0	100
WU-1-129PGD	e005429	GaP	555	green-diffused	3,2 - 12,5	100

Package Dimensions

WU-1-102



WU-1-129



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



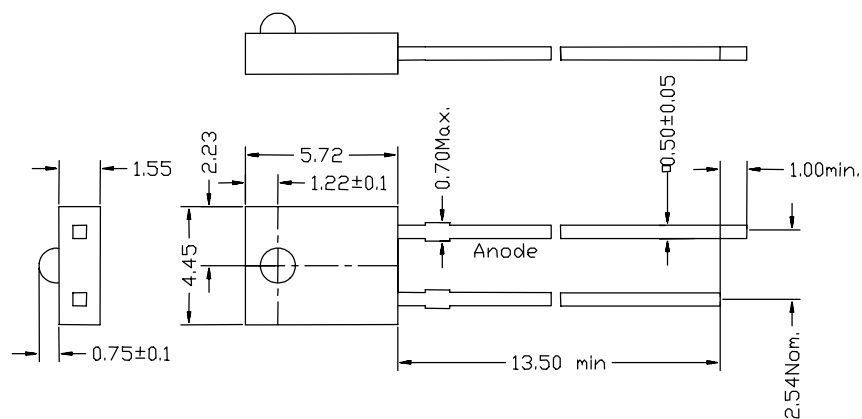
Optoelektronik

Side-View-LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-137SRD	e005430	GaAlAs	660	red-diffused	100,0 - 160,0*	170
WU-1-137ID	e005432	GaAsP/GaP	625	red-diffused	8,0 - 50,0	170
WU-1-137YD	e005434	GaAsP/GaP	590	yellow-diffused	3,2 - 20,0	170
WU-1-137SYD	e005815	InGaAlP	595	yellow-diffused	100,0 - 200,0*	170
WU-1-137SGD	e005436	GaP	565	green-diffused	8,0 - 40,0	170
WU-1-137SRC	e005431	GaAlAs	660	waterclear	160,0 - 220,0*	150
WU-1-137EC	e005433	GaAsP/GaP	625	waterclear	12,5 - 60,0	150
WU-1-137YC	e005435	GaAsP/GaP	590	waterclear	8,0 - 40,0	150
WU-1-137SYC	e005816	InGaAlP	595	waterclear	200,0 - 400,0	150
WU-1-137SGC	e005437	GaP	565	waterclear	12,5 - 50,0	150

Package Dimensions

WU-1-137



Attention: WU-1-137SRD/ -SRC reverse polarity

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Light-Bar LED

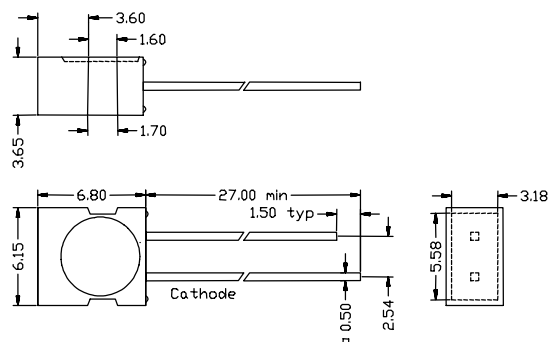
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}$ $I_F=20\text{mA}^*$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
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WU-1-103SRD	e006560	GaAlAs	660	red-diffused	32,0 - 100,0*	100
WU-1-103ID	e006112	GaAsP/GaP	625	red-diffused	5,0 - 20,0	100
WU-1-103YD	e006114	GaAsP/GaP	590	yellow-diffused	2,0 - 8,0	100
WU-1-103GD	e006113	GaP	565	green-diffused	2,0 - 8,0	100
WU-1-103SGD	e006559	GaP	565	green-diffused	5,0 - 20,0	100

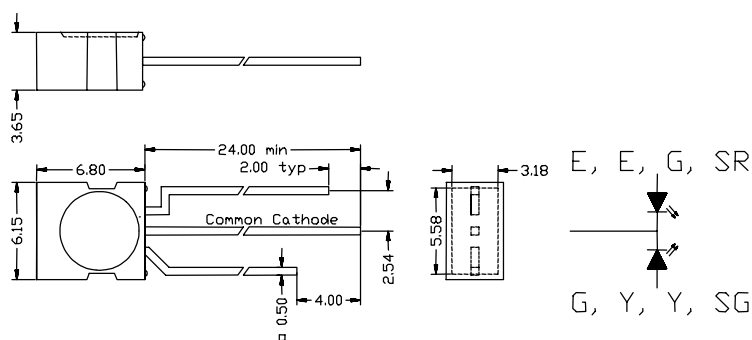
WU-1-103EGW	e005805	GaAsP/GaP GaP	625	white-diffused	8,0 - 20,0	100
			565		2,0 - 8,0	
WU-1-103EYW	e005806	GaAsP/GaP GaAsP/GaP	625	white-diffused	8,0 - 20,0	100
			590		2,0 - 8,0	
WU-1-103GYW	e005807	GaP GaAsP/GaP	565	white-diffused	2,0 - 8,0	100
			590		2,0 - 8,0	
WU-1-103SRSGW	e005808	GaAlAs GaP	660	white-diffused	32,0 - 100,0	100
			565		20,0 - 50,0	

Package Dimensions

WU-1-103



WU-1-103 bi-colour



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Light-Bar LED

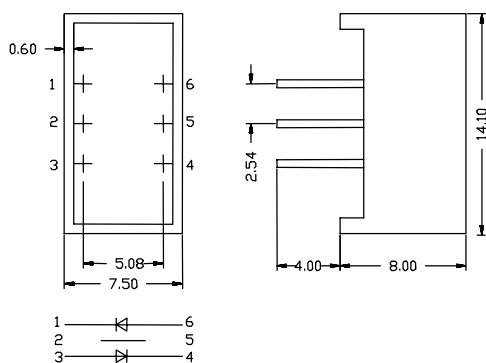
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(20\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-123/2ID	e006704	GaAsP/ GaP	625	red-diffused	3,0 - 18,0	120
WU-1-123/2GD	e006705	GaP	565	green-diffused	3,0 - 18,0	120
WU-1-123/2YD	e006706	GaAsP/ GaP	590	yellow-diffused	3,0 - 18,0	120
WU-1-123/2SRD	e012593	GaAlAs	660	red-diffused	40,0* - 100,0*	120
WU-1-123/2SGD	e012594	GaP	565	green-diffused	21,0* - 31,0*	120

WU-1-124/2ID	e006707	GaAsP/ GaP	625	red-diffused	5,0 - 20,0	120
WU-1-124/2GD	e006708	GaP	565	green-diffused	5,0 - 20,0	120
WU-1-124/2YD	e006709	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	120
WU-1-124/2SRD	e005526	GaAlAs	660	red-diffused	20,0* - 100,0*	120

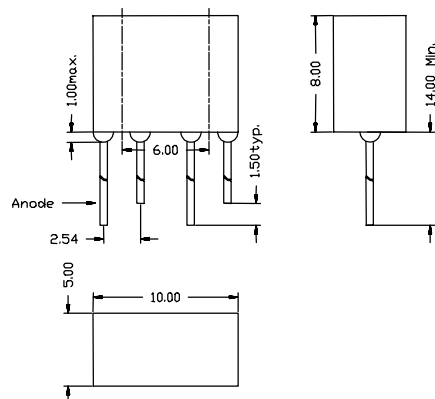
WU-1-125/3ID	e006115	GaAsP/ GaP	625	red-diffused	5,0 - 20,0	120
WU-1-125/3GD	e006116	GaP	565	green-diffused	5,0 - 20,0	120
WU-1-125/3YD	e006117	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	120
WU-1-125/3SRD	e005527	GaAlAs	660	red-diffused	20,0* - 100,0*	120

Package Dimensions

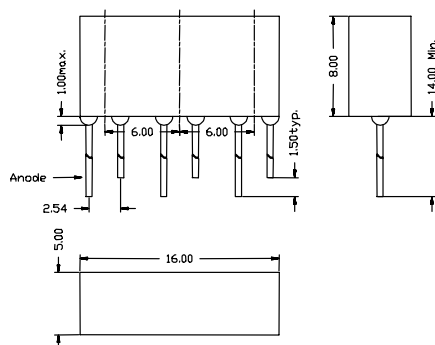
WU-1-123/2 7,5 x 14



WU-1-124/2 5 x 10



WU-1-125/3 5 x 16



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Light-Bar LED

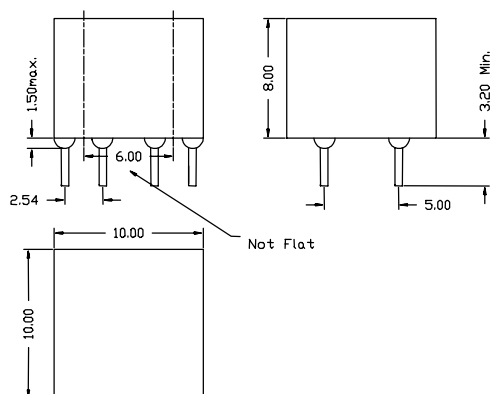
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(20\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-126/4ID	e006096	GaAsP/ GaP	625	red-diffused	5,0 - 20,0	120
WU-1-126/4GD	e006094	GaP	565	green-diffused	5,0 - 20,0	120
WU-1-126/4YD	e006095	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	120
WU-1-126/4SRD	e005528	GaAlAs	660	red-diffused	20,0* - 100,0*	120

WU-1-127/6ID	e006710	GaAsP/ GaP	625	red-diffused	5,0 - 20,0	120
WU-1-127/6GD	e006711	GaP	565	green-diffused	5,0 - 20,0	120
WU-1-127/6YD	e006712	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	120
WU-1-127/6SRD	e005529	GaAlAs	660	red-diffused	20,0* - 100,0*	120

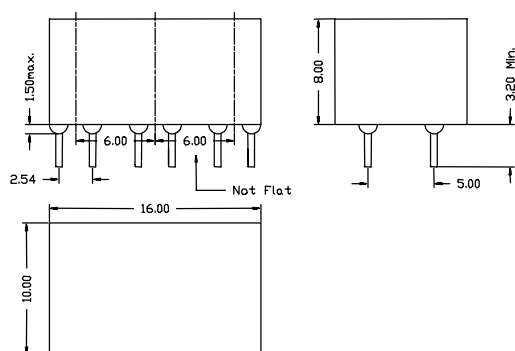
WU-1-128/8ID	e006713	GaAsP/ GaP	625	red-diffused	5,0 - 20,0	120
WU-1-128/8GD	e006714	GaP	565	green-diffused	5,0 - 20,0	120
WU-1-128/8YD	e006715	GaAsP/ GaP	590	yellow-diffused	5,0 - 20,0	120
WU-1-128/8SRD	e005530	GaAlAs	660	red-diffused	20,0* - 100,0*	120

Package Dimensions

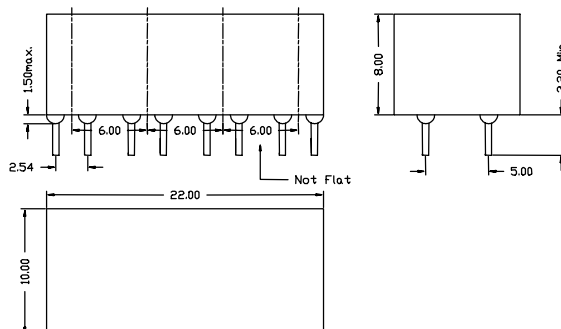
WU-1-126 10 x 10



WU-1-127 10 x 16



WU-1-128 10 x 22



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

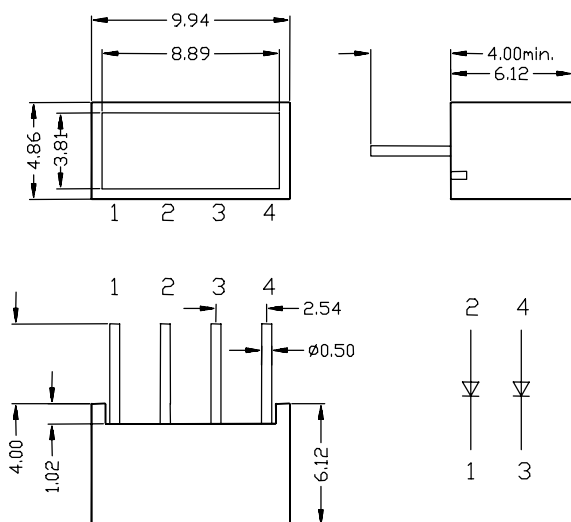
Light-Bar LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-2300SRW	e012717	GaAlAs	660	white-diffused	15,0 - 40,0	120
WU-1-2300EW	e012718	GaAsP/GaP	625	white-diffused	10,0 - 25,0	120
WU-1-2300YW	e012719	GaAsP/GaP	590	white-diffused	8,0 - 18,0	120
WU-1-2300SGW	e012720	GaP	565	white-diffused	10,0 - 25,0	120

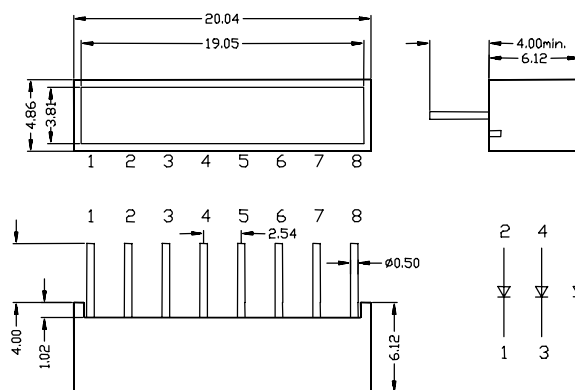
WU-1-2350SRW	e012721	GaAlAs	660	white-diffused	30,0 - 80,0	120
WU-1-2350EW	e012722	GaAsP/GaP	625	white-diffused	20,0 - 50,0	120
WU-1-2350YW	e012723	GaAsP/GaP	590	white-diffused	15,0 - 38,0	120
WU-1-2350SGW	e012724	GaP	565	white-diffused	20,0 - 50,0	120

Package Dimensions

WU-1-2300 5 x 10



WU-1-2350 5 x 20



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

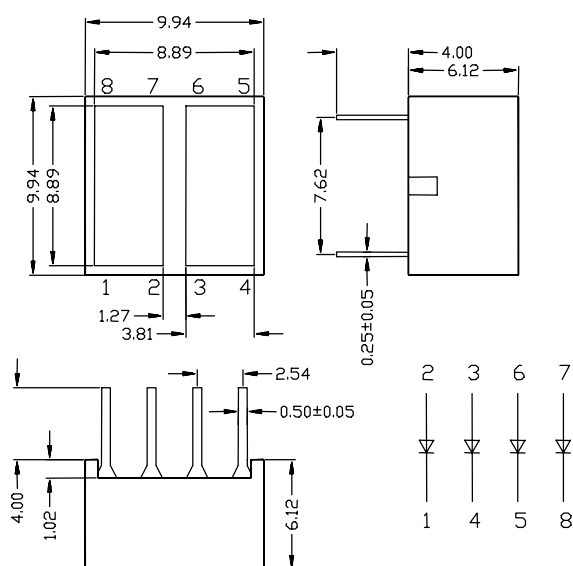
Light-Bar LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-2600SRW	e012725	GaAlAs	660	white-diffused	15,0 - 40,0	120
WU-1-2600EW	e012726	GaAsP/GaP	625	white-diffused	10,0 - 25,0	120
WU-1-2600YW	e012727	GaAsP/GaP	590	white-diffused	8,0 - 18,0	120
WU-1-2600SGW	e012728	GaP	565	white-diffused	10,0 - 25,0	120

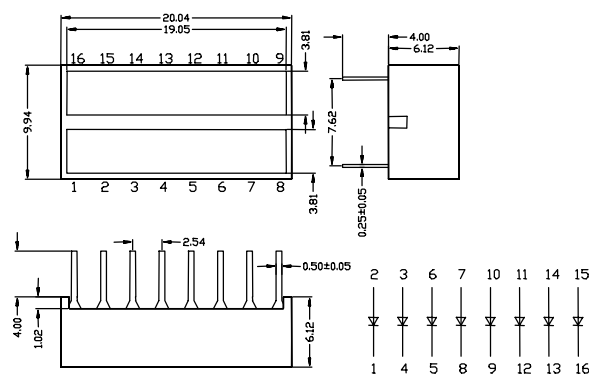
WU-1-2635SRW	e012729	GaAlAs	660	white-diffused	30,0 - 80,0	120
WU-1-2635EW	e012730	GaAsP/GaP	625	white-diffused	20,0 - 50,0	120
WU-1-2635YW	e012731	GaAsP/GaP	590	white-diffused	15,0 - 38,0	120
WU-1-2635SGW	e012732	GaP	565	white-diffused	20,0 - 50,0	120

Package Dimensions

WU-1-2600 10 x 10



WU-1-2635 10 x 20



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.

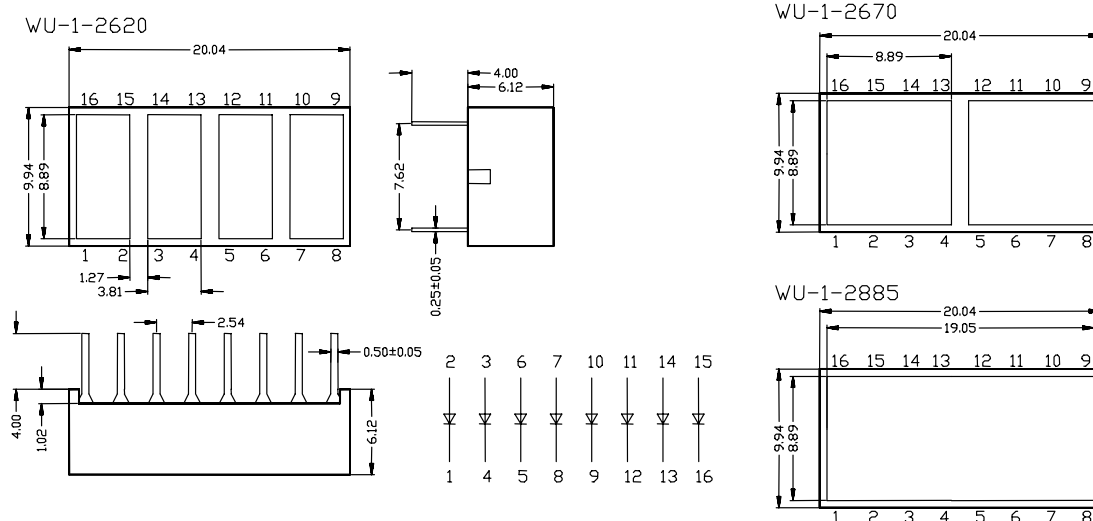


Optoelektronik

Light-Bar LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-2620SRW	e012733	GaAlAs	660	white-diffused	15,0 - 40,0	120
WU-1-2620EW	e012734	GaAsP/GaP	625	white-diffused	10,0 - 25,0	120
WU-1-2620YW	e012735	GaAsP/GaP	590	white-diffused	8,0 - 18,0	120
WU-1-2620SGW	e012736	GaP	565	white-diffused	10,0 - 25,0	120
WU-1-2670SRW	e012737	GaAlAs	660	white-diffused	30,0 - 80,0	120
WU-1-2670EW	e012738	GaAsP/GaP	625	white-diffused	20,0 - 45,0	120
WU-1-2670YW	e012739	GaAsP/GaP	590	white-diffused	15,0 - 35,0	120
WU-1-2670SGW	e012740	GaP	565	white-diffused	20,0 - 50,0	120
WU-1-2885SRW	e012741	GaAlAs	660	white-diffused	40,0 - 150,0	120
WU-1-2885EW	e012742	GaAsP/GaP	625	white-diffused	25,0 - 80,0	120
WU-1-2885YW	e012743	GaAsP/GaP	590	white-diffused	25,0 - 70,0	120
WU-1-2885SGW	e012744	GaP	565	white-diffused	30,0 - 100,0	120

Package Dimensions



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

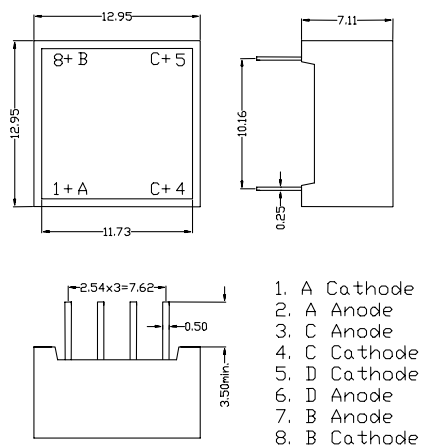
Light-Bar LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-LB46GD	e012745	GaP	567	green-diffused	6,5 - 11,0	120
WU-2-LB46YD	e012746	GaAsP/GaP	585	yellow-diffused	5,0 - 8,0	120
WU-2-LB46ID	e012747	GaAsP/GaP	635	red-diffused	7,0 - 12,0	120
WU-2-LB46SRD	e012748	GaAlAs	660	red-diffused	27,5 - 45,0	120

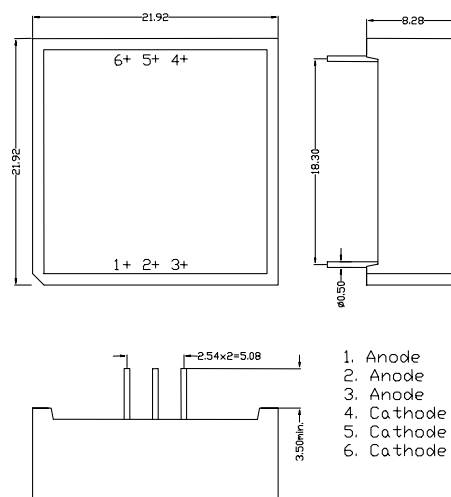
WU-2-LB78GD	e012709	GaP	567	green-diffused	8,0 - 13,0	120
WU-2-LB78YD	e012710	GaAsP/GaP	585	yellow-diffused	6,0 - 10,0	120
WU-2-LB78ID	e012711	GaAsP/GaP	635	red-diffused	9,0 - 15,0	120
WU-2-LB78SRD	e012712	GaAlAs	660	red-diffused	34,0 - 57,0	120

Package Dimensions

WU-2-LB46



WU-2-LB78



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



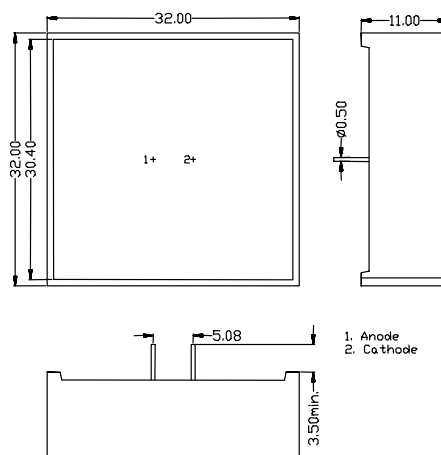
Optoelektronik

Light-Bar LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
WU-2-LB13GD	e012713	GaP	567	green-diffused	10,0 - 17,0	120
WU-2-LB13YD	e012714	GaAsP/GaP	585	yellow-diffused	9,0 - 16,0	120
WU-2-LB13ID	e012715	GaAsP/GaP	635	red-diffused	11,0 - 18,0	120
WU-2-LB13SRD	e012716	GaAlAs	660	red-diffused	42,0 - 70,0	120

Package Dimensions

WU-2-LB13



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



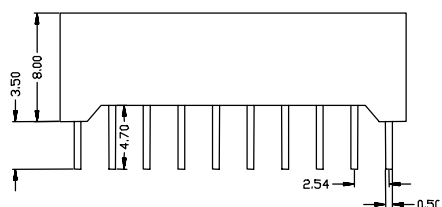
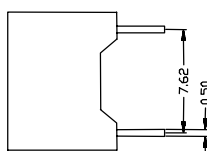
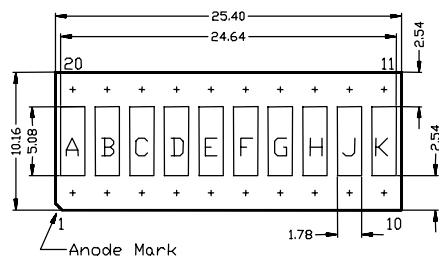
Optoelektronik

Bar Graph Arrays

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Segment- description
DC-10SRWA	e006716	GaAlAs	660	hyper-red	5600 - 31000	A - K
DC-10GWA	e006717	GaP	565	green	2200 - 5600	A - K
DC-10YWA	e006718	GaAsP/ GaP	590	yellow	2200 - 5600	A - K
DC-10EWA	e006719	GaAsP/ GaP	625	super-red	2200 - 5600	A - K
DC-7G3HWA	e006720	GaP	565	green	2200 - 5600	A - G
A-G green, H-K red		GaP	700	red	900 - 2200	H - K

Package Dimensions

DC-10



- | | |
|------------|--------------|
| 1 Anode A | 11 Cathode K |
| 2 Anode B | 12 Cathode J |
| 3 Anode C | 13 Cathode H |
| 4 Anode D | 14 Cathode G |
| 5 Anode E | 15 Cathode F |
| 6 Anode F | 16 Cathode E |
| 7 Anode G | 17 Cathode D |
| 8 Anode H | 18 Cathode C |
| 9 Anode J | 19 Cathode B |
| 10 Anode K | 20 Cathode A |

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



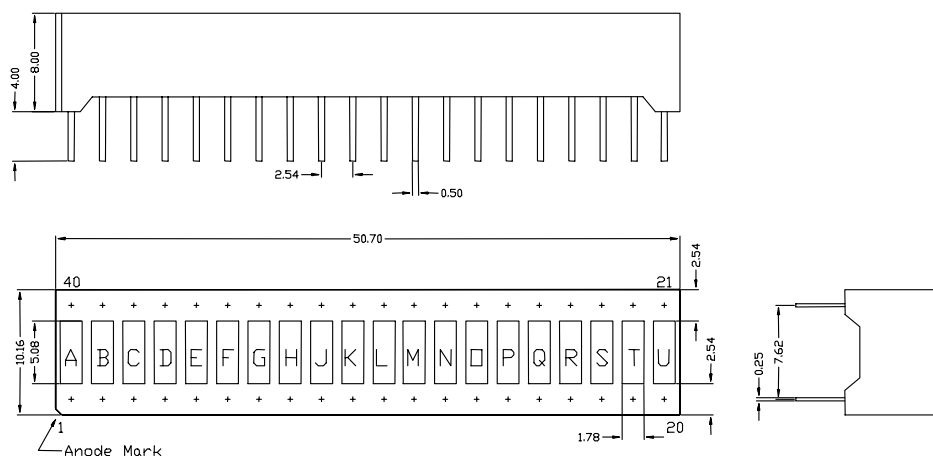
Optoelektronik

Bar Graph Arrays

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Segment- description
DC-20/20SRWA	e012595	GaAlAs	660	hyper-red	5600 - 31000	A – U
DC-20/20EWA	e012596	GaAsP/ GaP	625	super-red	2200 - 5600	A – U
DC-20/20YWA	e012597	GaAsP/ GaP	590	yellow	2200 - 5600	A – U
DC-20/20GWA	e012598	GaP	565	green	2200 - 5600	A – U

Package Dimensions

DC-20



1 Anode A	11 Anode L	21 Cathode U	31 Cathode K
2 Anode B	12 Anode M	22 Cathode T	32 Cathode J
3 Anode C	13 Anode N	23 Cathode S	33 Cathode H
4 Anode D	14 Anode O	24 Cathode R	34 Cathode G
5 Anode E	15 Anode P	25 Cathode Q	35 Cathode F
6 Anode F	16 Anode Q	26 Cathode P	36 Cathode E
7 Anode G	17 Anode R	27 Cathode O	37 Cathode D
8 Anode H	18 Anode S	28 Cathode N	38 Cathode C
9 Anode J	19 Anode T	29 Cathode M	39 Cathode B
10 Anode K	20 Anode U	30 Cathode L	40 Cathode A

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

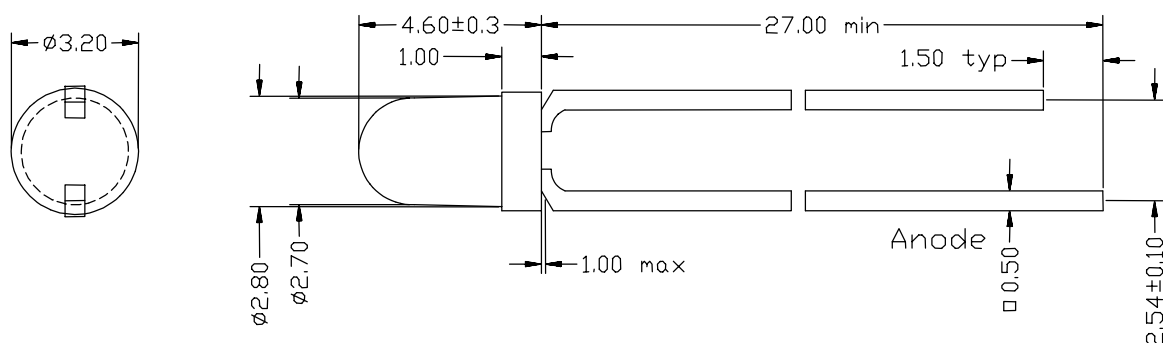
Super-Bright-LED 3mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-110SRD/C	e006583	GaAlAs	660	red-diffused	90,0 - 100,0	60
WU-1-110SRD/D	e006584	GaAlAs	660	red-diffused	100,0 - 200,0	60
WU-1-110SRD/E	e006585	GaAlAs	660	red-diffused	200,0 - 300,0	60
WU-1-110SRD/F	e006586	GaAlAs	660	red-diffused	300,0 - 400,0	60
WU-1-110SRD/G	e006587	GaAlAs	660	red-diffused	400,0 - 600,0	60
WU-1-110SRD/H	e005486	GaAlAs	660	red-diffused	600,0 - 1000,0	60
WU-1-110SRD/J	e005487	GaAlAs	660	red-diffused	1000,0 - 1300,0	60
WU-1-110SED	e005412	InGaAlP	620	orange-diffused	200,0 - 700,0	60
WU-1-110SYD	e005978	InGaAlP	595	yellow-diffused	100,0 - 400,0	60
WU-1-110SGD	e006581	GaP	565	green-diffused	40,0 - 60,0	60
WU-1-110MGD	e004504	InGaAlP	570	green-diffused	90,0 - 110,0	60

WU-1-111SRC/C	e006965	GaAlAs	660	waterclear	360,0 - 500,0	30
WU-1-111SRC/D	e006592	GaAlAs	660	waterclear	500,0 - 700,0	30
WU-1-111SRC/E	e006593	GaAlAs	660	waterclear	700,0 - 1000,0	30
WU-1-111SRC/F	e006594	GaAlAs	660	waterclear	1000,0 - 1200,0	30
WU-1-111SRC/G	e006595	GaAlAs	660	waterclear	1200,0 - 1400,0	30
WU-1-111SRC/H	e005488	GaAlAs	660	waterclear	1400,0 - 1800,0	30
WU-1-111SRC/J	e005489	GaAlAs	660	waterclear	1800,0 - 2500,0	30
WU-1-111SIC	e005411	InGaAlP	640	waterclear	500,0 - 1300,0	30
WU-1-111SIC-E	e005410	InGaAlP	640	waterclear	1000,0 - 2000,0	30
WU-1-111SEC	e005409	InGaAlP	620	waterclear	500,0 - 2000,0	30
WU-1-111SYC	e005977	InGaAlP	595	waterclear	200,0 - 1300,0	30
WU-1-111SGC	e006031	GaP	565	waterclear	100,0 - 300,0	30
WU-1-111MGC	e004531	InGaAlP	570	waterclear	300,0 - 390,0	30

Package Dimensions

WU-1-110/WU-1-111



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

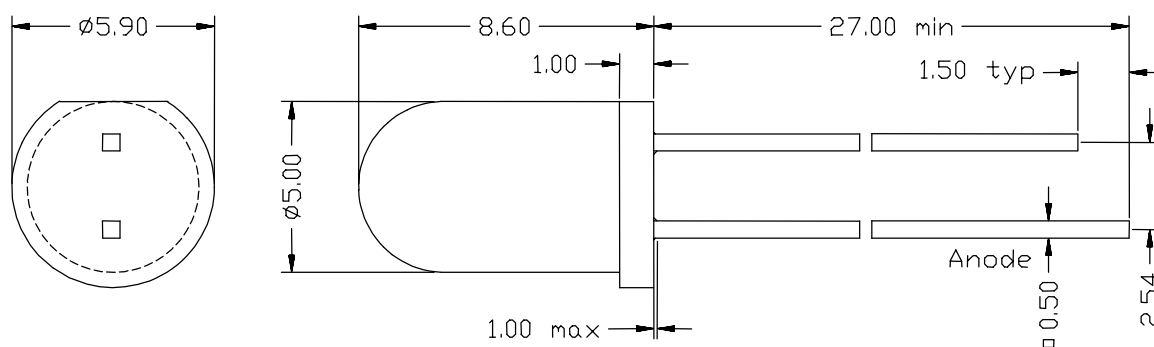
Super-Bright-LED 5mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-112SRD/C	e006599	GaAlAs	660	red-diffused	110,0 - 200,0	60
WU-1-112SRD/D	e006600	GaAlAs	660	red-diffused	200,0 - 300,0	60
WU-1-112SRD/E	e006613	GaAlAs	660	red-diffused	300,0 - 500,0	60
WU-1-112SRD/F	e006620	GaAlAs	660	red-diffused	500,0 - 700,0	60
WU-1-112SRD/G	e006627	GaAlAs	660	red-diffused	700,0 - 1000,0	60
WU-1-112SRD/H	e005408	GaAlAs	660	red-diffused	1000,0 - 1600,0	60
WU-1-112SED	e005407	InGaAlP	620	orange-diffused	400,0 - 1000,0	60
WU-1-112SYD	e005046	InGaAlP	595	yellow-diffused	100,0 - 500,0	60
WU-1-112SGD	e006597	GaP	565	green-diffused	20,0 - 60,0	60
WU-1-112MGD	e006235	InGaAlP	570	green-diffused	70,0 - 140,0	60

WU-1-113SRC/C	e006660	GaAlAs	660	waterclear	500,0 - 1000,0	30
WU-1-113SRC/D	e006109	GaAlAs	660	waterclear	1000,0 - 2000,0	30
WU-1-113SRC/E	e006111	GaAlAs	660	waterclear	2000,0 - 3500,0	30
WU-1-113SRC/F	e005400	GaAlAs	660	waterclear	3500,0 - 4500,0	30
WU-1-113SEC	e005406	InGaAlP	620	waterclear	700,0 - 3000,0	30
WU-1-113SYC	e005924	InGaAlP	595	waterclear	400,0 - 2500,0	30
WU-1-113SGC	e006088	GaP	565	waterclear	100,0 - 300,0	30
WU-1-113SIC	e005405	InGaAlP	640	waterclear	1300,0 - 3000,0	30
WU-1-113SIC-E	e005404	InGaAlP	640	waterclear	1600,0 - 3500,0	30
WU-1-113MGC	e006235	InGaAlP	570	waterclear	900,0 - 1500,0	30

Package Dimensions

WU-1-112/WU-1-113



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Super-Bright-LED LED 5mm Round, without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
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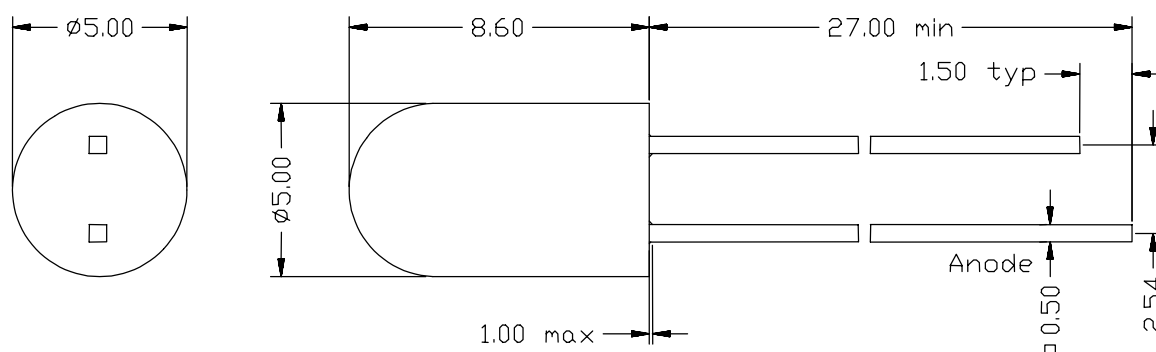
WU-1-114SRD	e006668	GaAlAs	660	red-diffused	100,0 - 500,0	60
WU-1-114SYD	e005403	InGaAlP	595	yellow-diffused	100,0 - 500,0	60
WU-1-114SGD	e005813	GaP	565	green-diffused	60,0 - 100,0	60

WU-1-114SRC/C	e006664	GaAlAs	660	waterclear	500,0 - 1000,0	30
WU-1-114SRC/D	e006665	GaAlAs	660	waterclear	1000,0 - 2000,0	30
WU-1-114SRC/E	e006666	GaAlAs	660	waterclear	2000,0 - 3500,0	30
WU-1-114SGC	e006663	GaP	565	waterclear	100,0 - 300,0	30
WU-1-114SYC	e005402	InGaAlP	595	waterclear	400,0 - 2500,0	30

WU-1-114SRT	e005814	GaAlAs	660	red-transparent	1000,0 - 2000,0	30
WU-1-114SYT	e005401	InGaAlP	595	yellow-transparent	400,0 - 2500,0	30
WU-1-114SGT	e006667	GaP	565	green-transparent	100,0 - 300,0	30

Package Dimensions

WU-1-114



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Super-Bright-LED 5mm Round

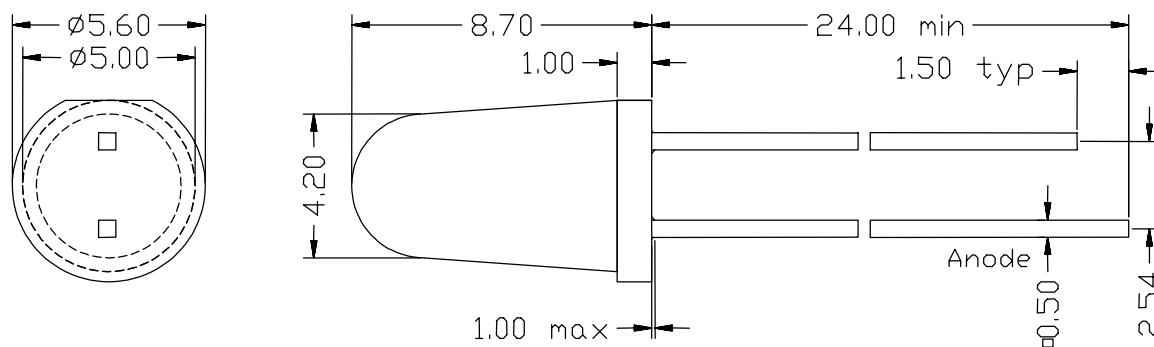
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
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WU-2-220SRC	e005622	GaAlAs/GaAlAs	660	waterclear	1400 - 2400	20
WU-2-220SEC	e005623	AlGaInP/GaAs	620	waterclear	1200 - 2000	20
WU-2-220SYC	e005624	AlGaInP/GaAs	595	waterclear	1200 - 1800	20
WU-2-220SGC	e005625	GaP/GaP	567	waterclear	250 - 450	20
WU-2-220SBC	e005626	GaN/SiC	430	waterclear	250 - 450	20

WU-2-220SRT	e005627	GaAlAs/GaAlAs	660	red-transparent	1400 - 2400	20
WU-2-220SET	e005628	AlGaInP/GaAs	620	orange-transparent	1200 - 2000	20
WU-2-220SYT	e005629	AlGaInP/GaAs	595	yellow-transparent	1200 - 1800	20
WU-2-220SGT	e005630	GaP/GaP	567	green-transparent	250 - 450	20
WU-2-220SBT	e005631	GaN/SiC	430	blue-transparent	250 - 450	20

Package Dimensions

WU-2-220



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Super-Bright-LED 5mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_V [mcd] $I_F = 20mA$ Min. - Typ.	Viewing Angle Degrees Φ_V [°]
WU-2-230SRD	e005664	GaAlAs/GaAlAs	660	red-diffused	180 - 300	44
WU-2-230USR	e005665	GaAlAs/GaAlAs	650	red-diffused	360 - 600	44
WU-2-230SED	e005666	AlGaInP/GaAs	620	orange-diffused	360 - 600	44
WU-2-230SYD	e005667	AlGaInP/GaAs	595	yellow-diffused	255 - 425	44
WU-2-230SGD	e005668	GaP/GaP	567	green-diffused	40 - 100	44
WU-2-230BD	e005669	GaN/SiC	430	blue-diffused	50 - 100	44

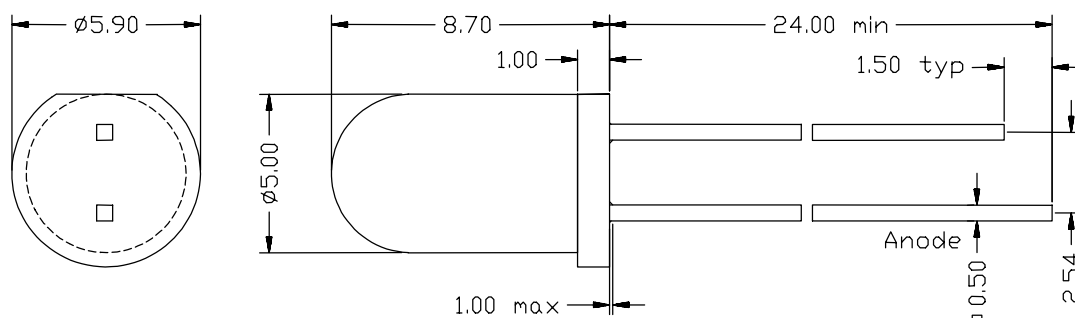
WU-2-230SRWD	e005670	GaAlAs/GaAlAs	660	white-diffused	180 - 300	44
WU-2-230USRWD	e005671	GaAlAs/GaAlAs	650	white-diffused	360 - 600	44
WU-2-230SEWD	e005672	AlGaInP/GaAs	620	white-diffused	360 - 600	44
WU-2-230SYWD	e005673	AlGaInP/GaAs	595	white-diffused	255 - 425	44
WU-2-230SGWD	e005674	GaP/GaP	567	white-diffused	40 - 100	44
WU-2-230BWD	e005675	GaN/SiC	430	white-diffused	50 - 100	44

WU-2-230SRC	e005676	GaAlAs/GaAlAs	660	waterclear	1200 - 2000	22
WU-2-230USRC	e005677	GaAlAs/GaAlAs	650	waterclear	1400 - 2200	22
WU-2-230SIC	e005678	AlGaInP/GaAs	640	waterclear	1200 - 2000	22
WU-2-230SEC	e005679	AlGaInP/GaAs	620	waterclear	1200 - 2000	22
WU-2-230SYC	e005680	AlGaInP/GaAs	595	waterclear	800 - 1500	22
WU-2-230SGC	e005681	GaP/GaP	567	waterclear	150 - 300	22
WU-2-230BC	e005682	GaN/SiC	430	waterclear	100 - 300	22

WU-2-230SRT	e005683	GaAlAs/GaAlAs	660	red-transparent	1200 - 2000	22
WU-2-230USRT	e005684	GaAlAs/GaAlAs	650	red-transparent	1400 - 2200	22
WU-2-230SIT	e005685	AlGaInP/GaAs	640	orange-transparent	1200 - 2000	22
WU-2-230SET	e005686	AlGaInP/GaAs	620	orange-transparent	1200 - 2000	22
WU-2-230SYT	e005687	AlGaInP/GaAs	595	yellow-transparent	800 - 1500	22
WU-2-230SGT	e005688	GaP/GaP	567	green-transparent	150 - 300	22
WU-2-230BT	e005689	GaN/SiC	430	blue-transparent	100 - 300	22

Package Dimensions

WU-2-230



1. All dimensions are in [mm], Tolerance is $\pm 0.25mm$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

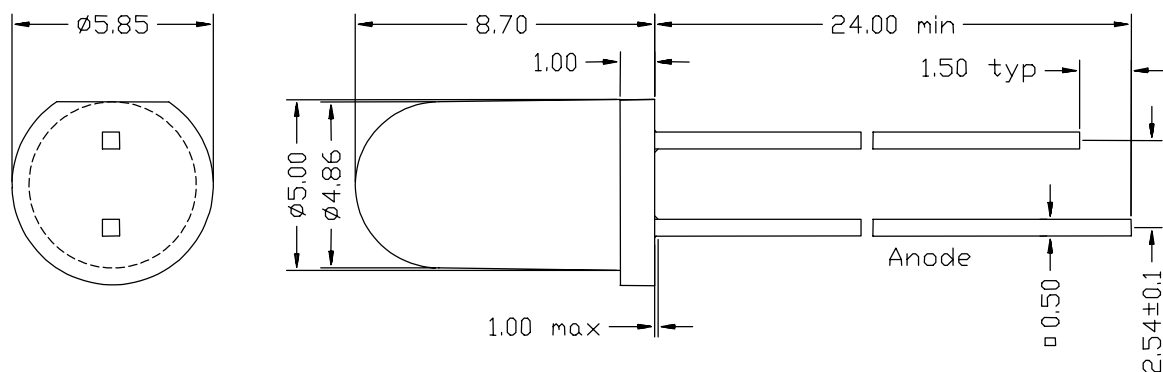
Super-Bright-LED 5mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-245SRC	e005650	GaAlAs/GaAlAs	660	waterclear	1200 - 2000	22
WU-2-245USRC	e005651	GaAlAs/GaAlAs	650	waterclear	1400 - 2200	22
WU-2-245SIC	e005652	AlGaInP/GaAs	640	waterclear	1200 - 2000	22
WU-2-245SEC	e005653	AlGaInP/GaAs	620	waterclear	1200 - 2000	22
WU-2-245SYC	e005654	AlGaInP/GaAs	595	waterclear	800 - 1500	22
WU-2-245SGC	e005655	GaP/GaP	567	waterclear	150 - 300	22
WU-2-245SBC	e005656	GaN/SiC	430	waterclear	100 - 300	22

WU-2-245SRT	e005657	GaAlAs/GaAlAs	660	red-transparent	1200 - 2000	22
WU-2-245USRT	e005658	GaAlAs/GaAlAs	650	red-transparent	1400 - 2200	22
WU-2-245SIT	e005659	AlGaInP/GaAs	640	orange-transparent	1200 - 2000	22
WU-2-245SET	e005660	AlGaInP/GaAs	620	orange-transparent	1200 - 2000	22
WU-2-245SYT	e005661	AlGaInP/GaAs	595	yellow-transparent	800 - 1500	22
WU-2-245SGT	e005662	GaP/GaP	567	green-transparent	150 - 300	22
WU-2-245SBT	e005663	GaN/SiC	430	blue-transparent	100 - 300	22

Package Dimensions

WU-2-245



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



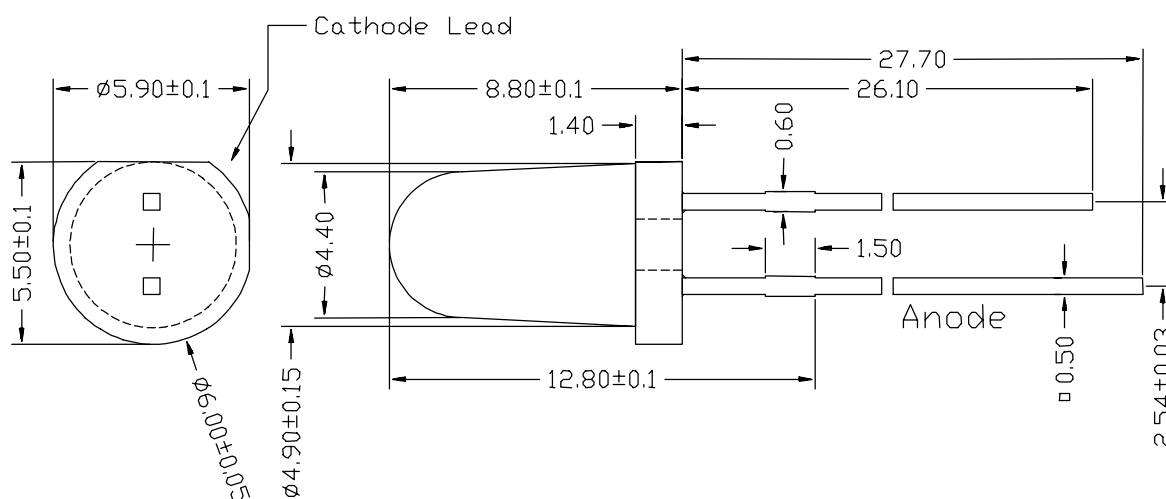
Optoelektronik

Super-Bright-LED 5mm Round Injection-Type

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Forward Voltage U_F [V] $I_F = 20\text{mA}$ Typ	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-0-LR5000SR	e005632	AlGaAs	645	waterclear	1,8	693 - 2286	18
WU-0-LR5000RR	e005633	AlInGaP	632	waterclear	2,0	334 - 1103	30
WU-0-LR5000HR	e005634	AlInGaP	625	waterclear	2,0	334 - 1588	30
WU-0-LR5000RO	e005635	AlInGaP	620	waterclear	2,0	334 - 1588	30
WU-0-LR5000OR	e005636	AlInGaP	615	waterclear	2,0	334 - 1588	30
WU-0-LR5000OO	e005637	AlInGaP	605	waterclear	2,0	334 - 1588	30
WU-0-LR5000YO	e005638	AlInGaP	597	waterclear	2,0	334 - 1588	30
WU-0-LR5000YY	e005639	AlInGaP	589	waterclear	2,0	334 - 1103	30
WU-0-LR5000YG	e005640	GaP	565	waterclear	2,0	200 - 600	30
WU-0-LR5000PG	e006372	GaP	555	waterclear	2,0	200 - 600	30

Package Dimensions

WU-0-LR5000



1. All dimensions are in [mm], Tolerance is ± 0.1 mm unless otherwise noted.



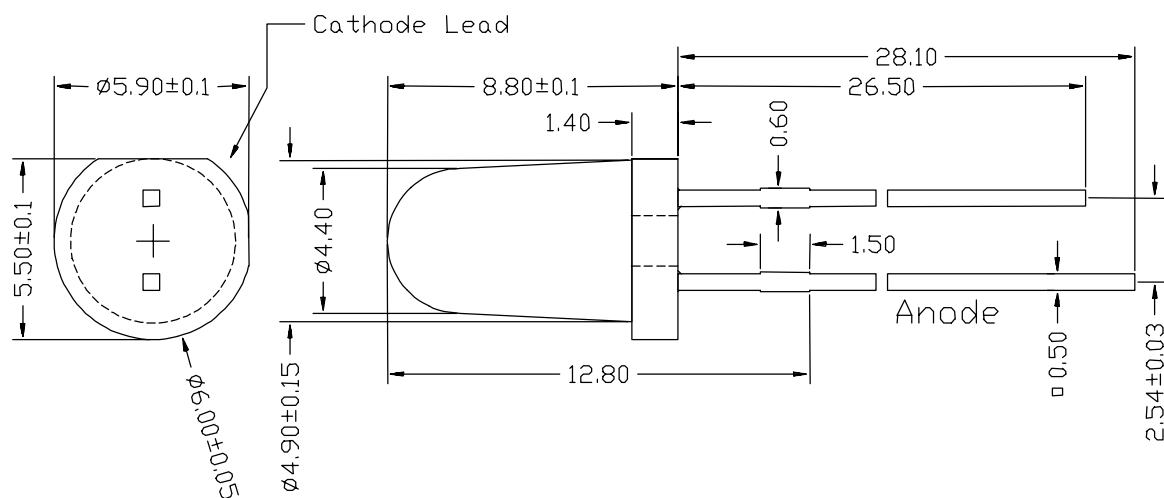
Optoelektronik

Super-Bright-LED 5mm Round Injection-Type

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Forward Voltage U_F [V] $I_F = 20\text{mA}$ Typ	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-0-LR5001SR	e005641	AlGaAs	645	waterclear	1,8	750 - 2400	15
WU-0-LR5001RR	e005642	AlInGaP	632	waterclear	2,0	481 - 1588	25
WU-0-LR5001HR	e005643	AlInGaP	625	waterclear	2,0	481 - 2286	25
WU-0-LR5001RO	e005644	AlInGaP	620	waterclear	2,0	481 - 2286	25
WU-0-LR5001OR	e005645	AlInGaP	615	waterclear	2,0	481 - 2286	25
WU-0-LR5001OO	e005646	AlInGaP	605	waterclear	2,0	481 - 2286	25
WU-0-LR5001YO	e005647	AlInGaP	597	waterclear	2,0	481 - 2286	25
WU-0-LR5001YY	e005648	AlInGaP	589	waterclear	2,0	481 - 2286	25
WU-0-LR5001YG	e005649	GaP	565	waterclear	2,0	200 - 600	25
WU-0-LR5001PG	e005780	GaP	555	waterclear	2,0	200 - 600	25

Package Dimensions

WU-0-LR5001



1. All dimensions are in [mm], Tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.



Optoelektronik

Super-Bright-LED 8mm and 10mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-115SRD/B	e006669	GaAlAs	660	red-diffused	120,0 - 200,0	60
WU-1-115SRD/C	e006670	GaAlAs	660	red-diffused	200,0 - 350,0	60
WU-1-115SRD/D	e006673	GaAlAs	660	red-diffused	350,0 - 450,0	60
WU-1-115SRD/E	e006674	GaAlAs	660	red-diffused	450,0 - 550,0	60
WU-1-115SRD/F	e006675	GaAlAs	660	red-diffused	550,0 - 650,0	60
WU-1-115SRD/G	e006676	GaAlAs	660	red-diffused	650,0 - 800,0	60
WU-1-115SRD/H	e005522	GaAlAs	660	red-diffused	800,0 - 1300,0	60

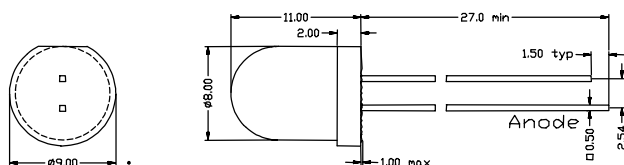
WU-1-116SRC/B	e006677	GaAlAs	660	waterclear	500,0 - 1000,0	40
WU-1-116SRC/C	e006679	GaAlAs	660	waterclear	1000,0 - 1600,0	40
WU-1-116SRC/D	e006680	GaAlAs	660	waterclear	1600,0 - 2000,0	40
WU-1-116SRC/E	e006681	GaAlAs	660	waterclear	2000,0 - 3000,0	40
WU-1-116SRC/F	e005523	GaAlAs	660	waterclear	3000,0 - 4500,0	40

WU-1-117SRD/B	e006682	GaAlAs	660	red-diffused	120,0 - 200,0	60
WU-1-117SRD/C	e006683	GaAlAs	660	red-diffused	200,0 - 350,0	60
WU-1-117SRD/D	e006684	GaAlAs	660	red-diffused	350,0 - 450,0	60
WU-1-117SRD/E	e006685	GaAlAs	660	red-diffused	450,0 - 550,0	60
WU-1-117SRD/F	e006686	GaAlAs	660	red-diffused	550,0 - 650,0	60
WU-1-117SRD/G	e006687	GaAlAs	660	red-diffused	650,0 - 800,0	60
WU-1-117SRD/H	e005524	GaAlAs	660	red-diffused	800,0 - 1300,0	60

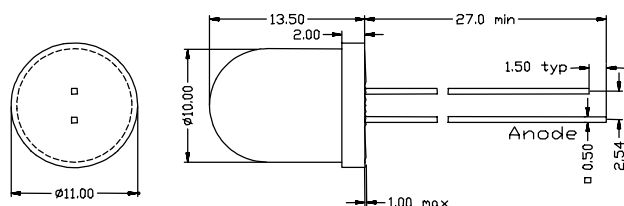
WU-1-118SRC/B	e006688	GaAlAs	660	waterclear	500,0 - 1000,0	40
WU-1-118SRC/C	e006689	GaAlAs	660	waterclear	1000,0 - 1600,0	40
WU-1-118SRC/D	e006690	GaAlAs	660	waterclear	1600,0 - 2000,0	40
WU-1-118SRC/E	e006691	GaAlAs	660	waterclear	2000,0 - 3000,0	40
WU-1-118SRC/F	e005525	GaAlAs	660	waterclear	3000,0 - 4500,0	40

Package Dimensions

WU-1-115/116



WU-1-117/118



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



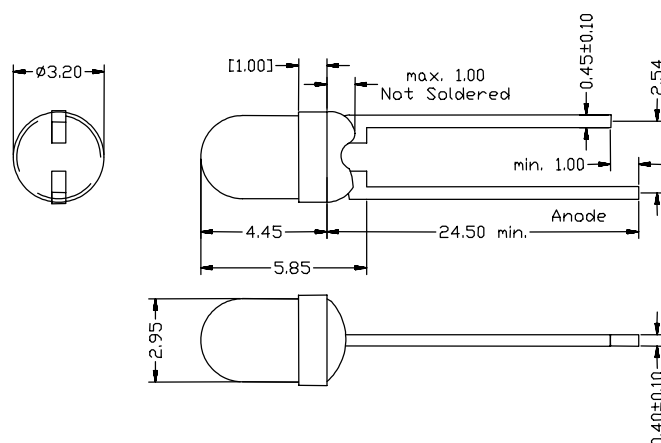
Optoelektronik

Ultra-High-Bright-Intensity-LED 3mm Round

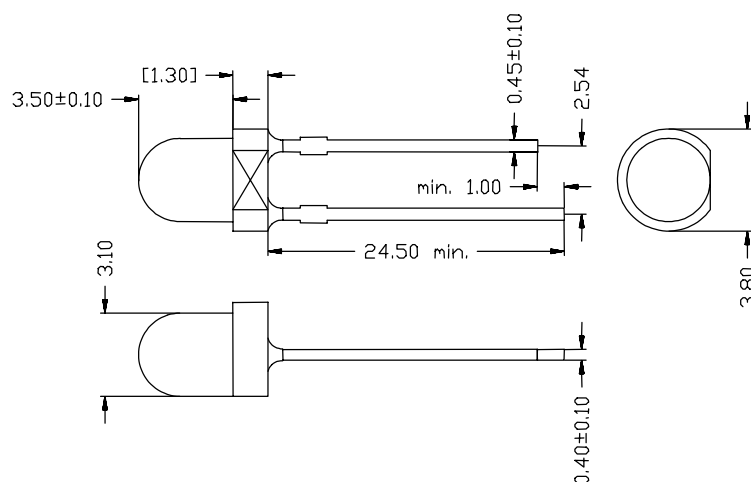
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Dom} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-14-730 BC	e004500	GaInN	470	waterclear	650 - 1100	15
WU-14-730 GC	e004501	GaInN	525	waterclear	1900 - 3200	15
WU-14-731 BC	e005319	GaInN	470	waterclear	385 - 665	30
WU-14-731 GC	e005320	GaInN	525	waterclear	1465 - 2525	30
WU-14-732 BC	e005506	GaInN	470	waterclear	235 - 470	45
WU-14-732 GC	e005507	GaInN	525	waterclear	895 - 1555	45

Package Dimensions

WU-14-730



WU-14-731/732



1. All dimensions are in [mm], Tolerance is $\pm 0.25mm$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



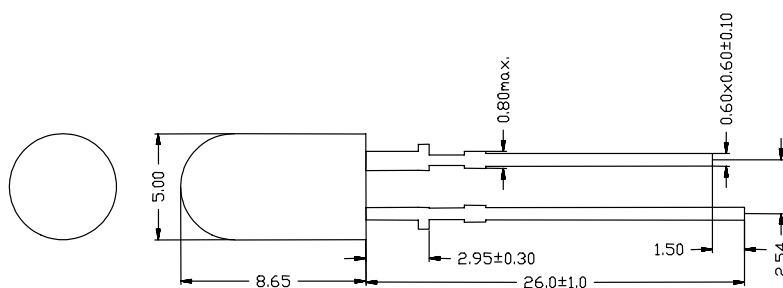
Optoelektronik

Ultra-High-Bright-Intensity-LED 5mm Round

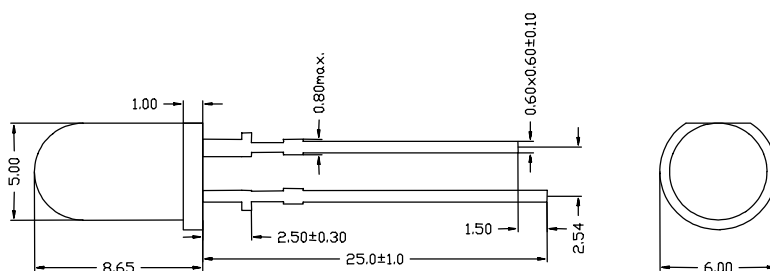
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Dom} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-14-750 BC	e005385	GaInN	470	waterclear	1000 - 2000	15
WU-14-750 GC	e005330	GaInN	525	waterclear	3000 - 5600	15
WU-14-751 BC	e005336	GaInN	470	waterclear	520 - 1000	30
WU-14-751 GC	e005331	GaInN	525	waterclear	1900 - 4200	30
WU-14-752 BC	e005508	GaInN	470	waterclear	210 - 370	45
WU-14-752 GC	e005509	GaInN	525	waterclear	700 - 1200	45

Package Dimensions

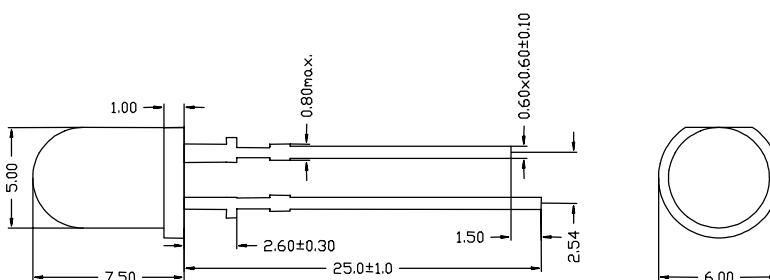
WU-14-750



WU-14-751



WU-14-752



1. All dimensions are in [mm], Tolerance is ±0.25mm unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



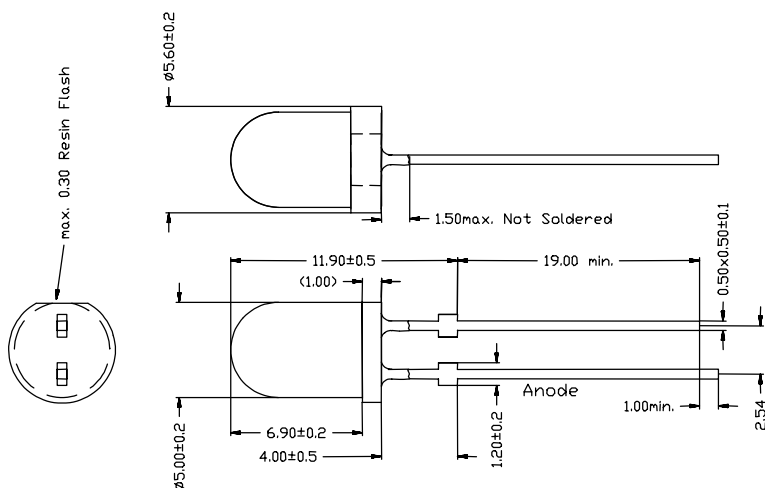
Optoelektronik

Ultra-High-Bright-Intensity-LED 5mm Round

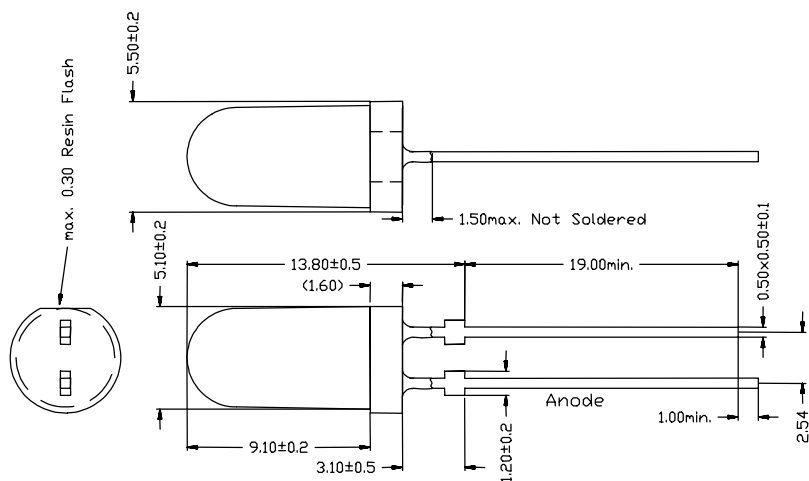
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Dom} [nm]	Case-Colour	Luminous Intensity I_v [mcd] I_F =20mA Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-14-751BGC	e005695	GaInN	503	waterclear	795 - 1195	30
WU-14-751BGC-U	e005694	GaInN	500	waterclear	1195 - 1500	30
WU-14-758BGC	e005693	GaInN	503	waterclear	2575 - 3200	6

Package Dimensions

WU-14-751BGC / -U



WU-14-758BGC



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



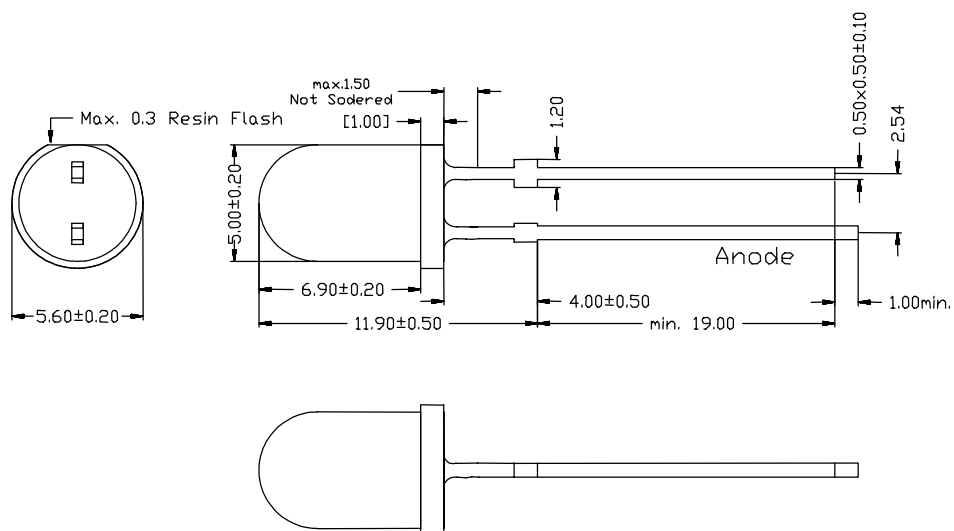
Optoelektronik

Ultra-High-Bright-Intensity-LED 5mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Dom} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-14-757 BGC	e004502	GaInN	503	waterclear	1195 - 1790	23

Package Dimensions

WU-14-757



1. All dimensions are in [mm], Tolerance is ± 0.25 mm unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

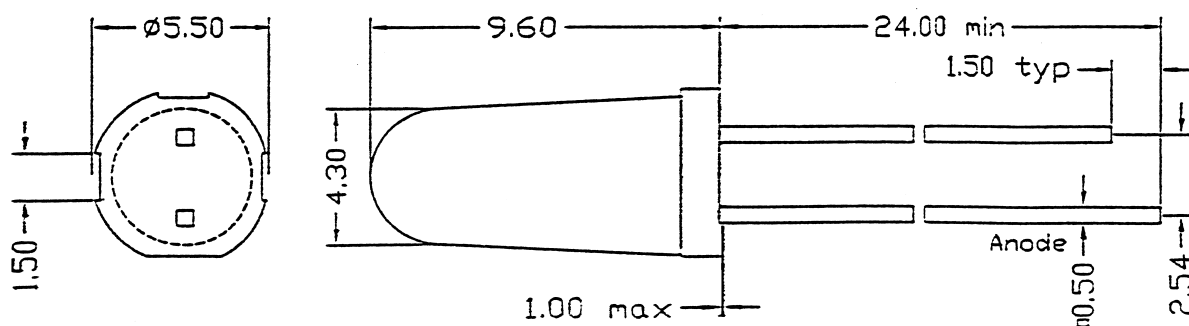
Ultra-High-Bright-Intensity-LED 5mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
WU-2-7LU-SRC	e005561	GaAlAs/GaAlAs	660	waterclear	1500 - 2500	8
WU-2-7LU-SEC	e005562	InGaAlP/GaAs	620	waterclear	1850 - 3000	8
WU-2-7LU-SYC	e005563	InGaAlP/GaAs	595	waterclear	1750 - 3000	8

WU-2-7LU-SRT	e005564	GaAlAs/GaAlAs	660	red-transparent	1500 - 2500	8
WU-2-7LU-SET	e005565	InGaAlP/GaAs	620	orange-transparent	1850 - 3000	8
WU-2-7LU-SYT	e005566	InGaAlP/GaAs	595	yellow-transparent	1750 - 3000	8

Package Dimensions

WU-2-7LU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



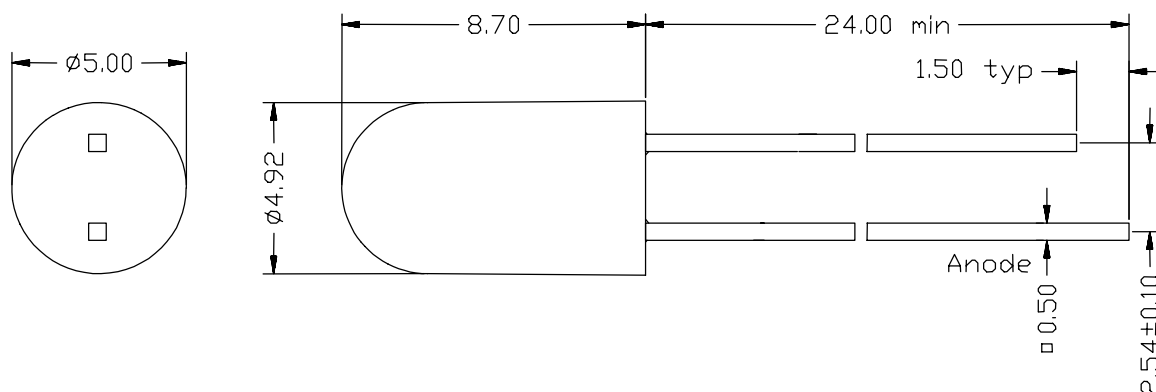
Optoelektronik

Ultra-High-Bright-Intensity-LED 5mm Round, without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
WU-2-5GU-SRD	e005738	GaAlAs/GaAlAs	660	red-diffused	235 - 376	44
WU-2-5GU-SED	e005739	InGaAlP/GaAs	620	orange-diffused	382 - 535	44
WU-2-5GU-SYD	e005740	InGaAlP/GaAs	595	yellow-diffused	382 - 535	44
WU-2-5GU-SRC	e005741	GaAlAs/GaAlAs	660	waterclear	593 - 950	22
WU-2-5GU-SEC	e005742	InGaAlP/GaAs	620	waterclear	785 - 1100	22
WU-2-5GU-SYC	e005743	InGaAlP/GaAs	595	waterclear	785 - 1100	22
WU-2-5GU-SRT	e005744	GaAlAs/GaAlAs	660	red-transparent	593 - 950	22
WU-2-5GU-SET	e005745	InGaAlP/GaAs	620	orange-transparent	785 - 1100	22
WU-2-5GU-SYT	e005746	InGaAlP/GaAs	595	yellow-transparent	785 - 1100	22

Package Dimensions

WU-2-5GU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



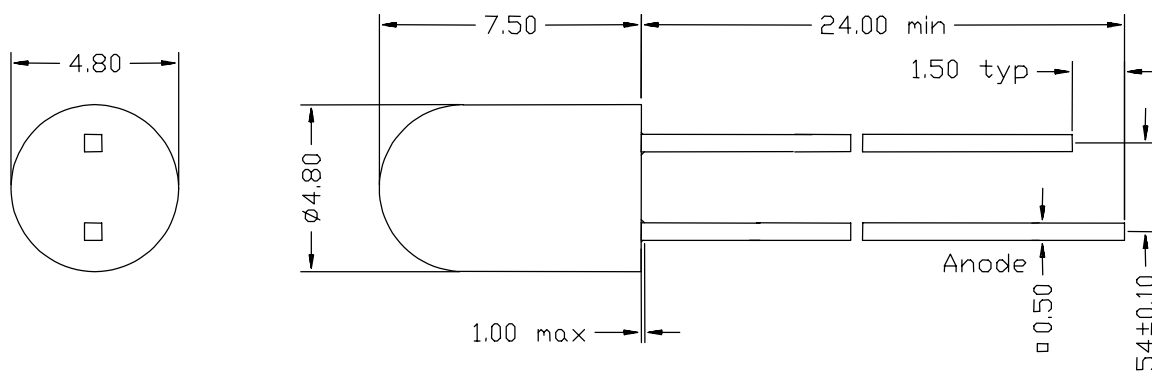
Optoelektronik

Ultra-High-Bright-LED 4,8mm Round without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-58U-SRD	e005518	GaAlAs/GaAlAs	660	red-diffused	234 - 380	38
WU-2-58U-SED	e005519	InGaAlP/GaAs	620	orange-diffused	314 - 526	38
WU-2-58U-SYD	e005520	InGaAlP/GaAs	595	yellow-diffused	314 - 526	38
WU-2-58U-SRC	e005606	GaAlAs/GaAlAs	660	waterclear	550 - 1050	26
WU-2-58U-SEC	e005607	InGaAlP/GaAs	620	waterclear	735 - 1235	26
WU-2-58U-SYC	e005608	InGaAlP/GaAs	595	waterclear	735 - 1233	26
WU-2-58U-SRT	e005609	GaAlAs/GaAlAs	660	red-transparent	550 - 1050	26
WU-2-58U-SET	e005610	InGaAlP/GaAs	620	orange-transparent	735 - 1235	26
WU-2-58U-SYT	e005611	InGaAlP/GaAs	595	yellow-transparent	735 - 1233	26

Package Dimensions

WU-2-58U



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

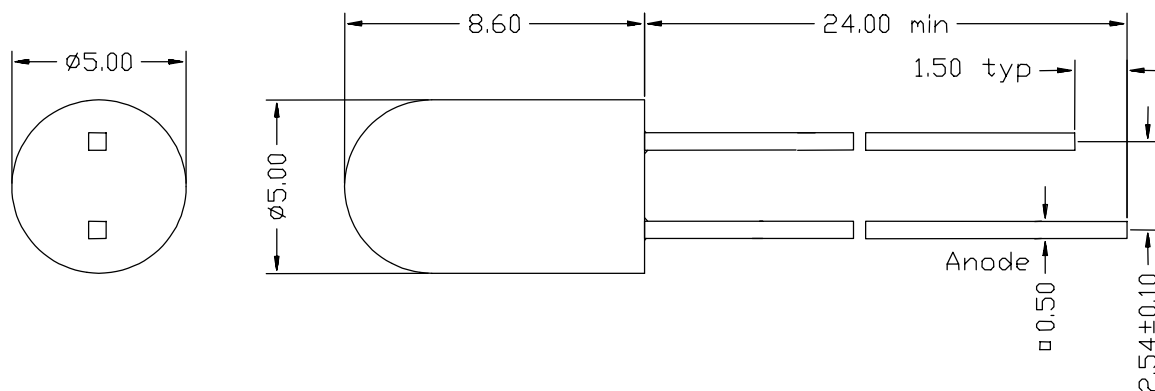
Ultra-High-Bright-Intensity-LED 5mm, without Flange

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-7FU-SRC	e005747	GaAlAs/GaAlAs	660	waterclear	550 - 1080	25
WU-2-7FU-SEC	e005748	InGaAlP/GaAs	620	waterclear	750 - 1360	25
WU-2-7FU-SYC	e005749	InGaAlP/GaAs	595	waterclear	710 - 1290	25

WU-2-7FU-SRT	e005750	GaAlAs/GaAlAs	660	red-transparent	550 - 1080	25
WU-2-7FU-SET	e005751	InGaAlP/GaAs	620	orange-transparent	750 - 1360	25
WU-2-7FU-SYT	e005752	InGaAlP/GaAs	595	yellow-transparent	710 - 1290	25

Package Dimensions

WU-2-7FU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



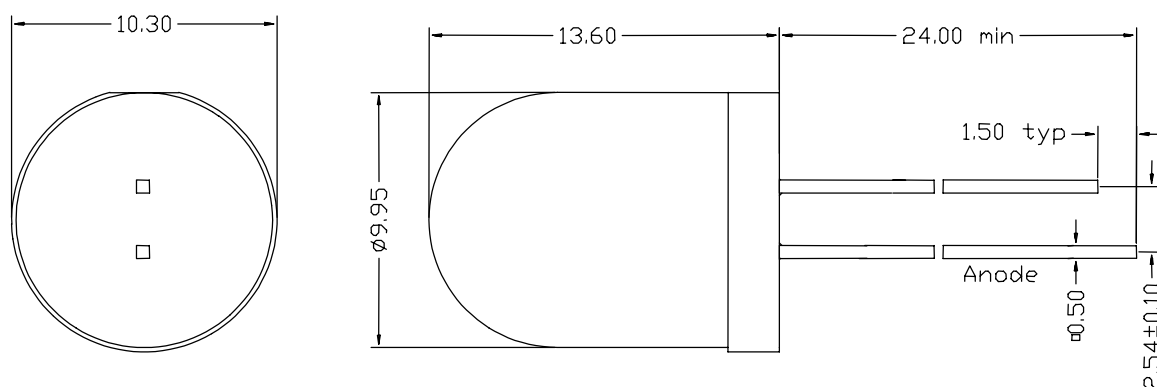
Optoelektronik

Ultra-High-Bright-Intensity-LED 10mm Round

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-6HU-SRC	e005753	GaAlAs/GaAlAs	660	waterclear	1400 - 2400	9
WU-2-6HU-SEC	e005754	InGaAlP/GaAs	620	waterclear	1950 - 3250	9
WU-2-6HU-SYC	e005755	InGaAlP/GaAs	595	waterclear	1890 - 3150	9
WU-2-6HU-SRT	e005756	GaAlAs/GaAlAs	660	red-transparent	1400 - 2400	9
WU-2-6HU-SET	e005757	InGaAlP/GaAs	620	orange-transparent	1950 - 3250	9
WU-2-6HU-SYT	e005758	InGaAlP/GaAs	595	yellow-transparent	1890 - 3150	9

Package Dimensions

WU-2-6HU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

Ultra-High-Bright-Intensity-LED 4,3 x 3,2mm / 5,7 x 4,7mm -oval-

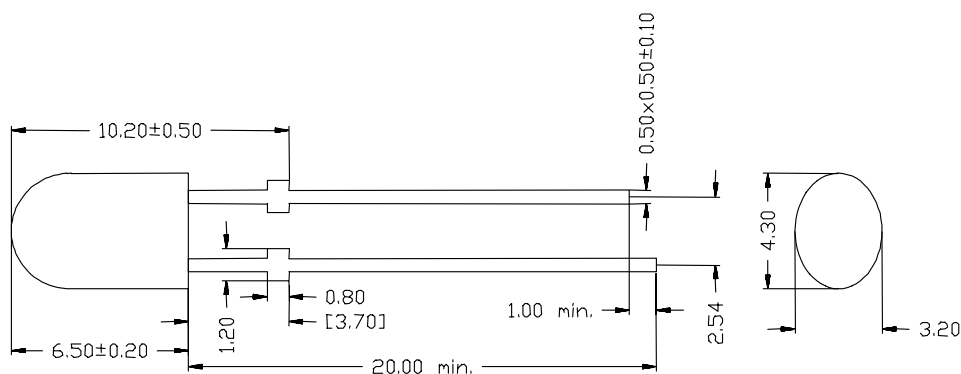
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Dom} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20mA$ Min. - Typ.	Viewing Angle Degrees Φ_v [°] X / Y
WU-14-PA4 EC	e005510	GaAlAs	625	waterclear	245 - 450	80/ 35
WU-14-PA4 BT	e005511	GaInN	470	blue-transparent	330 - 485	80/ 35
WU-14-PA4 GT	e005512	GaInN	525	green-transparent	770 - 1335	80/ 35

WU-14-PA41 EC	e005513	GaAlAs	625	waterclear	195 - 300	100/ 45
WU-14-PA41 BT	e005514	GaInN	470	blue-transparent	160 - 275	100/ 45
WU-14-PA41 GT	e005515	GaInN	525	green-transparent	550 - 725	100/ 45

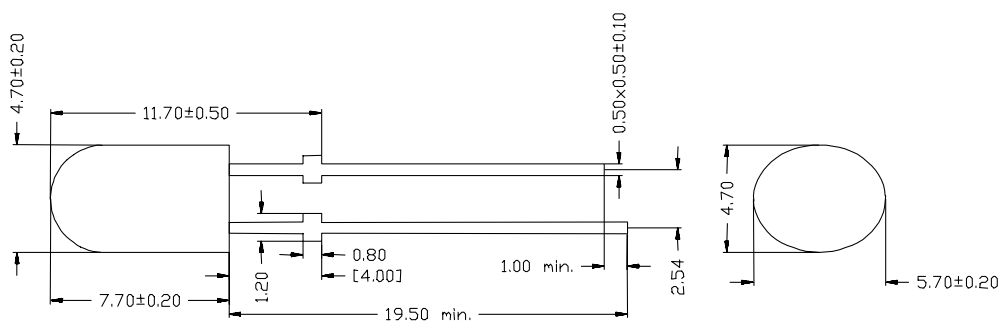
WU-14-PA5 BT	e005474	GaInN	470	blue-transparent	410 - 540	70/ 25
WU-14-PA5 GT	e005475	GaInN	525	green-transparent	985 - 1695	70/ 25

Package Dimensions

WU-14-PA4/-PA41



WU-14-PA5-series



1. All dimensions are in [mm], Tolerance is ±0.25mm unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



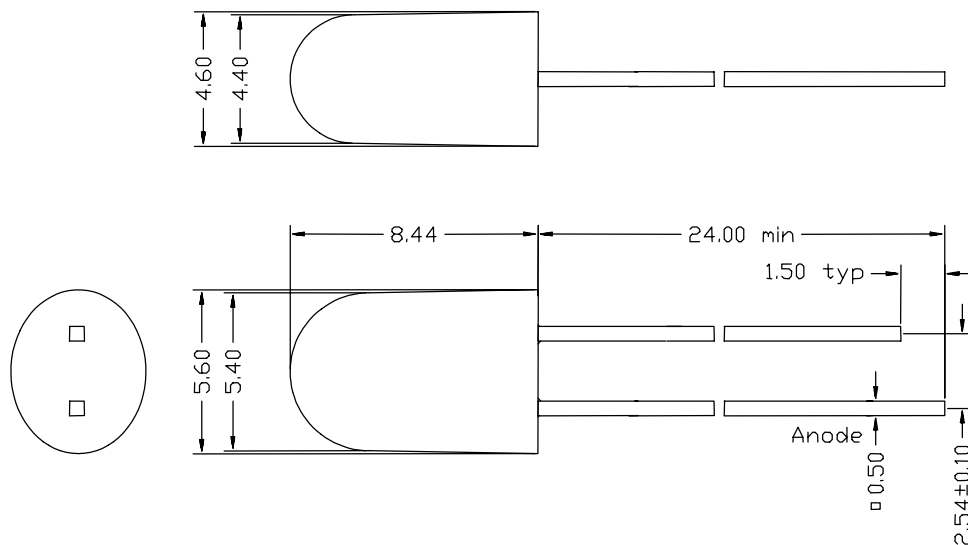
Optoelektronik

Ultra-High-Bright-Intensity-LED 5,3 x 4,9mm -oval-

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°] X / Y
WU-2-6DU-SRC	e005759	GaAlAs/GaAlAs	660	waterclear	400 - 700	20/30
WU-2-6DU-SEC	e005760	InGaAlP/GaAs	620	waterclear	585 - 980	20/30
WU-2-6DU-SYC	e005761	InGaAlP/GaAs	595	waterclear	570 - 950	20/30
WU-2-6DU-SRT	e005762	GaAlAs/GaAlAs	660	red-transparent	400 - 700	20/30
WU-2-6DU-SET	e005763	InGaAlP/GaAs	620	orange-transparent	585 - 980	20/30
WU-2-6DU-SYT	e005764	InGaAlP/GaAs	595	yellow-transparent	570 - 950	20/30

Package Dimensions

WU-2-6DU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



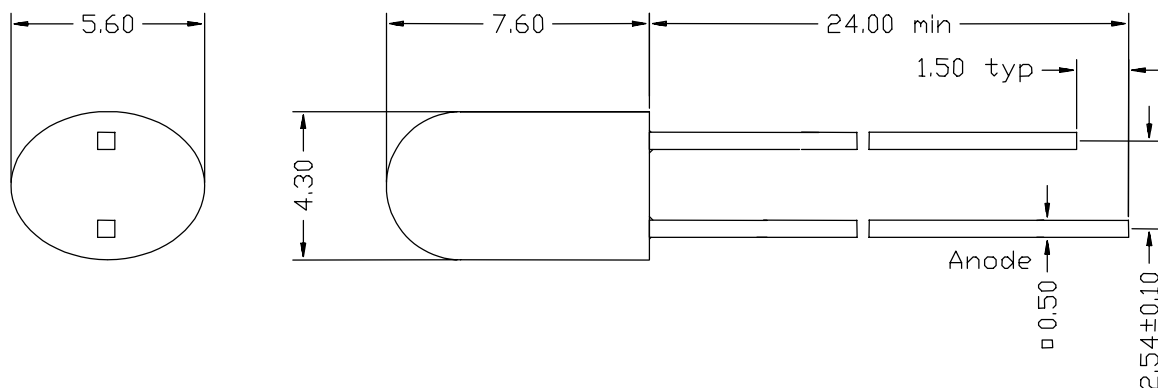
Optoelektronik

Ultra-High-Bright-Intensity-LED 5,4 x 4,3mm -oval-

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°] X / Y
WU-2-7CU-SRC	e005765	GaAlAs/GaAlAs	660	waterclear	385 - 645	48/26
WU-2-7CU-SEC	e005766	InGaAlP/GaAs	620	waterclear	540 - 900	48/26
WU-2-7CU-SYC	e005767	InGaAlP/GaAs	595	waterclear	520 - 870	48/26
WU-2-7CU-SRT	e005768	GaAlAs/GaAlAs	660	red-transparent	385 - 645	48/26
WU-2-7CU-SET	e005769	InGaAlP/GaAs	620	orange-transparent	540 - 900	48/26
WU-2-7CU-SYT	e005770	InGaAlP/GaAs	595	yellow-transparent	520 - 870	48/26

Package Dimensions

WU-2-7CU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



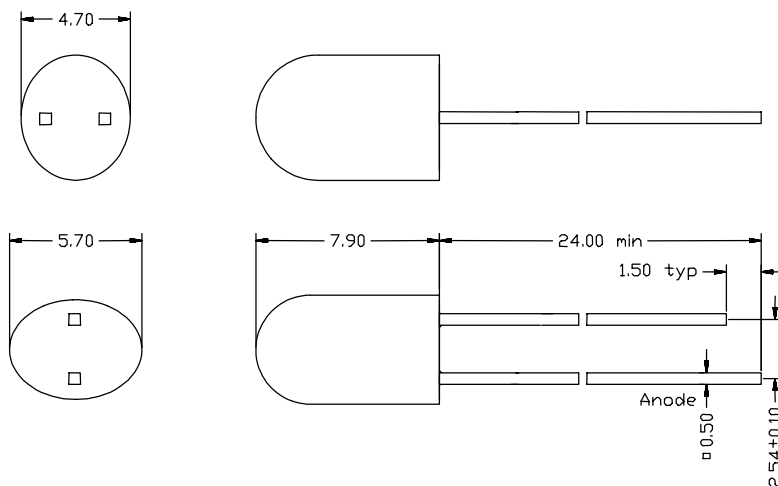
Optoelektronik

Ultra-High-Bright-Intensity-LED 5,7 x 4,7mm -oval-

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_V [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_V [°] X / Y
WU-2-7DU-SRC	e005594	GaAlAs/GaAlAs	660	waterclear	280 - 510	48/26
WU-2-7DU-SEC	e005595	InGaAlP/GaAs	620	waterclear	390 - 715	48/26
WU-2-7DU-SYC	e005596	InGaAlP/GaAs	595	waterclear	370 - 680	48/26
WU-2-7DU-SRT	e005597	GaAlAs/GaAlAs	660	red-transparent	280 - 510	48/26
WU-2-7DU-SET	e005598	InGaAlP/GaAs	620	orange-transparent	390 - 715	48/26
WU-2-7DU-SYT	e005599	InGaAlP/GaAs	595	yellow-transparent	370 - 680	48/26

Package Dimensions

WU-2-7DU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

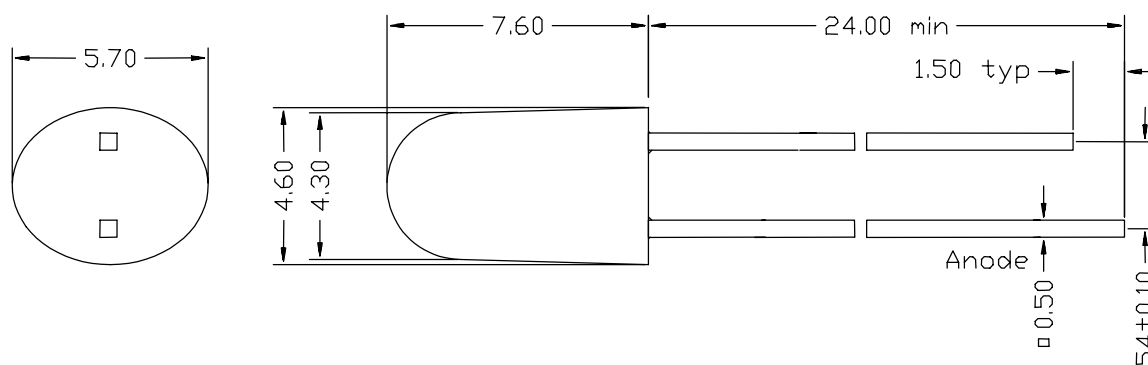
Ultra-High-Bright-Intensity-LED 5,7 x 4,6mm -oval-

Type	Part-No.	Emitting Colour/ Material	Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_V [mcd] $I_F = 20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_V [°] X / Y
WU-2-7RU-SRC	e005600	GaAlAs/GaAlAs	660	waterclear	340 - 600	31/65
WU-2-7RU-SEC	e005601	InGaAlP/GaAs	620	waterclear	430 - 780	31/65
WU-2-7RU-SYC	e005602	InGaAlP/GaAs	595	waterclear	400 - 740	31/65

WU-2-7RU-SRT	e005603	GaAlAs/GaAlAs	660	red-transparent	340 - 600	31/65
WU-2-7RU-SET	e005604	InGaAlP/GaAs	620	orange-transparent	430 - 780	31/65
WU-2-7RU-SYT	e005605	InGaAlP/GaAs	595	yellow-transparent	400 - 740	31/65

Package Dimensions

WU-2-7RU



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.



Optoelektronik

High-Power-Flux-LED 7,62 x 7,62mm

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Case-Colour	Luminous Intensity I_v [mcd] $I_F = 20\text{mA}$ $I_F = (30\text{mA}^*)$ Min. - Typ. / Min. - Typ.	Viewing Angle Degrees $\Phi_v 0.9v$ [°]
WU-2-HPAL-MGC	e004538	AlGaInP/GaAs	573	waterclear	340 - 560/ 500 - 840*	90
WU-2-HPAL-USIC	e005485	AlGaInP/GaAs	632	waterclear	480 - 800/ 800 - 1200*	90
WU-2-HPAL-TSYC	e004539	TS AlGaInP	592	waterclear	960 - 1600/ 1440 - 2400*	90
WU-2-HPAL-TSEC	e004540	TS AlGaInP	621	waterclear	960 - 1600/ 1440 - 2400*	90
WU-2-HPAL-TSIC	e004541	TS AlGaInP	642	waterclear	960 - 1600/ 1440 - 2400*	90
WU-2-HPAL-BC	e004542	InGaN/Sapphire	465	waterclear	350 - 550	90
WU-2-HPAL-BGC	e004543	InGaN/Sapphire	502	waterclear	350 - 550	90
WU-2-HPAL-GC	e004544	InGaN/Sapphire	520	waterclear	350 - 550	90

WU-2-HPAL-MGC-V	e004545	AlGaInP/GaAs	573	waterclear	540 - 910/ 820 - 1360*	70
WU-2-HPAL-USIC-V	e005577	AlGaInP/GaAs	632	waterclear	800 - 1300/ 1200 - 1950*	70
WU-2-HPAL-TSYC-V	e004546	TS AlGaInP	592	waterclear	1600 - 2600/ 2300 - 3900*	70
WU-2-HPAL-TSEC-V	e004547	TS AlGaInP	621	waterclear	1600 - 2600/ 2300 - 3900*	70
WU-2-HPAL-TSIC-V	e004548	TS AlGaInP	642	waterclear	1600 - 2600/ 2300 - 3900*	70
WU-2-HPAL-BC-V	e004549	InGaN/Sapphire	465	waterclear	500 - 800	70
WU-2-HPAL-BGC-V	e004550	InGaN/Sapphire	502	waterclear	500 - 800	70
WU-2-HPAL-GC-V	e004551	InGaN/Sapphire	520	waterclear	500 - 800	70

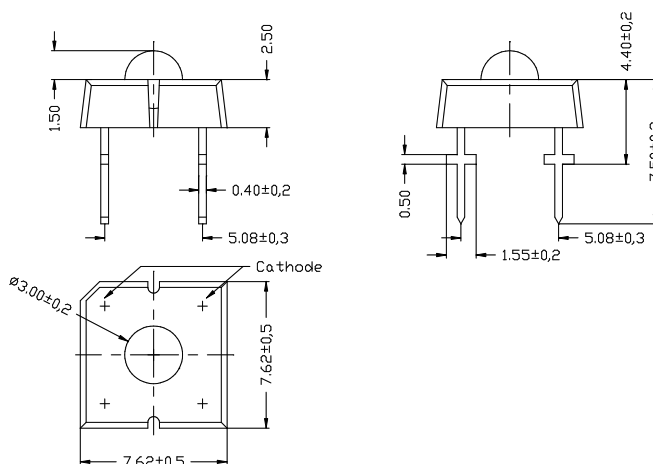
White Flux-LED:

CIE-Data

WU-3-HPAL-WC	e005696	GaInN	x=0,31 y=0,32	waterclear	1500 - 3000	30
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Package Dimensions

WU-2-HPAL



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
2. An epoxid meniscus may extend about 1.0mm down the leads.
3. Burr around bottom of epoxy body may be 0.5mm max.



Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len's-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-13HD	e005212	GaP	700	red-diffused	0,5 - 1,3	140
WU-1-13SRD	e005531	GaAlAs	660	red-diffused	50,0 - 90,0	140
WU-1-13ID	e005954	GaAsP/GaP	625	red-diffused	8,0 - 32,0	140
WU-1-13SYD	e005532	InGaAlP	595	yellow-diffused	40,0 - 100,0	140
WU-1-13YD	e006616	GaAsP/GaP	590	yellow-diffused	5,0 - 12,5	140
WU-1-13SGD	e005533	GaP	565	green-diffused	8,0 - 32,0	140
WU-1-13ESGW	e005534	GaAsP/GaP GaP	625 565	white-diffused	8,0 - 32,0 8,0 - 32,0	140

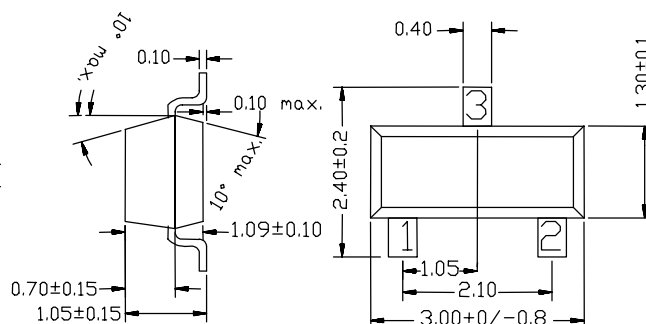
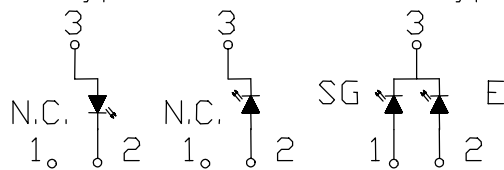
WU-1-13HT	e005535	GaP	700	red-transparent	0,5 - 1,3	140
WU-1-13SRT	e005536	GaAlAs	660	red-transparent	50,0 - 90,0	140
WU-1-13IT	e005537	GaAsP/GaP	625	red-transparent	8,0 - 32,0	140
WU-1-13SYT	e005538	InGaAlP	595	yellow-transparent	40,0 - 100,0	140
WU-1-13YT	e005539	GaAsP/GaP	590	yellow-transparent	5,0 - 12,5	140
WU-1-13SGT	e005540	GaP	565	green-transparent	8,0 - 32,0	140

WU-1-13HC	e005542	GaP	700	waterclear	0,5 - 1,3	140
WU-1-13SRC	e005543	GaAlAs	660	waterclear	50,0 - 90,0	140
WU-1-13EC	e005544	GaAsP/GaP	625	waterclear	8,0 - 32,0	140
WU-1-13SYC	e005545	InGaAlP	595	waterclear	40,0 - 100,0	140
WU-1-13YC	e005546	GaAsP/GaP	590	waterclear	5,0 - 12,5	140
WU-1-13SGC	e005547	GaP	565	waterclear	8,0 - 32,0	140
WU-1-13ESGC	e005548	GaAsP/GaP GaP	625 565	waterclear	8,0 - 32,0 8,0 - 32,0	140

Package Dimensions

WU-1-13

SR-Typ. all other ESG-Typ.

1.All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

SMD with Reflector 3,5 X 2,8 mm (PLCC-2)

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len's-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-200EC	e005376	GaAsP/GaP	625	waterclear	12,5 - 40,0	120
WU-1-200YC	e005731	GaAsP/GaP	590	waterclear	8,0 - 20,0	120
WU-1-200SGC	e006827	GaP	565	waterclear	12,5 - 40,0	120

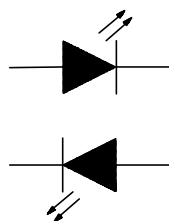
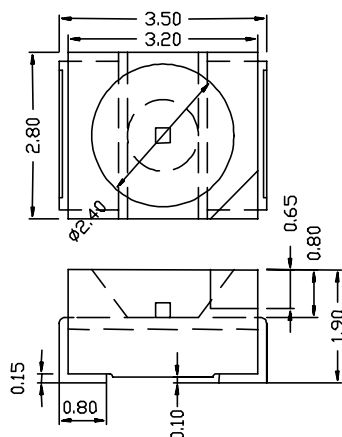
WU-1-200IT	e005130	GaAsP/GaP	625	red-transparent	12,5 - 40,0	120
WU-1-200YT	e005732	GaAsP/GaP	590	yellow-transparent	8,0 - 20,0	120
WU-1-200SGT	e005733	GaP	565	green-transparent	12,5 - 40,0	120

WU-2-200SRC	e005456	GaAlAs/GaAlAs	660	waterclear	160,0 - 280,0	120
WU-2-200SEC	e005457	InGaAlP/GaAs	620	waterclear	120,0 - 200,0	120
WU-2-200SYC	e005455	InGaAlP/GaAs	595	waterclear	150,0 - 250,0	120

WU-2-200SRT	e005459	GaAlAs/GaAlAs	660	red-transparent	160,0 - 280,0	120
WU-2-200SET	e005460	InGaAlP/GaAs	620	orange-transparent	120,0 - 200,0	120
WU-2-200SYT	e005458	InGaAlP/GaAs	595	yellow-transparent	150,0 - 250,0	120

Package Dimensions

WU-1-200/WU-2-200



SR Type

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

SMD with Reflector 3,5 x 2,8 mm (PLCC-2) Low Current

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len's-Colour	Luminous Intensity I_v [mcd] $I_F=2\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-210EC/LC	e005882	GaAsP/GaP	625	waterclear	1,5 - 4,0	120
WU-1-210YC/LC	e005462	GaAsP/GaP	590	waterclear	0,8 - 1,8	120
WU-1-210SGC/LC	e005461	GaP	565	waterclear	1,5 - 4,0	120

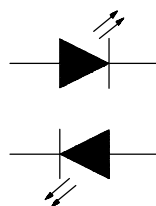
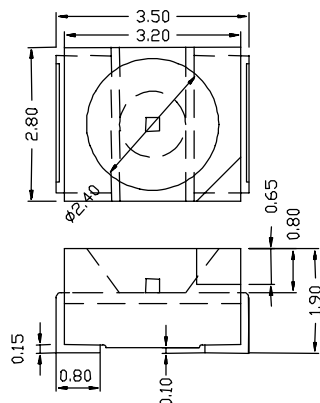
WU-1-210IT/LC	e005465	GaAsP/GaP	625	red-transparent	1,5 - 4,0	120
WU-1-210YT/LC	e005464	GaAsP/GaP	590	yellow-transparent	0,8 - 1,8	120
WU-1-210SGT/LC	e005463	GaP	565	green-transparent	1,5 - 4,0	120

WU-2-210SRC/LC	e005467	GaAlAs/GaAlAs	660	waterclear	14,5 - 26,0	120
WU-2-210SEC/LC	e005468	InGaAlP/GaAs	620	waterclear	11,0 - 19,0	120
WU-2-210SYC/LC	e005466	InGaAlP/GaAs	595	waterclear	13,5 - 23,0	120

WU-2-210SRT/LC	e005470	GaAlAs/GaAlAs	660	red-transparent	14,5 - 26,0	120
WU-2-210SET/LC	e005471	InGaAlP/GaAs	620	orange-transparent	11,0 - 19,0	120
WU-2-210SYT/LC	e005469	InGaAlP/GaAs	595	yellow-transparent	13,5 - 23,0	120

Package Dimensions

WU-1-210/WU-2-210



SR Type

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



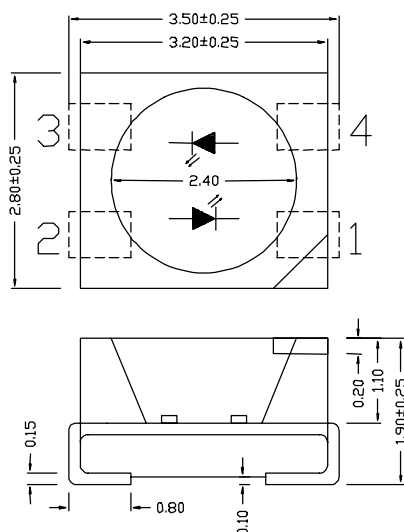
Optoelektronik

SMD with Reflector 3,5 x 2,8 mm (PLCC-2) Bi-Colour / RGB-Colour

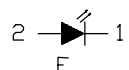
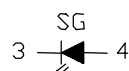
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-1-202ESGC	e005284	GaAsP/GaP GaP	625 565	waterclear	12,5 - 40,0 12,5 - 40,0	120
WU-1-202YSGC	e005490	GaAsP/ GaP GaP	590 565	waterclear	8,0 - 20,0 12,5 - 40,0	120
WU-1-202EYC	e005491	GaAsP/GaP GaAsP/GaP	625 590	waterclear	12,5 - 40,0 8,0 - 20,0	120
WU-1-202EMBSGC	e005285	GaAsP/GaP GaP GaN	625 565 430	waterclear	12,5 - 40,0 12,5 - 40,0 2,0 - 8,0	120

Package Dimensions

WU-1-202



....ESGC



....EMBSGC

1 Cathode red

2 Common Anode

3 Cathode Blue

4 Cathode Green

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

SMD-LED 1,6 x 0,8 mm (0603)

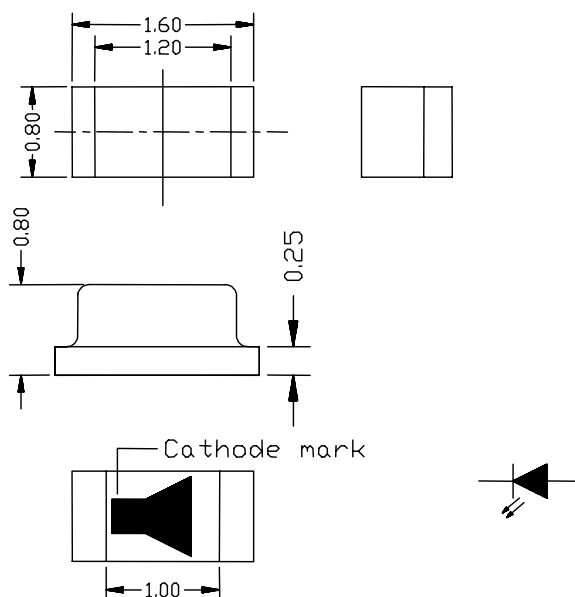
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(2\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-4-400SRC	e005008	GaAlAs	660	waterclear	14,0 - 40,0	140
WU-4-400RC	e005002	GaAlAs	660	waterclear	3,6 - 10,0	140
WU-4-400URC	e005003	GaAsP/GaP	650	waterclear	1,4 - 4,0	140
WU-4-400NC	e005004	GaAsP/GaP	610	waterclear	2,2 - 6,3	140
WU-4-400PGC	e005556	GaP	555	waterclear	1,4 - 4,0	140
WU-4-400YC	e005005	GaAsP/GaP	585	waterclear	2,2 - 6,3	140
WU-4-400GC	e005006	GaP	570	waterclear	3,6 - 10,0	140
WU-4-400TGW	e005549	GaP	570	white-transparent	3,6 - 10,0	140

Low current-LEDs:

WU-4-400EC/LC	e005550	GaAsP/GaP	630	waterclear	0,9 - 2,5*	140
WU-4-400NC/LC	e005551	GaAsP/GaP	611	waterclear	0,9 - 2,5*	140
WU-4-400YC/LC	e005552	GaAsP/GaP	590	waterclear	0,56 - 1,8*	140

Package Dimensions

WU-4-400



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted



Optoelektronik

SMD-LED 2,0 x 1,25 mm (0805)

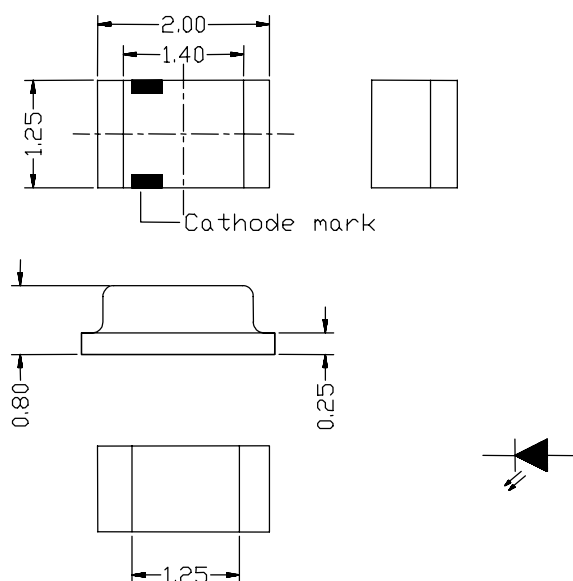
Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F=10\text{mA}(2\text{mA}^*)$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-4-401SRC	e005015	GaAlAs	660	waterclear	14,0 - 40,0	110
WU-4-401RC	e005009	GaAlAs	660	waterclear	3,6 - 10,0	110
WU-4-401URC	e005010	GaAsP/GaP	650	waterclear	1,4 - 4,0	110
WU-4-401NC	e005011	GaAsP/GaP	610	waterclear	2,2 - 6,3	110
WU-4-401YC	e005012	GaAsP/GaP	585	waterclear	2,2 - 6,3	110
WU-4-401GC	e005013	GaP	570	waterclear	3,6 - 10,0	110
WU-4-401PGC	e005557	GaP	555	waterclear	1,4 - 4,0	110

Low current-LEDs:

WU-4-401EC/LC	e005553	GaAsP/GaP	630	waterclear	0,9 - 2,5*	110
WU-4-401NC/LC	e005554	GaAsP/GaP	611	waterclear	0,9 - 2,5*	110
WU-4-401YC/LC	e005555	GaAsP/GaP	590	waterclear	0,56 - 1,8*	110

Package Dimensions

WU-4-401



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted



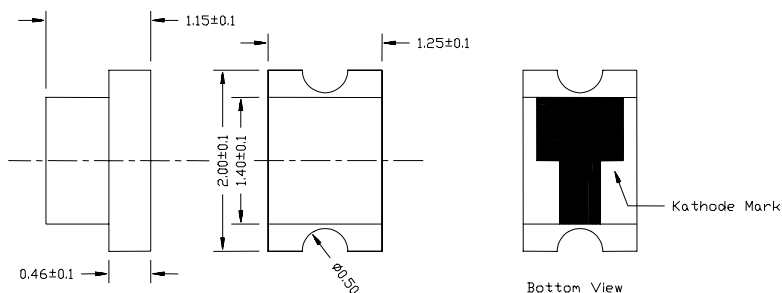
Optoelektronik

SMD-LED 2,0 x 1,25mm (0805)

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-2-8A-HC	e005581	GaP	700	waterclear	1,2 - 1,5	130
WU-2-8A-EC	e005584	GaAsP/GaP	635	waterclear	5,4 - 6,6	130
WU-2-8A-NC	e005585	GaAsP/GaP	610	waterclear	5,4 - 6,6	130
WU-2-8A-YC	e005583	GaAsP/GaP	585	waterclear	3,6 - 4,8	130
WU-2-8A-GC	e005582	GaP	567	waterclear	7,2 - 9,6	130
WU-2-8A-PGC	e005586	GaP	555	waterclear	2,4 - 3,6	130

Package Dimensions

WU-2-8A



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted



Optoelektronik

SMD-LED

3,0 x 2,0 mm

(1208)

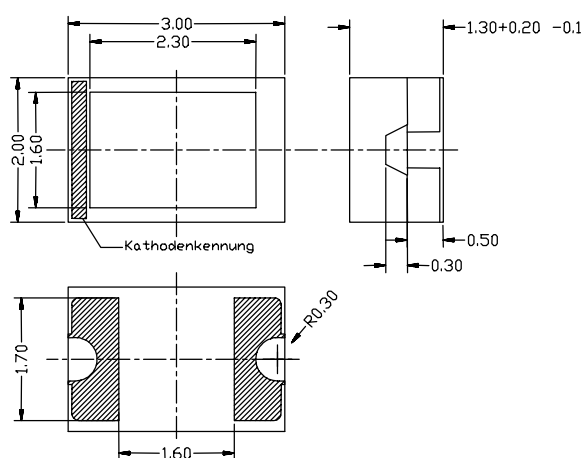
3,0 x 2,5 mm / Bi-colour (1210)

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees Φ_v [°]
WU-4-402SRC	e005022	GaAlAs	660	waterclear	14,0 - 40,0	110
WU-4-402RC	e005016	GaAlAs	660	waterclear	5,6 - 16,0	110
WU-4-402URC	e005017	GaAsP/GaP	650	waterclear	2,2 - 6,3	110
WU-4-402NC	e005018	GaAsP/GaP	610	waterclear	3,6 - 10,0	110
WU-4-402YC	e005019	GaAsP/GaP	585	waterclear	2,2 - 6,3	110
WU-4-402GC	e005020	GaP	570	waterclear	5,6 - 16,0	110
WU-4-402PGC	e005558	GaP	555	waterclear	1,4 - 6,3	110

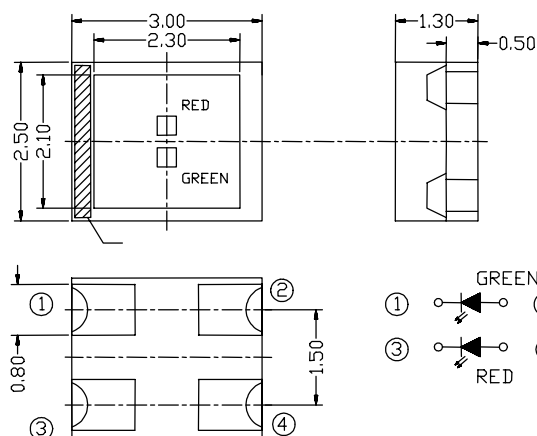
WU-4-403RGC	e005023	GaAlAs/GaAs GaP	660 570	waterclear	9,0 - 16,0 9,0 - 20,0	100
WU-4-403HGC	e005024	GaAsP/GaP GaP	650 570	waterclear	3,6 - 6,3 9,0 - 20,0	100

Package Dimensions

WU-4-402



WU-4-403



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted



Optoelektronik

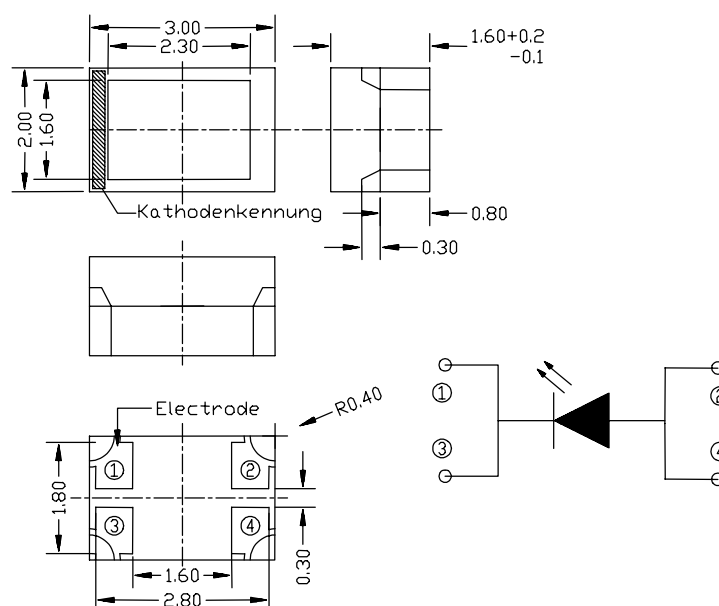
SMD-LED

3,0 x 2,0 mm (1206) Side-LED

Type	Part-No.	Material	Emitting Colour/ Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F=20\text{mA}$ Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
WU-4-405RC	e005559	GaAlAs	660	waterclear	5,6 - 16,0	110
WU-4-405URC	e005298	GaAsP/GaP	650	waterclear	2,2 - 6,5	110
WU-4-405NC	e005560	GaAsP/GaP	610	waterclear	3,6 - 10,0	110
WU-4-405YC	e005180	GaAsP/GaP	585	waterclear	1,4 - 4,0	110
WU-4-405GC	e005063	GaP	570	waterclear	5,6 - 16,0	110

Package Dimensions

WU-4-405



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted



Optoelektronik

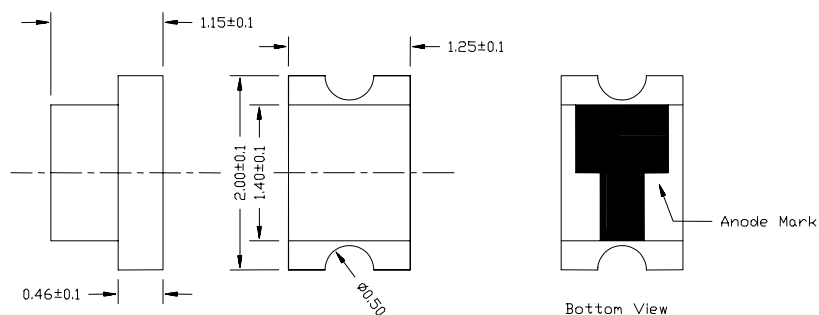
Ultra-Bright-SMD-LED 2,0 x 1,25mm (0805)

Type	Part-No.	Emitting Colour/ Material	Wave- Length λ_{Peak} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] I_F =20mA Min. - Typ.	Viewing Angle Degrees Φ_v [°]
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WU-2-8A-SRC-U	e005592	GaAlAs/GaAs	660	waterclear	42,0 - 60,0	130
WU-2-8A-SRC	e005593	GaAlAs/GaAs	660	waterclear	24,0 - 30,0	130
WU-2-8A-SIC	e005587	InGaAlP/GaAs	639	waterclear	33,0 - 55,0	130
WU-2-8A-USIC	e005589	InGaAlP/GaAs	632	waterclear	45,0 - 75,0	130
WU-2-8A-SEC	e005590	InGaAlP/GaAs	621	waterclear	45,0 - 75,0	130
WU-2-8A-SNC	e005591	InGaAlP/GaAs	611	waterclear	45,0 - 75,0	130
WU-2-8A-SYC	e005588	InGaAlP/GaAs	595	waterclear	45,0 - 75,0	130

Package Dimensions

WU-2-8A



1. All dimensions are in [mm], Tolerance is ±0.25mm unless otherwise noted



Optoelektronik

Ultra-High-Bright-Intensity-SMD-LED

3,0 x 1,5 mm (1206)

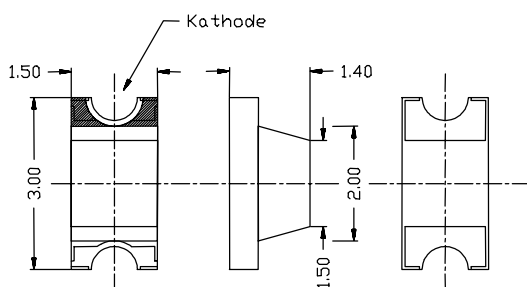
1,6 x 0,8 mm (0603)

Type	Part-No.	Material	Emitting Colour Wave-Length λ_{Dom} [nm]	Len`s-Colour	Luminous Intensity I_v [mcd] $I_F = 20mA$ Min. - Typ.	Viewing Angle Degrees ϕ_v [°]
WU-14-315-14 BC	e005334	GaInN	470	waterclear	33,0 - 56,0	140
WU-14-315-14 GC	e005332	GaInN	525	waterclear	94,0 - 161,0	140
WU-14-315-4 BC	e005775	GaInN	470	waterclear	71,0 - 140,0	40
WU-14-315-4 GC	e005776	GaInN	525	waterclear	209,0 - 418,0	40

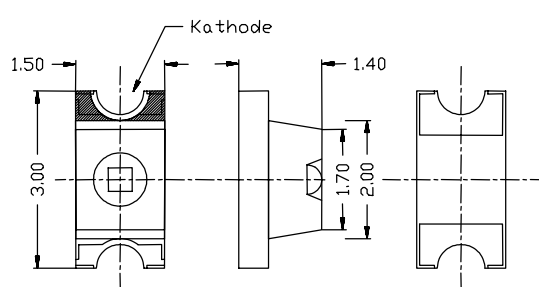
WU-14-400BC	e004503	GaInN	475	waterclear	26,0 - 44,0	140/130
WU-14-400GC	e005972	GaInN	530	waterclear	87,0 - 148,0	140/130

Package Dimensions

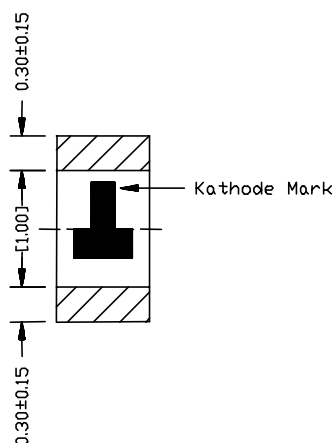
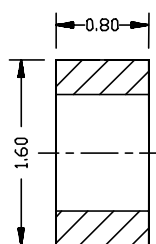
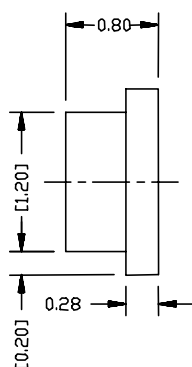
WU-14-315-14-series



WU-14-315-4-series



WU-14-400



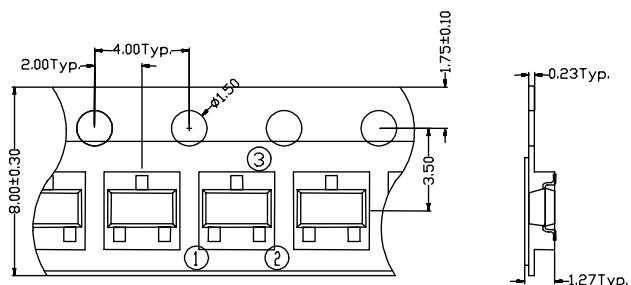
1.All dimensions are in [mm], Tolerance is $\pm 0.25mm$ unless otherwise noted



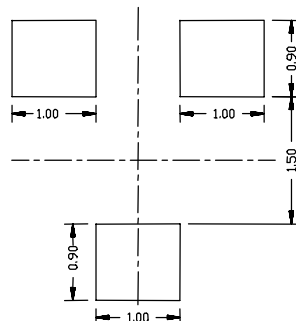
Optoelektronik

Tape Specifications and Landpattern for SMD-LEDs

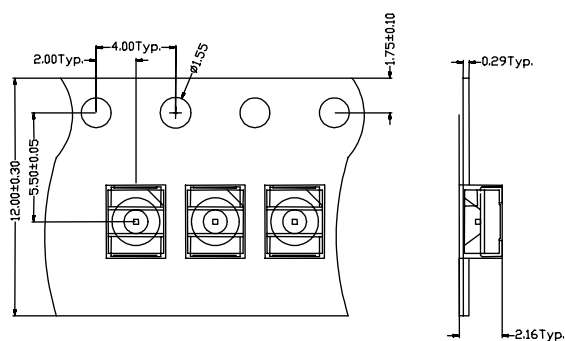
WU-1-13



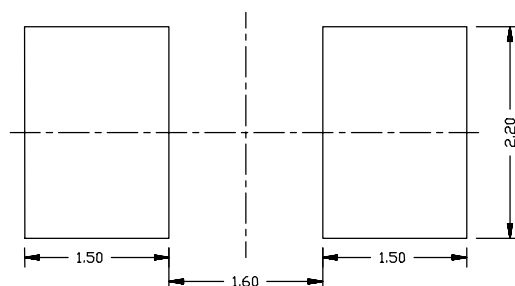
WU-1-13



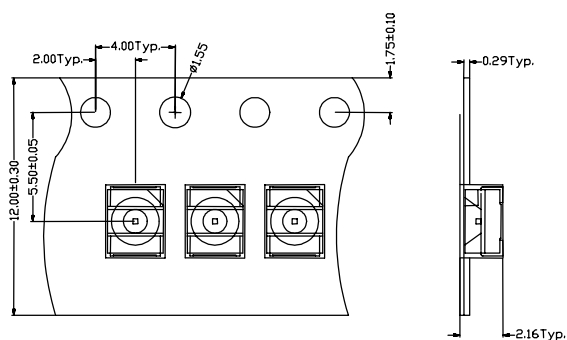
WU-1-200/ WU-2-200/ WU-1-210/ WU-2-210



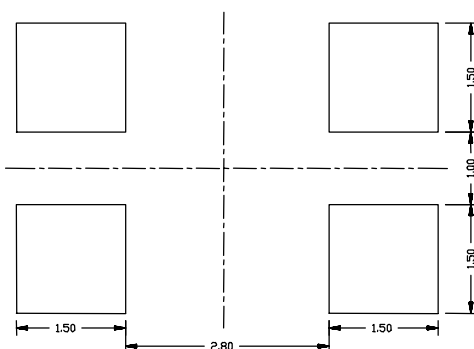
WU-1-200/ WU-2-200/ WU-1-210/ WU-2-210



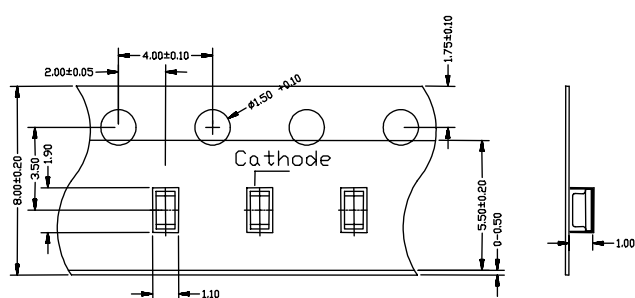
WU-1-202



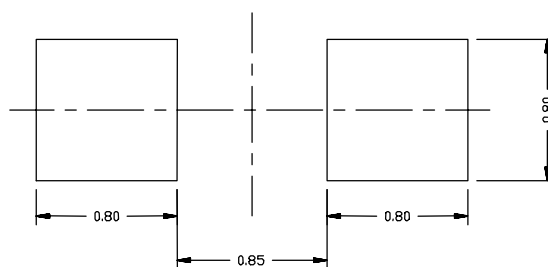
WU-1-202



WU-4-400



WU-4-400

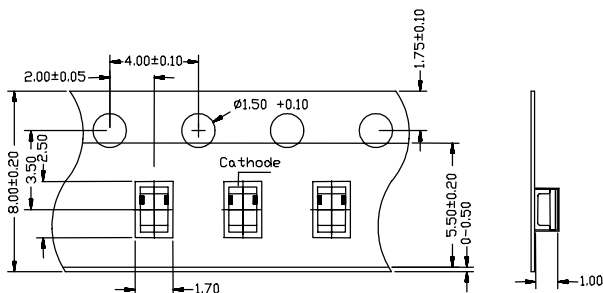




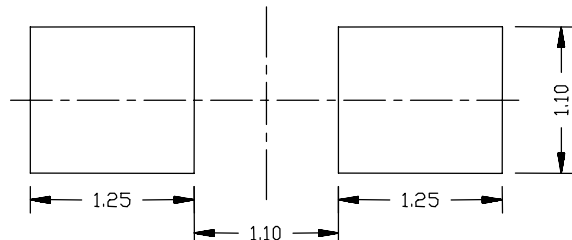
Optoelektronik

Tape Specifications and Landpattern for SMD-LEDs

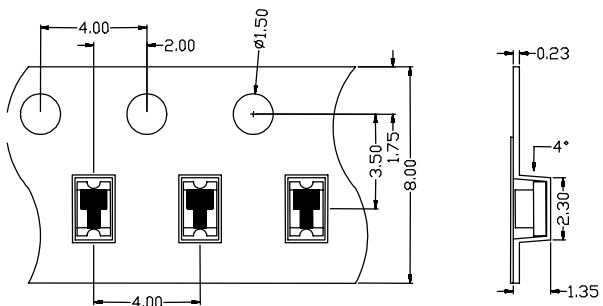
WU-4-401



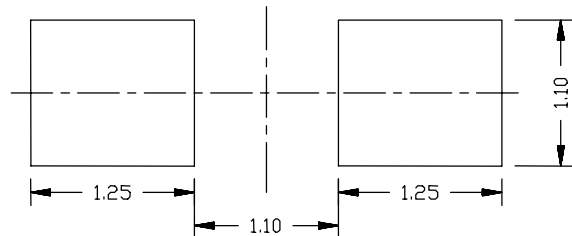
WU-4-401



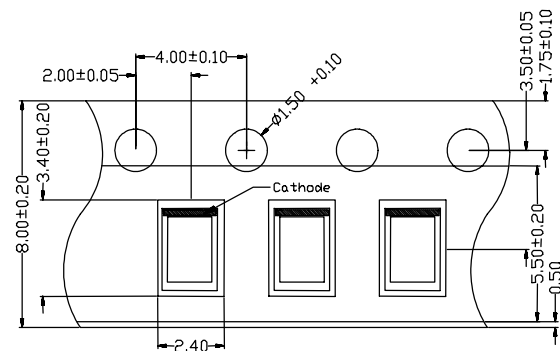
WU-2-8A



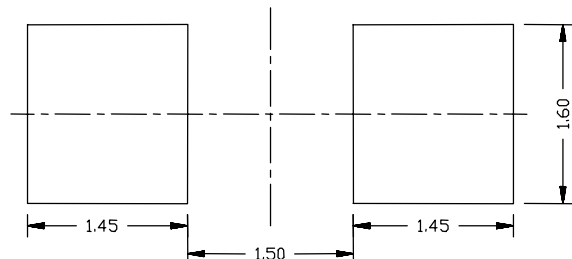
WU-2-8A



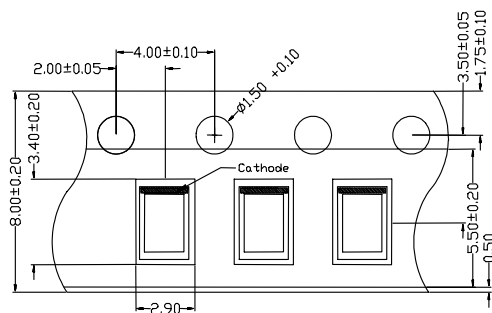
WU-4-402



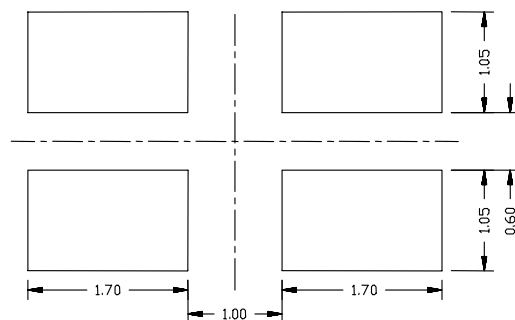
WU-4-402



WU-4-403



WU-4-403

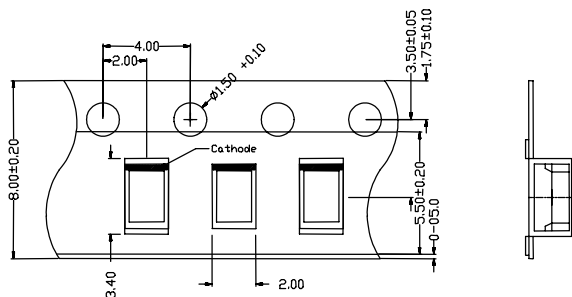




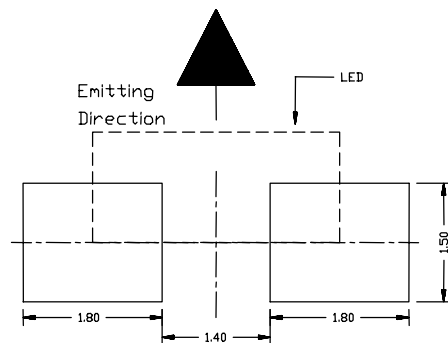
Optoelektronik

Tape Specifications and Landpattern for SMD-LEDs

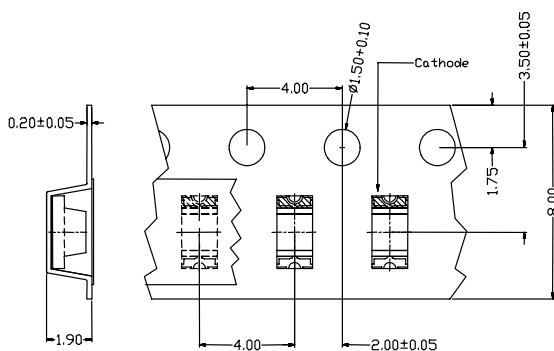
WU-4-405



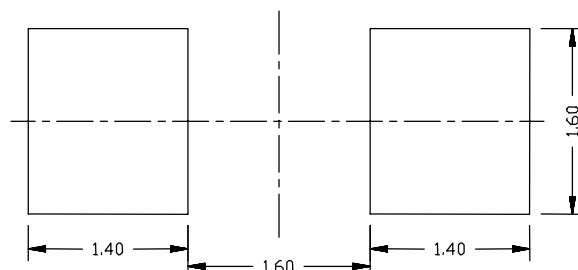
WU-4-405



WU-14-315-4/ -14

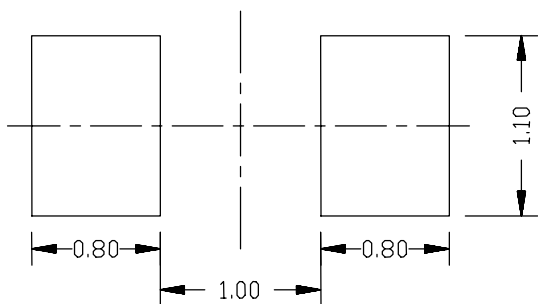


WU-14-315-4/ -14

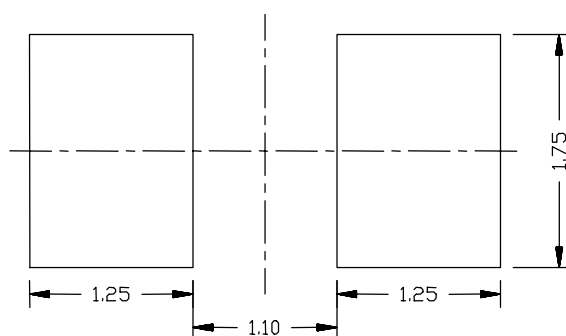


Dip Soldering, Wave Flow

WU-4-400



WU-4-401



WU-4-402/ -403/ -405, WU-1-13, WU-14-315-4/ -14 and WU-2-8A can not be dip and wave flow soldered.

Part-No.	Quantity (pcs/reel)
WU-1-13	2.000
WU-1-200/ WU-2-200/ WU-1-210/ WU-2-210/ WU-1-202	1.500
WU-4-400/ -401	3.000
WU-2-8A	2.000 or 4.000
WU-4-402/ -403/ -405	2.500
WU-14-315-4/ -14	3.000



Optoelektronik

7-Segment Display 7mm

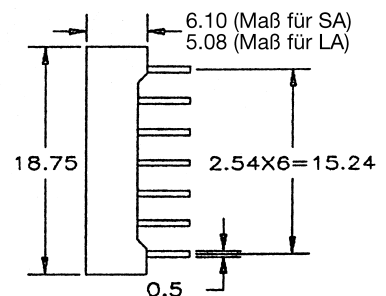
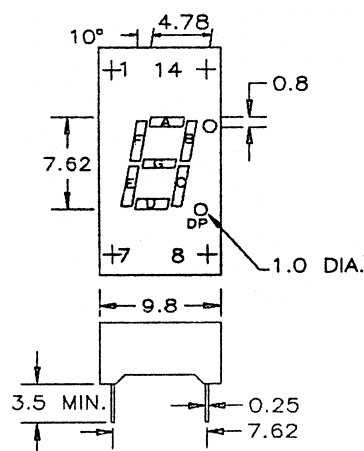
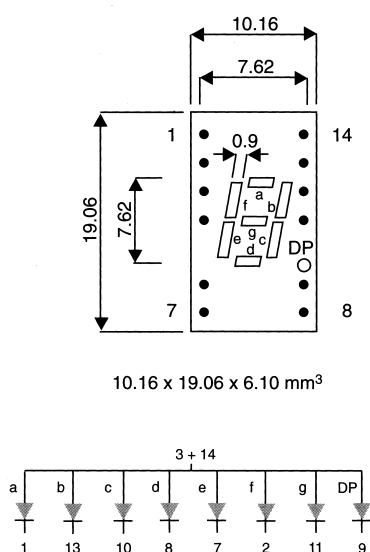
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA03-11HWA	e012003	GaP	700	red	360 - 1400	Common Anode
SA03-11GWA	e012005	GaP	565	green	1400 - 5600	Common Anode
SA03-11YWA	e012007	GaAsP/GaP	590	yellow	1400 - 5600	Common Anode
SA03-11EWA	e012009	GaAsP/GaP	625	super-red	2200 - 9000	Common Anode
SA03-11SRWA	e012011	GaAlAs	660	hyper-red	5600 - 14000	Common Anode

LA3051-12EWAK	e012660	GaP	700	red	550 - 1500	Common Anode
LA3021-12EWAK	e012661	GaP	567	green	1950 - 5500	Common Anode
LA3031-12EWAK	e012662	GaAsP/GaP	585	yellow	1550 - 4300	Common Anode
LA3041-12EWAK	e012663	GaAsP/GaP	635	super-red	2250 - 6100	Common Anode
LA3041R-12RRAK	e012664	GaAsP/GaP	635	hi.-eff.-red	2250 - 6100	Common Anode
LA3071-12-EWAK	e012665	GaAlAs	660	hyper-red	8700 - 24000	Common Anode

Package Dimensions

SA03-11-Series

LA30X1-12-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

7-Segment Display 7mm

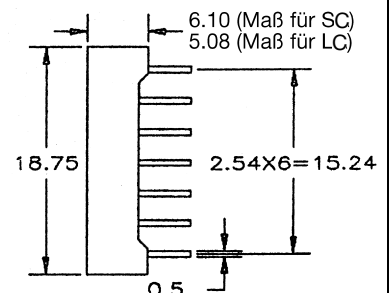
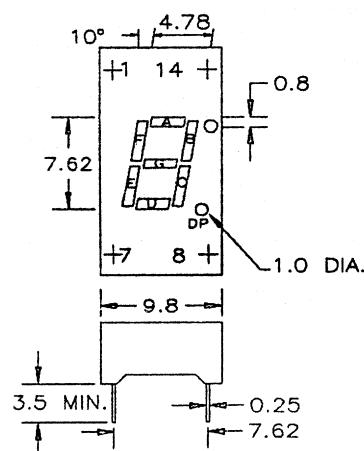
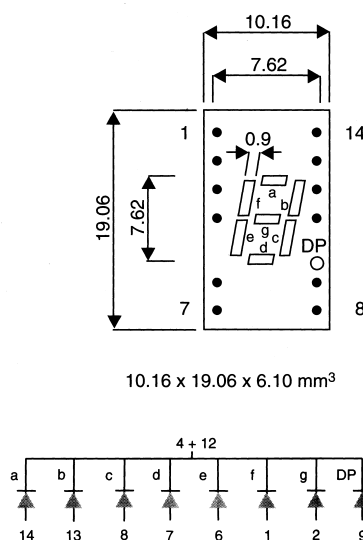
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SC03-12HWA	e012004	GaP	700	red	360 - 1400	Common Cathode
SC03-12GWA	e012006	GaP	565	green	1400 - 5600	Common Cathode
SC03-12YWA	e012008	GaAsP/GaP	590	yellow	1400 - 5600	Common Cathode
SC03-12EWA	e012010	GaAsP/GaP	625	super-red	2200 - 9000	Common Cathode
SC03-12SRWA	e012019	GaAlAs	660	hyper-red	5600 - 14000	Common Cathode

LC3051-11EWAK	e012654	GaP	700	red	550 - 1500	Common Cathode
LC3021-11EWAK	e012655	GaP	567	green	1950 - 5500	Common Cathode
LC3031-11EWAK	e012656	GaAsP/GaP	585	yellow	1550 - 4300	Common Cathode
LC3041-11EWAK	e012657	GaAsP/GaP	635	super-red	2250 - 6100	Common Cathode
LC3041R-11RRAK	e012658	GaAsP/GaP	635	hi.-eff.-red	2250 - 6100	Common Cathode
LC3071-11-EWAK	e012659	GaAlAs	660	hyper-red	8700 - 24000	Common Cathode

Package Dimensions

SC03-12-Series

LC30X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

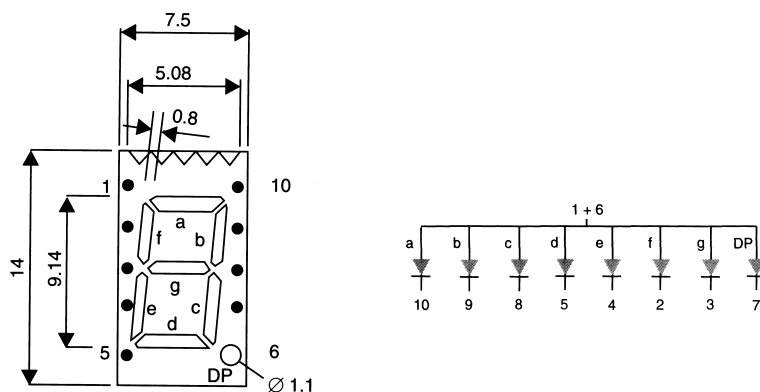
7-Segment Display 9mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA36-11HWA	e012024	GaP	700	red	240 - 900	Common Anode
SA36-11GWA	e012026	GaP	565	green	900 - 3600	Common Anode
SA36-11YWA	e012028	GaAsP/GaP	590	yellow	900 - 3600	Common Anode
SA36-11EWA	e012031	GaAsP/GaP	625	super-red	900 - 3600	Common Anode
SA36-11SRWA	e012067	GaAlAs	660	hyper-red	2200 - 9000	Common Anode

LA3611-11EWAK	e012666	GaAsP	655	red	200 - 400	Common Anode
LA3651-11EWAK	e012485	GaP	700	red	400 - 600	Common Anode
LA3621-11EWAK	e012667	GaP	567	green	1400 - 2300	Common Anode
LA3631-11EWAK	e012668	GaAsP/GaP	585	yellow	1100 - 1800	Common Anode
LA3641-11EWAK	e012572	GaAsP/GaP	635	super-red	1600 - 2600	Common Anode
LA3641R-11RRAK	e012669	GaAsP/GaP	635	hi.-eff.-red	1600 - 2600	Common Anode
LA3671-11-EWAK	e012670	GaAlAs/GaAs	660	hyper-red	6100 - 14500	Common Anode

Package Dimensions

SA-36-11-Series
LA36X1-11-Series



7.5 x 14 x 8.5 mm³

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

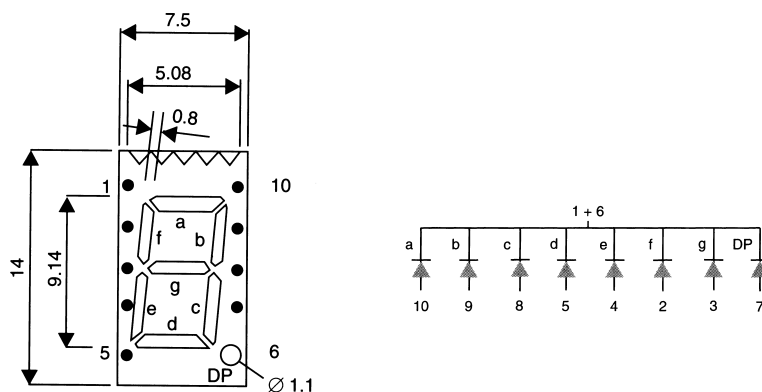
7-Segment Display 9mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SC36-11HWA	e012025	GaP	700	red	240 - 900	Common Cathode
SC36-11GWA	e012027	GaP	565	green	900 - 3600	Common Cathode
SC36-11YWA	e012029	GaAsP/GaP	590	yellow	900 - 3600	Common Cathode
SC36-11EWA	e012066	GaAsP/GaP	625	super-red	900 - 3600	Common Cathode
SC36-11SRWA	e012068	GaAlAs	660	hyper-red	2200 - 9000	Common Cathode

LC3611-11EWAK	e012671	GaAsP	655	red	200 - 400	Common Cathode
LC3651-11EWAK	e012585	GaP	700	red	400 - 600	Common Cathode
LC3621-11EWAK	e012458	GaP	567	green	1400 - 2300	Common Cathode
LC3631-11EWAK	e012672	GaAsP/GaP	585	yellow	1100 - 1800	Common Cathode
LC3641-11EWAK	e012444	GaAsP/GaP	635	super-red	1600 - 2600	Common Cathode
LC3641R-11RRAK	e012673	GaAsP/GaP	635	hi.-eff.-red	1600 - 2600	Common Cathode
LC3671-11-EWAK	e012674	GaAlAs/GaAs	660	hyper-red	6100 - 14500	Common Cathode

Package Dimensions

SC-36-11-Series
LC36X1-11-Series



7.5 x 14 x 8.5 mm³

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



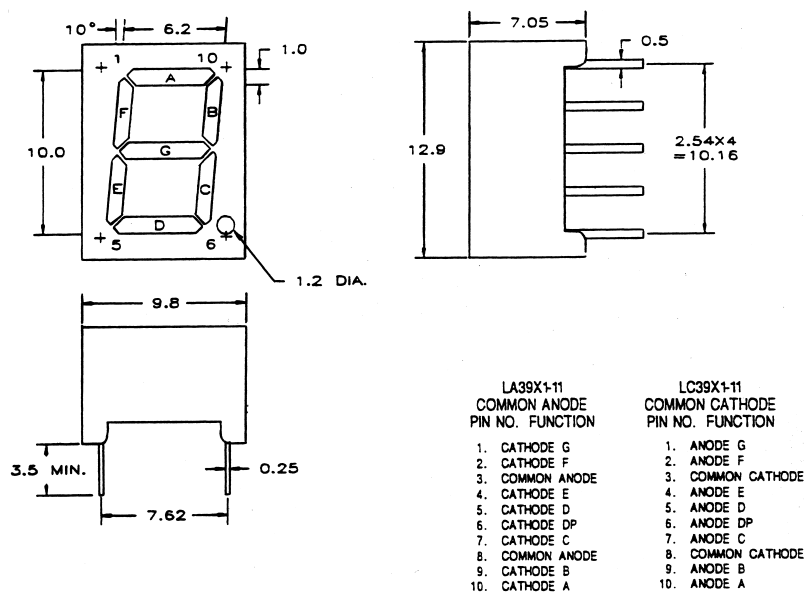
Optoelektronik

7-Segment Display 10mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
LA3911-11EWAK	e012042	GaAsP	655	red	200 - 400	Common Anode
LC3911-11EWAK	e012072	GaAsP	655	red	200 - 400	Common Cathode
LA3951-11EWAK	e012074	GaP	700	red	400 - 600	Common Anode
LC3951-11EWAK	e012079	GaP	700	red	400 - 600	Common Cathode
LA3921-11EWAK	e012080	GaP	567	green	1400 - 2300	Common Anode
LC3921-11EWAK	e012081	GaP	567	green	1400 - 2300	Common Cathode
LA3931-11EWAK	e012082	GaAsP/GaP	585	yellow	1100 - 1800	Common Anode
LC3931-11EWAK	e012083	GaAsP/GaP	585	yellow	1100 - 1800	Common Cathode
LA3941-11EWAK	e012089	GaAsP/GaP	635	super-red	1600 - 2600	Common Anode
LC3941-11EWAK	e012090	GaAsP/GaP	635	super-red	1600 - 2600	Common Cathode
LA3941R-11RRAK	e012599	GaAsP/GaP	635	hi.-eff.-red	1600 - 2600	Common Anode
LC3941R-11RRAK	e012092	GaAsP/GaP	635	hi.-eff.-red	1600 - 2600	Common Cathode
LA3971-11EWAK	e012529	GaAlAs/GaAs	660	hyper-red	6100 - 14500	Common Anode
LC3971-11EWAK	e012552	GaAlAs/GaAs	660	hyper-red	6100 - 14500	Common Cathode

Package Dimensions

LA-39X1-11-Series
LC-39X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

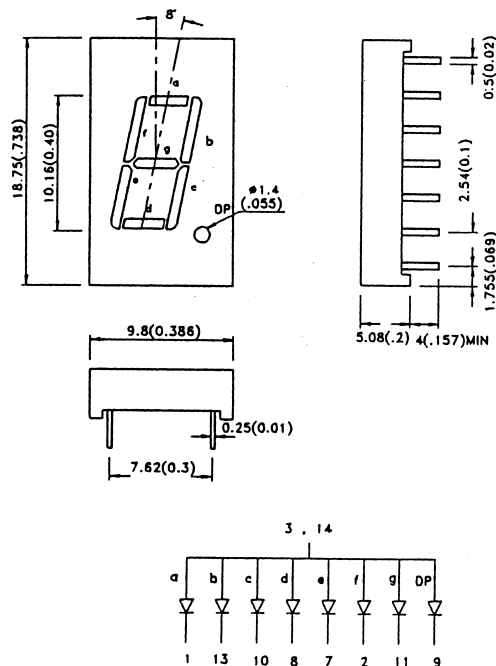
7-Segment Display 10mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA04-11HWA	e012095	GaP	700	red	560 - 2200	Common Anode
SA04-11GWA	e012097	GaP	565	green	1400 - 5600	Common Anode
SA04-11YWA	e012099	GaAsP/GaP	590	yellow	1400 - 5600	Common Anode
SA04-11EWA	e012101	GaAsP/GaP	625	super-red	2200 - 9000	Common Anode
SA04-11SRWA	e012103	GaAlAs	660	hyper-red	5600 - 14000	Common Anode

LA4011-11EWAK	e012675	GaAsP	655	red	300 - 500	Common Anode
LA4051-11EWAK	e012676	GaP	700	red	500 - 800	Common Anode
LA4021-11EWAK	e012677	GaP	567	green	1700 - 2900	Common Anode
LA4031-11EWAK	e012678	GaAsP/GaP	585	yellow	1400 - 2300	Common Anode
LA4041-11EWAK	e012041	GaAsP/GaP	635	super-red	2000 - 3300	Common Anode
LA4041R-11RRAK	e012430	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Anode
LA4071-11EWAK	e012679	GaAlAs/GaAs	660	hyper-red	7700 - 18500	Common Anode

Package Dimensions

SA04-11-Series
LA40X1-11-Series



4,5,6,12 NO PIN

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

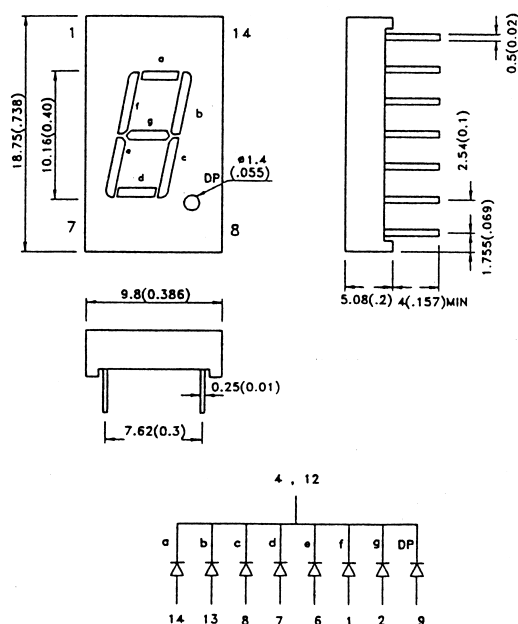
7-Segment Display 10mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SC04-11HWA	e012096	GaP	700	red	560 - 2200	Common Cathode
SC04-11GWA	e012098	GaP	565	green	1400 - 5600	Common Cathode
SC04-11YWA	e012100	GaAsP/GaP	590	yellow	1400 - 5600	Common Cathode
SC04-11EWA	e012102	GaAsP/GaP	625	super-red	2200 - 9000	Common Cathode
SC04-11SRWA	e012104	GaAlAs	660	hyper-red	5600 - 14000	Common Cathode

LC4011-11EWAK	e012680	GaAsP	655	red	300 - 500	Common Cathode
LC4051-11EWAK	e012681	GaP	700	red	500 - 800	Common Cathode
LC4021-11EWAK	e012682	GaP	567	green	1700 - 2900	Common Cathode
LC4031-11EWAK	e012683	GaAsP/GaP	585	yellow	1400 - 2300	Common Cathode
LC4041-11EWAK	e012684	GaAsP/GaP	635	super-red	2000 - 3300	Common Cathode
LC4041R-11RRAK	e012685	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Cathode
LC4071-11EWAK	e012686	GaAlAs/GaAs	660	hyper-red	7700 - 18500	Common Cathode

Package Dimensions

SC04-11-Series
LC40X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

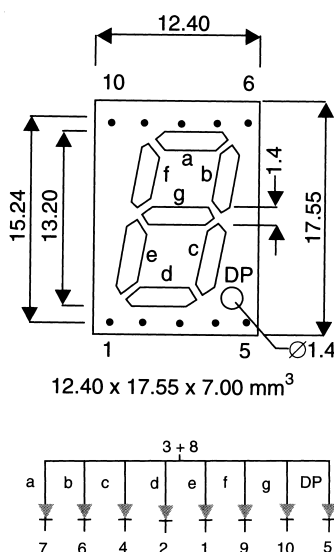
7-Segment Display 13mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA52-11HWA	e012107	GaP	700	red	900 - 2200	Common Anode
SA52-11GWA	e012109	GaP	565	green	2200 - 5600	Common Anode
SA52-11YWA	e012111	GaAsP/GaP	590	yellow	2200 - 5600	Common Anode
SA52-11EWA	e012113	GaAsP/GaP	625	super-red	2200 - 5600	Common Anode
SA52-11SRWA	e012114	GaAlAs	660	hyper-red	5600 - 21000	Common Anode

LA5211-11EWAK	e012687	GaAsP	655	red	300 - 500	Common Anode
LA5251-11EWAK	e012491	GaP	700	red	500 - 800	Common Anode
LA5221-11EWAK	e012039	GaP	567	green	1700 - 2900	Common Anode
LA5231-11EWAK	e012688	GaAsP/GaP	585	yellow	1400 - 2300	Common Anode
LA5241-11EWAK	e012014	GaAsP/GaP	635	super-red	2000 - 3300	Common Anode
LA5241R-11RRAK	e012689	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Anode
LA5271-11EWAK	e012086	GaAlAs/GaAs	660	hyper-red	7700 - 23000	Common Anode

Package Dimensions

SA52-11-Series
LA52X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

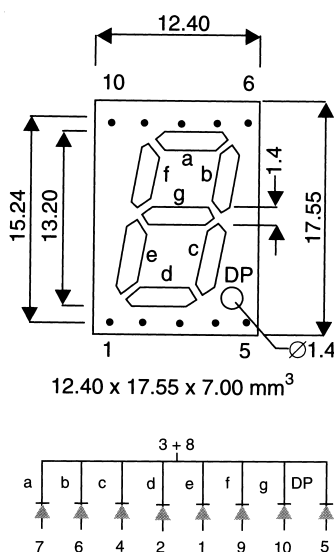
7-Segment Display 13mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SC52-11HWA	e012108	GaP	700	red	900 - 2200	Common Cathode
SC52-11GWA	e012110	GaP	565	green	2200 - 5600	Common Cathode
SC52-11YWA	e012112	GaAsP/GaP	590	yellow	2200 - 5600	Common Cathode
SC52-11EWA	e012018	GaAsP/GaP	625	super-red	2200 - 5600	Common Cathode
SC52-11SRWA	e012115	GaAlAs	660	hyper-red	5600 - 21000	Common Cathode

LC5211-11EWAK	e012690	GaAsP	655	red	300 - 500	Common Cathode
LC5251-11EWAK	e012492	GaP	700	red	500 - 800	Common Cathode
LC5221-11EWAK	e012490	GaP	567	green	1700 - 2900	Common Cathode
LC5231-11EWAK	e012584	GaAsP/GaP	585	yellow	1400 - 2300	Common Cathode
LC5241-11EWAK	e012493	GaAsP/GaP	635	super-red	2000 - 3300	Common Cathode
LC5241R-11RRAK	e012691	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Cathode
LC5271-11EWAK	e012494	GaAlAs/GaAs	660	hyper-red	7700 - 23000	Common Cathode

Package Dimensions

SC52-11-Series
LC52X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

7-Segment Display 14mm

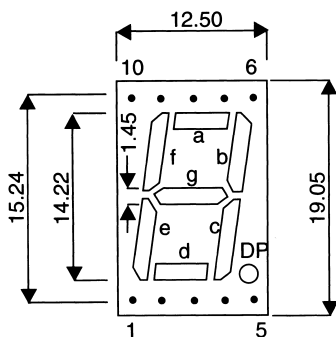
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA56-11HWA	e012118	GaP	700	red	560 - 1400	Common Anode
SA56-11GWA	e012120	GaP	565	green	2200 - 5600	Common Anode
SA56-11YWA	e012122	GaAsP/GaP	590	yellow	2200 - 5600	Common Anode
SA56-11EWA	e012124	GaAsP/GaP	625	super-red	2200 - 5600	Common Anode
SA56-11SRWA	e012126	GaAlAs	660	hyper-red	5600 - 21000	Common Anode

LA5611-11EWRS	e012692	GaAsP	655	red	300 - 500	Common Anode
LA5651-11EWRS	e012495	GaP	700	red	500 - 800	Common Anode
LA5621-11EWRS	e012056	GaP	567	green	1700 - 2900	Common Anode
LA5631-11EWRS	e012693	GaAsP/GaP	585	yellow	1400 - 2300	Common Anode
LA5641-11EWRS	e012438	GaAsP/GaP	635	super-red	2000 - 3300	Common Anode
LA5641R-11RRRS	e012694	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Anode
LA5671-11EWRS	e012498	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Anode

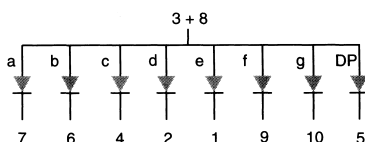
Package Dimensions

SA56-11-Series

LA56X1-11-Series



12.50 x 19.05 x 8.00 mm³



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

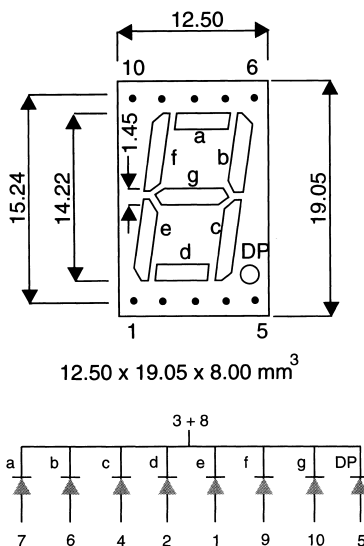
7-Segment Display 14mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SC56-11HWA	e012119	GaP	700	red	560 - 1400	Common Cathode
SC56-11GWA	e012121	GaP	565	green	2200 - 5600	Common Cathode
SC56-11YWA	e012123	GaAsP/GaP	590	yellow	2200 - 5600	Common Cathode
SC56-11EWA	e012125	GaAsP/GaP	625	super-red	2200 - 5600	Common Cathode
SC56-11SRWA	e012127	GaAlAs	660	hyper-red	5600 - 21000	Common Cathode

LC5611-11EWRS	e012695	GaAsP	655	red	300 - 500	Common Cathode
LC5651-11EWRS	e012496	GaP	700	red	500 - 800	Common Cathode
LC5621-11EWRS	e012431	GaP	567	green	1700 - 2900	Common Cathode
LC5631-11EWRS	e012696	GaAsP/GaP	585	yellow	1400 - 2300	Common Cathode
LC5641-11EWRS	e012466	GaAsP/GaP	635	super-red	2000 - 3300	Common Cathode
LC5641R-11RRRS	e012697	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Cathode
LC5671-11EWRS	e012509	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Cathode

Package Dimensions

SC56-11-Series
LC56X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

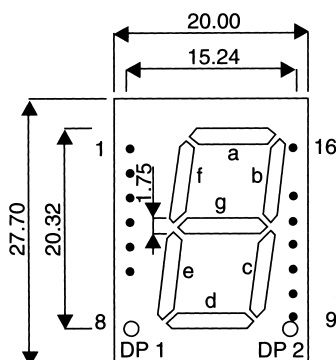
7-Segment Display 20mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA08-11HWA	e012128	GaP	700	red	360 - 1400	Common Anode
SA08-11GWA	e012130	GaP	565	green	1400 - 3600	Common Anode
SA08-11YWA	e012132	GaAsP/GaP	590	yellow	1400 - 3600	Common Anode
SA08-11EWA	e012134	GaAsP/GaP	625	super-red	2200 - 9000	Common Anode
SA08-11SRWA	e012136	GaAlAs	660	hyper-red	9000 - 21000	Common Anode

LA8011-11EWRS	e012698	GaAsP	655	red	400 - 700	Common Anode
LA8051-11EWRS	e012699	GaP	700	red	600 - 1000	Common Anode
LA8021-11EWRS	e012504	GaP	567	green	2000 - 3300	Common Anode
LA8031-11EWRS	e012076	GaAsP/GaP	585	yellow	1600 - 2700	Common Anode
LA8041-11EWRS	e012064	GaAsP/GaP	635	super-red	2300 - 3800	Common Anode
LA8041R-11RRRS	e012445	GaAsP/GaP	635	hi.-eff.-red	2300 - 3800	Common Anode
LA8071-11EWRS	e012514	GaAlAs/GaAs	660	hyper-red	8900 - 21400	Common Anode

Package Dimensions

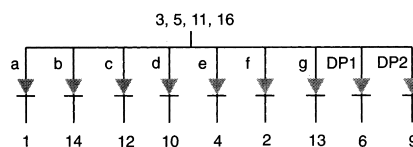
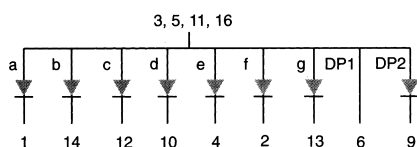
SA08-11-Series
LA80X1-11-Series



SA08-11-Series

20.00 x 27.70 x 8.40 mm³

LA80X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

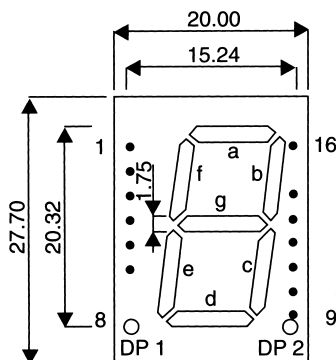
7-Segment Display 20mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SC08-11HWA	e012129	GaP	700	red	360 - 1400	Common Cathode
SC08-11GWA	e012131	GaP	565	green	1400 - 3600	Common Cathode
SC08-11YWA	e012133	GaAsP/GaP	590	yellow	1400 - 3600	Common Cathode
SC08-11EWA	e012135	GaAsP/GaP	625	super-red	2200 - 9000	Common Cathode
SC08-11SRWA	e012137	GaAlAs	660	hyper-red	9000 - 21000	Common Cathode

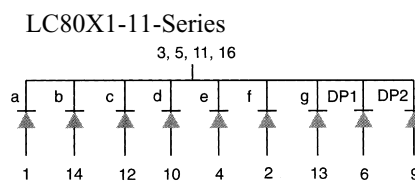
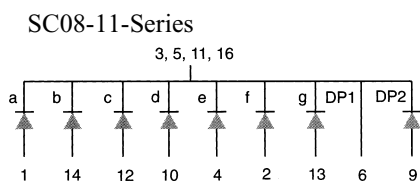
LC8011-11EWRS	e012700	GaAsP	655	red	400 - 700	Common Cathode
LC8051-11EWRS	e012701	GaP	700	red	600 - 1000	Common Cathode
LC8021-11EWRS	e012450	GaP	567	green	2000 - 3300	Common Cathode
LC8031-11EWRS	e012521	GaAsP/GaP	585	yellow	1600 - 2700	Common Cathode
LC8041-11EWRS	e012420	GaAsP/GaP	635	super-red	2300 - 3800	Common Cathode
LC8041R-11RRRS	e012702	GaAsP/GaP	635	hi.-eff.-red	2300 - 3800	Common Cathode
LC8071-11EWRS	e012515	GaAlAs/GaAs	660	hyper-red	8900 - 21400	Common Cathode

Package Dimensions

SC08-11-Series
LC80X1-11-Series



20.00 x 27.70 x 8.40 mm³



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

7-Segment Display 25mm

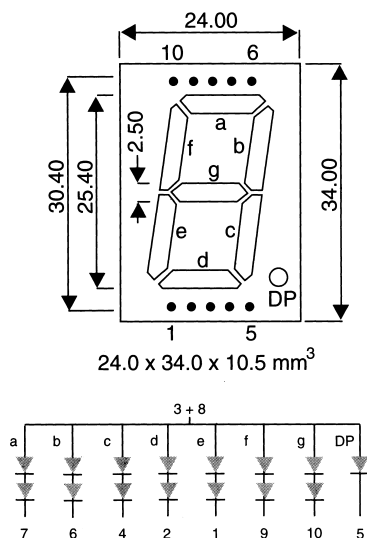
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA10-21HWA	e012138	GaP	700	red	900 - 2200	Common Anode
SA10-21GWA	e012140	GaP	565	green	3600 - 9000	Common Anode
SA10-21YWA	e012142	GaAsP/GaP	590	yellow	3600 - 9000	Common Anode
SA10-21EWA	e012144	GaAsP/GaP	625	super-red	5600 - 14000	Common Anode
SA10-21SRWA	e012146	GaAlAs	660	hyper-red	14000 - 31000	Common Anode

LA2511-21EWRN	e012703	GaAsP	655	red	500 - 800	Common Anode
LA2551-21EWRN	e012704	GaP	700	red	700 - 1200	Common Anode
LA2521-21EWRN	e012455	GaP	567	green	2800 - 4600	Common Anode
LA2531-21EWRN	e012705	GaAsP/GaP	585	yellow	2200 - 3700	Common Anode
LA2541-21EWRN	e012706	GaAsP/GaP	635	super-red	3100 - 5200	Common Anode
LA2541R-21RRRN	e012413	GaAsP/GaP	635	hi.-eff.-red	3100 - 5200	Common Anode
LA2571-21EWRN	e012707	GaAlAs/GaAs	660	hyper-red	12200 - 30500	Common Anode

Package Dimensions

SA10-21-Series

LA25X1-21-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

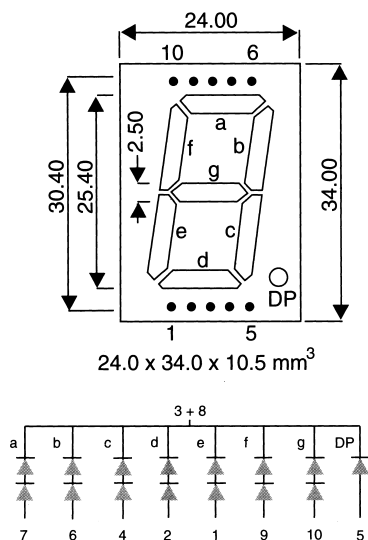
7-Segment Display 25mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_V [μcd] I_F =10mA Min. - Typ.	Description
SC10-21HWA	e012139	GaP	700	red	900 - 2200	Common Cathode
SC10-21GWA	e012141	GaP	565	green	3600 - 9000	Common Cathode
SC10-21YWA	e012143	GaAsP/GaP	590	yellow	3600 - 9000	Common Cathode
SC10-21EWA	e012145	GaAsP/GaP	625	super-red	5600 - 14000	Common Cathode
SC10-21SRWA	e012147	GaAlAs	660	hyper-red	14000 - 31000	Common Cathode

LC2511-21EWRN	e012708	GaAsP	655	red	500 - 800	Common Cathode
LC2551-21EWRN	e012749	GaP	700	red	700 - 1200	Common Cathode
LC2521-21EWRN	e012750	GaP	567	green	2800 - 4600	Common Cathode
LC2531-21EWRN	e012751	GaAsP/GaP	585	yellow	2200 - 3700	Common Cathode
LC2541-21EWRN	e012752	GaAsP/GaP	635	super-red	3100 - 5200	Common Cathode
LC2541R-21RRRN	e012753	GaAsP/GaP	635	hi.-eff.-red	3100 - 5200	Common Cathode
LC2571-21EWRN	e012754	GaAlAs/GaAs	660	hyper-red	12200 - 30500	Common Cathode

Package Dimensions

SC10-21-Series
LC25X1-21-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



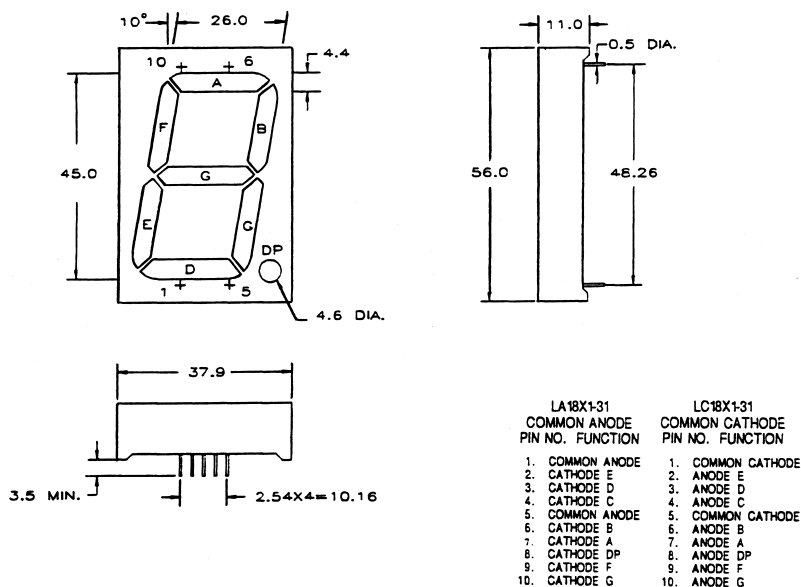
Optoelektronik

7-Segment Display 45mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
LA1811-31EWRN	e012148	GaAsP	655	red	500 - 800	Common Anode
LC1811-31EWRN	e012149	GaAsP	655	red	500 - 800	Common Cathode
LA1851-31EWRN	e012150	GaP	700	red	700 - 1200	Common Anode
LC1851-31EWRN	e012151	GaP	700	red	700 - 1200	Common Cathode
LA1821-31EWRN	e012152	GaP	567	green	2800 - 4600	Common Anode
LC1821-31EWRN	e012153	GaP	567	green	2800 - 4600	Common Cathode
LA1831-31EWRN	e012154	GaAsP/GaP	585	yellow	2200 - 3700	Common Anode
LC1831-31EWRN	e012155	GaAsP/GaP	585	yellow	2200 - 3700	Common Cathode
LA1841-31EWRN	e012156	GaAsP/GaP	635	super-red	2100 - 3100	Common Anode
LC1841-31EWRN	e012157	GaAsP/GaP	635	super-red	2100 - 3100	Common Cathode
LA1841R-31RRRN	e012158	GaAsP/GaP	635	hi.-eff.-red	3100 - 5200	Common Anode
LC1841R-31RRRN	e012159	GaAsP/GaP	635	hi.-eff.-red	3100 - 5200	Common Cathode
LA1871-31EWRN	e012600	GaAlAs/GaAs	660	hyper-red	12200 - 30500	Common Anode
LC1871-31EWRN	e012601	GaAlAs/GaAs	660	hyper-red	12200 - 30500	Common Cathode

Package Dimensions

LA-18X1-31-Series
LC-18X1-31-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

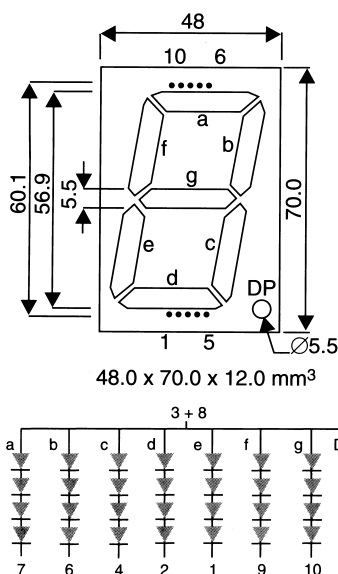
7-Segment Display 57mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA23-12GWA	e012016	GaP	565	green	3600 - 9000	Common Anode
SA23-12YWA	e012163	GaAsP/GaP	590	yellow	3600 - 9000	Common Anode
SA23-12EWA	e012017	GaAsP/GaP	625	super-red	5600 - 21000	Common Anode
SA23-12SRWA	e012166	GaAlAs	660	hyper-red	14000 - 31000	Common Anode

LA2311-41SEWRN	e012842	GaAsP	655	red	700 - 1200	Common Anode
LA2351-41SEWRN	e012843	GaP	700	red	1200 - 3400	Common Anode
LA2321-41SEWRN	e012844	GaP	567	green	4600 - 12700	Common Anode
LA2331-41SEWRN	e012845	GaAsP/GaP	585	yellow	3700 - 10300	Common Anode
LA2341-41SEWRN	e012846	GaAsP/GaP	635	super-red	5250 - 14600	Common Anode
LA2341R-41SRRRN	e012847	GaAsP/GaP	635	hi.-eff.-red	5250 - 14600	Common Anode
LA2371-41SEWRN	e012848	GaAlAs/GaAs	660	hyper-red	20550 - 47900	Common Anode

Package Dimensions

SA23-12-Serie
LA23X1-41S-Serie



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

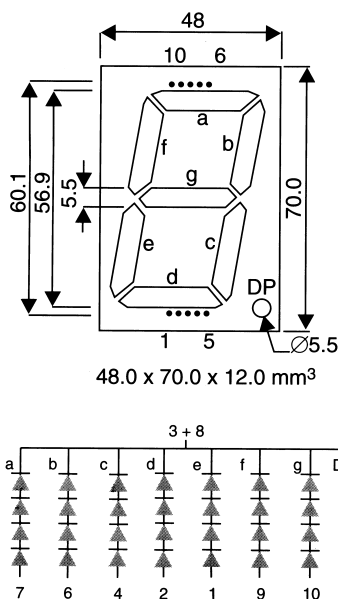
7-Segment Display 57mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_V [μcd] I_F =10mA Min. - Typ.	Description
SC23-12GWA	e012162	GaP	565	green	3600 - 9000	Common Cathode
SC23-12YWA	e012164	GaAsP/GaP	590	yellow	3600 - 9000	Common Cathode
SC23-12EWA	e012165	GaAsP/GaP	625	super-red	5600 - 21000	Common Cathode
SC23-12SRWA	e012167	GaAlAs	660	hyper-red	14000 - 31000	Common Cathode

LC2311-41SEWRN	e012849	GaAsP	655	red	700 - 1200	Common Cathode
LC2351-41SEWRN	e012850	GaP	700	red	1200 - 3400	Common Cathode
LC2321-41SEWRN	e012851	GaP	567	green	4600 - 12700	Common Cathode
LC2331-41SEWRN	e012852	GaAsP/GaP	585	yellow	3700 - 10300	Common Cathode
LC2341-41SEWRN	e012853	GaAsP/GaP	635	super-red	5250 - 14600	Common Cathode
LC2341R-41SRRRN	e012854	GaAsP/GaP	635	hi.-eff.-red	5250 - 14600	Common Cathode
LC2371-41SEWRN	e012855	GaAlAs/GaAs	660	hyper-red	20550 - 47900	Common Cathode

Package Dimensions

SC23-12-Series
LC23X1-41S-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

7-Segment Display 100mm

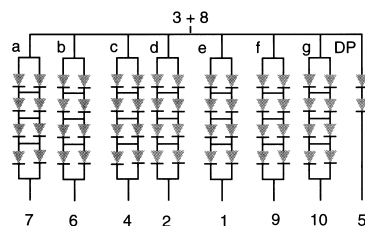
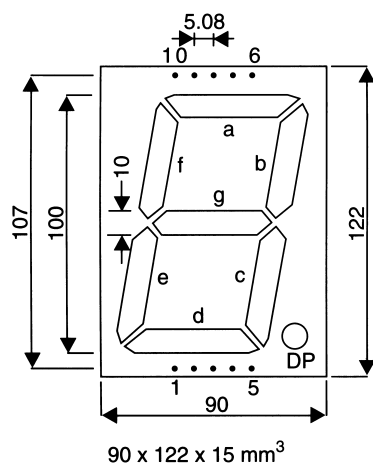
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
SA40-19EWA	e012168	GaAsP/GaP	625	super-red	3600 - 14000	Common Anode
SA40-19GWA	e012170	GaP	565	green	3600 - 9000	Common Anode
SA40-19YWA	e012172	GaAsP/GaP	590	yellow	3600 - 9000	Common Anode
SA40-19SRWA	e012174	GaAlAs	660	hyper-red	14000 - 31000	Common Anode

LA4151-82SEWEW	e012631	GaP	700	red	1550 - 4300	Common Anode
LA4121-82SEWEW	e012632	GaP	567	green	5800 - 16100	Common Anode
LA4131-82SEWEW	e012633	GaAsP/GaP	585	yellow	4650 - 13000	Common Anode
LA4141-82SEWEW	e012634	GaAsP/GaP	635	super-red	6600 - 18500	Common Anode
LA4141R-82SEWEW	e012635	GaAsP/GaP	635	hi.-eff.-red	6600 - 18500	Common Anode
LA4171-82SEWEW	e012636	GaAlAs/GaAs	660	hyper-red	25900 - 60400	Common Anode

Package Dimensions

SA40-19-Series

LA41X1-82S-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

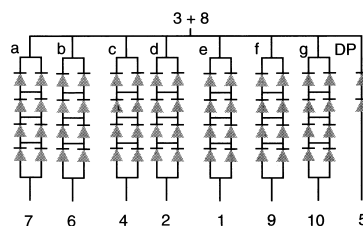
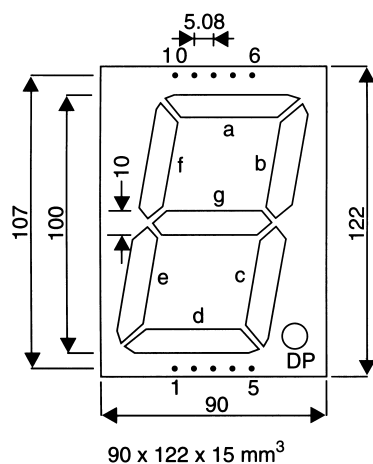
7-Segment Display 100mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =20mA Min. - Typ.	Description
SC40-19EWA	e012169	GaAsP/GaP	625	super-red	3600 - 14000	Common Cathode
SC40-19GWA	e012171	GaP	565	green	3600 - 9000	Common Cathode
SC40-19YWA	e012173	GaAsP/GaP	590	yellow	3600 - 9000	Common Cathode
SC40-19SRWA	e012175	GaAlAs	660	hyper-red	14000 - 31000	Common Cathode

LC4151-82SEWEW	e012625	GaP	700	red	1550 - 4300	Common Cathode
LC4121-82SEWEW	e012626	GaP	567	green	5800 - 16100	Common Cathode
LC4131-82SEWEW	e012627	GaAsP/GaP	585	yellow	4650 - 13000	Common Cathode
LC4141-82SEWEW	e012628	GaAsP/GaP	635	super-red	6600 - 18500	Common Cathode
LC4141R-82SEWEW	e012629	GaAsP/GaP	635	hi.-eff.-red	6600 - 18500	Common Cathode
LC4171-82SEWEW	e012630	GaAlAs/GaAs	660	hyper-red	25900 - 60400	Common Cathode

Package Dimensions

SC40-19-Series
LC41X1-82S-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



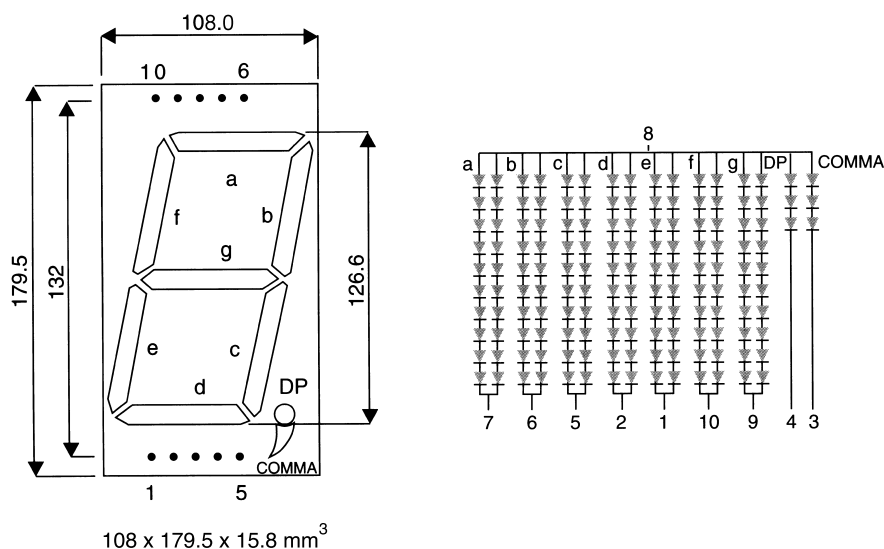
Optoelektronik

7-Segment Display 125mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_V [μcd] $I_F=20\text{mA}$ Min. - Typ.	Description
SA50-11EWA	e012645	GaAsP/GaP	625	super-red	14000 - 21000	Common Anode
SA50-11GWA	e012646	GaP	565	green	21000 - 31000	Common Anode
SA50-11YWA	e012647	GaAsP/GaP	590	yellow	9000 - 14000	Common Anode
SA50-11SRWA	e012417	GaAlAs	660	hyper-red	31000 - 50000	Common Anode
LA5151-K2EWEW	e012648	GaP	700	red	2600 - 6700	Common Anode
LA5121-K2EWEW	e012649	GaP	567	green	9700 - 26000	Common Anode
LA5131-K2EWEW	e012650	GaAsP/GaP	585	yellow	7750 - 21000	Common Anode
LA5141-K2EWEW	e012651	GaAsP/GaP	635	super-red	11050 - 28800	Common Anode
LA5141R-K2RREW	e012652	GaAsP/GaP	635	hi.-eff.-red	11050 - 28800	Common Anode
LA5171-K2EWEW	e012653	GaAlAs/GaAs	660	hyper-red	25800 - 60400	Common Anode

Package Dimensions

SA50-11-Series
LA51X1-K2-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



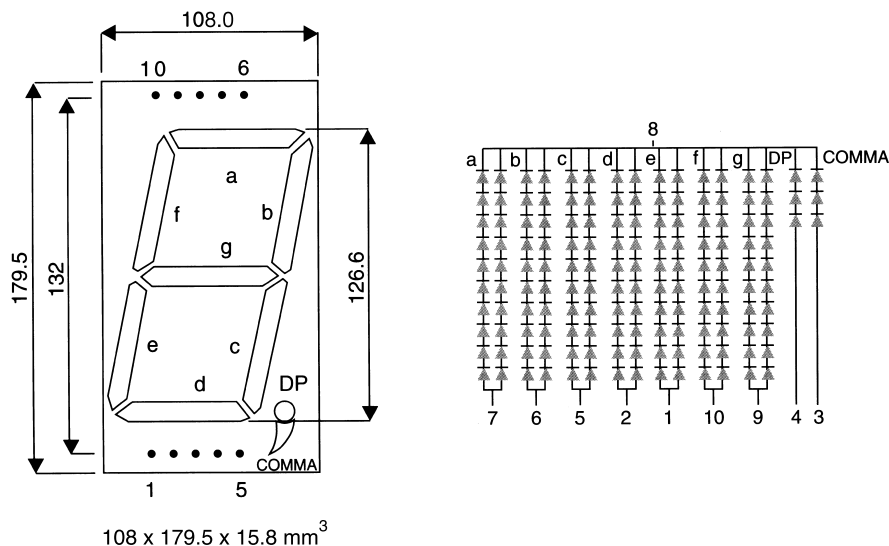
Optoelektronik

7-Segment Display 125mm

Type	Part-No.	Emitting Colour/ Material	Wave- Length λ_{Peak} [nm]	Colour	Luminous Intensity I_V [μcd] $I_F=20\text{mA}$ Min. - Typ.	Description
SC50-11EWA	e012513	GaAsP/GaP	625	super-red	14000 - 21000	Common Cathode
SC50-11GWA	e012638	GaP	565	green	21000 - 31000	Common Cathode
SC50-11YWA	e012637	GaAsP/GaP	590	yellow	9000 - 14000	Common Cathode
SC50-11SRWA	e012305	GaAlAs	660	hyper-red	31000 - 50000	Common Cathode
LC5151-K2EWEW	e012639	GaP	700	red	2600 - 6700	Common Cathode
LC5121-K2EWEW	e012640	GaP	567	green	9700 - 26000	Common Cathode
LC5131-K2EWEW	e012641	GaAsP/GaP	585	yellow	7750 - 21000	Common Cathode
LC5141-K2EWEW	e012642	GaAsP/GaP	635	super-red	11050 - 28800	Common Cathode
LC5141R-K2RREW	e012643	GaAsP/GaP	635	hi.-eff.-red	11050 - 28800	Common Cathode
LC5171-K2EWEW	e012644	GaAlAs/GaAs	660	hyper-red	25800 - 60400	Common Cathode

Package Dimensions

SC50-11-Series
LC51X1-K2-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



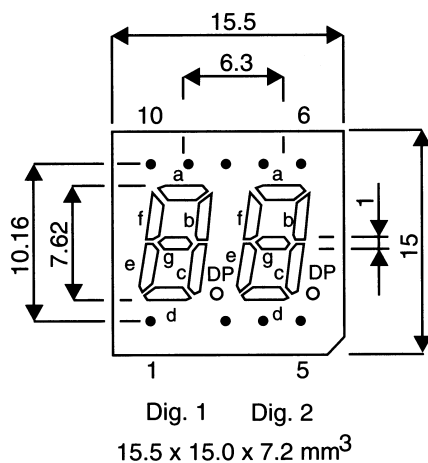
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7-Segment Display 7mm/ Dual

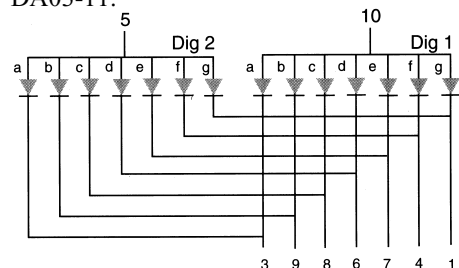
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
DA03-11HWA	e012184	GaP	700	red	240 - 900	Common Anode
DC03-11HWA	e012185	GaP	700	red	240 - 900	Common Cathode
DA03-11GWA	e012186	GaP	565	green	900 - 3600	Common Anode
DC03-11GWA	e012187	GaP	565	green	900 - 3600	Common Cathode
DA03-11YWA	e012188	GaAsP/GaP	590	yellow	2200 - 5600	Common Anode
DC03-11YWA	e012189	GaAsP/GaP	590	yellow	2200 - 5600	Common Cathode
DA03-11EWA	e012190	GaAsP/GaP	625	super-red	2200 - 5600	Common Anode
DC03-11EWA	e012196	GaAsP/GaP	625	super-red	2200 - 5600	Common Cathode
DA03-11SRWA	e012199	GaAlAs	660	hyper-red	3600 - 14000	Common Anode
DC03-11SRWA	e012201	GaAlAs	660	hyper-red	3600 - 14000	Common Cathode

Package Dimensions

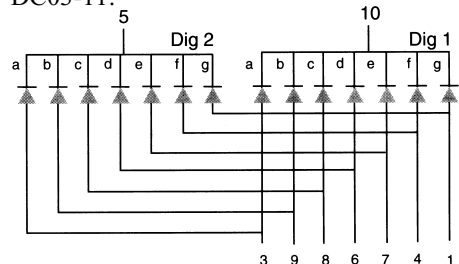
DA03-11-Series
DC03-11-Series



DA03-11:



DC03-11:



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



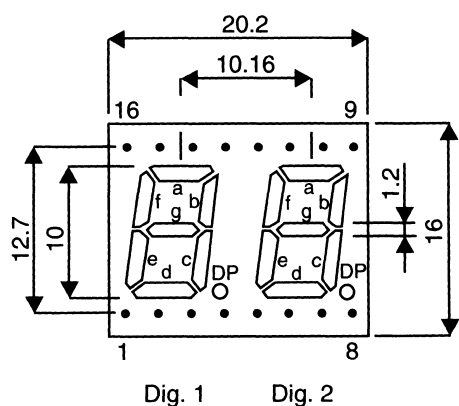
Optoelektronik

7-Segment Display 10mm/ Dual

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
DA04-11HWA	e012224	GaP	700	red	560 - 1400	Common Anode
DC04-11HWA	e012225	GaP	700	red	560 - 1400	Common Cathode
DA04-11GWA	e012226	GaP	565	green	2200 - 3600	Common Anode
DC04-11GWA	e012227	GaP	565	green	2200 - 3600	Common Cathode
DA04-11YWA	e012228	GaAsP/GaP	590	yellow	2200 - 5600	Common Anode
DC04-11YWA	e012229	GaAsP/GaP	590	yellow	2200 - 5600	Common Cathode
DA04-11EWA	e012230	GaAsP/GaP	625	super-red	2200 - 5600	Common Anode
DC04-11EWA	e012231	GaAsP/GaP	625	super-red	2200 - 5600	Common Cathode
DA04-11SRWA	e012232	GaAlAs	660	hyper-red	3600 - 9000	Common Anode
DC04-11SRWA	e012233	GaAlAs	660	hyper-red	3600 - 9000	Common Cathode

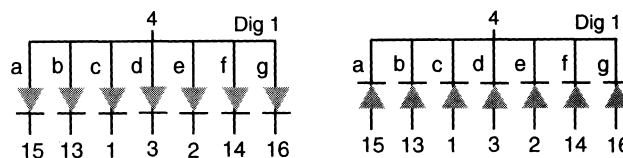
Package Dimensions

DA04-11-Series
DC04-11-Series

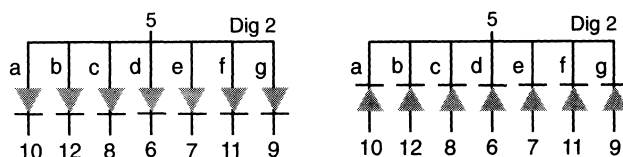


20.2 x 16.0 x 7.0 mm³

DA04-11:



DC04-11:



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



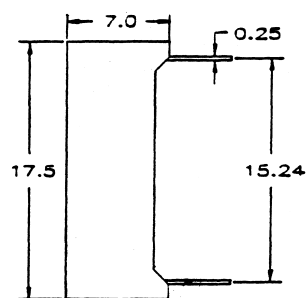
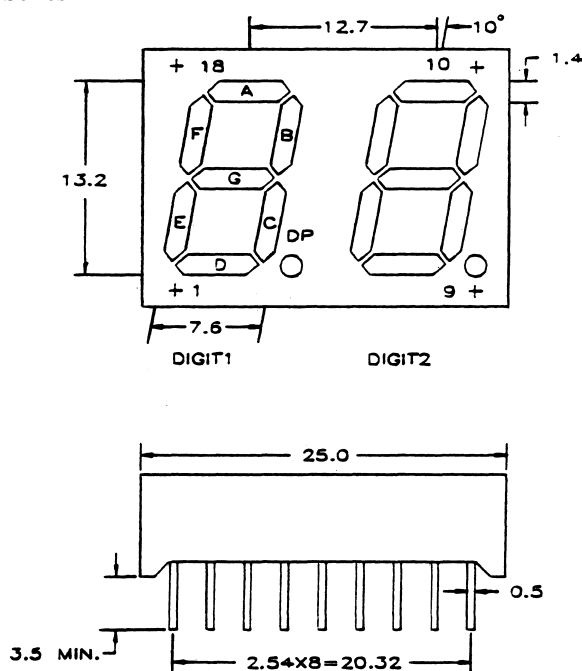
Optoelektronik

7-Segment Display 13mm/ Dual

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
LA5212-11EWAK	e012234	GaAsP	655	red	300 - 500	Common Anode
LC5212-11EWAK	e012235	GaAsP	655	red	300 - 500	Common Cathode
LA5252-11EWAK	e012236	GaP	700	red	500 - 800	Common Anode
LC5252-11EWAK	e012237	GaP	700	red	500 - 800	Common Cathode
LA5222-11EWAK	e012238	GaP	567	green	1700 - 2900	Common Anode
LC5222-11EWAK	e012239	GaP	567	green	1700 - 2900	Common Cathode
LA5232-11EWAK	e012240	GaAsP/GaP	585	yellow	1400 - 2300	Common Anode
LC5232-11EWAK	e012241	GaAsP/GaP	585	yellow	1400 - 2300	Common Cathode
LA5242-11EWAK	e012242	GaAsP/GaP	635	super-red	2000 - 3300	Common Anode
LC5242-11EWAK	e012243	GaAsP/GaP	635	super-red	2000 - 3300	Common Cathode
LA5242R-11RRAK	e012244	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Anode
LC5242R-11RRAK	e012245	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Cathode
LA5272-11EWAK	e012602	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Anode
LC5272-11EWAK	e012603	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Cathode

Package Dimensions

LA-52X2-11-Series
LC-52X2-11-Series



LA52X2-11 COMMON ANODE PIN NO. FUNCTION	LC52X2-11 COMMON CATHODE PIN NO. FUNCTION
1. CATHODE E (DIGIT 1)	1. ANODE E (DIGIT 1)
2. CATHODE D (DIGIT 1)	2. ANODE D (DIGIT 1)
3. CATHODE C (DIGIT 1)	3. ANODE C (DIGIT 1)
4. CATHODE DP (DIGIT 1)	4. ANODE DP (DIGIT 1)
5. CATHODE E (DIGIT 2)	5. ANODE E (DIGIT 2)
6. CATHODE D (DIGIT 2)	6. ANODE D (DIGIT 2)
7. CATHODE G (DIGIT 2)	7. ANODE G (DIGIT 2)
8. CATHODE C (DIGIT 2)	8. ANODE C (DIGIT 2)
9. CATHODE DP (DIGIT 2)	9. ANODE DP (DIGIT 2)
10. CATHODE B (DIGIT 2)	10. ANODE B (DIGIT 2)
11. CATHODE A (DIGIT 2)	11. ANODE A (DIGIT 2)
12. CATHODE F (DIGIT 2)	12. ANODE F (DIGIT 2)
13. DIGIT 2 COMMON ANODE	13. DIGIT 2 COMMON CATHODE
14. DIGIT 1 COMMON ANODE	14. DIGIT 1 COMMON CATHODE
15. CATHODE B (DIGIT 1)	15. ANODE B (DIGIT 1)
16. CATHODE A (DIGIT 1)	16. ANODE A (DIGIT 1)
17. CATHODE G (DIGIT 1)	17. ANODE G (DIGIT 1)
18. CATHODE F (DIGIT 1)	18. ANODE F (DIGIT 1)

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



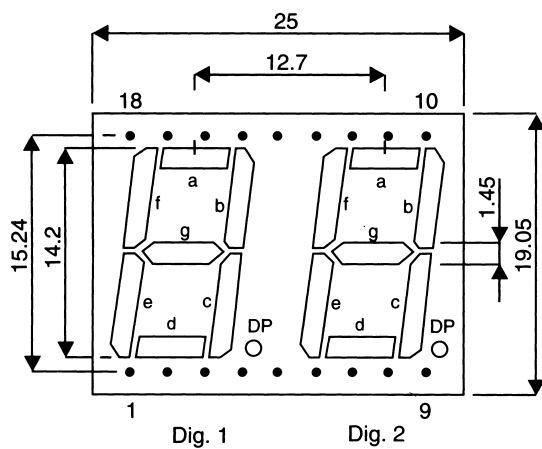
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7-Segment Display 14mm/ Dual

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
DA56-11HWA	e012248	GaP	700	red	900 - 2200	Common Anode
DC56-11HWA	e012249	GaP	700	red	900 - 2200	Common Cathode
DA56-11GWA	e012250	GaP	565	green	2200 - 5600	Common Anode
DC56-11GWA	e012251	GaP	565	green	2200 - 5600	Common Cathode
DA56-11YWA	e012252	GaAsP/GaP	590	yellow	2200 - 5600	Common Anode
DC56-11YWA	e012253	GaAsP/GaP	590	yellow	2200 - 5600	Common Cathode
DA56-11EWA	e012254	GaAsP/GaP	625	super-red	2200 - 5600	Common Anode
DC56-11EWA	e012255	GaAsP/GaP	625	super-red	2200 - 5600	Common Cathode
DA56-11SRWA	e012256	GaAlAs	660	hyper-red	5600 - 21000	Common Anode
DC56-11SRWA	e012257	GaAlAs	660	hyper-red	5600 - 21000	Common Cathode

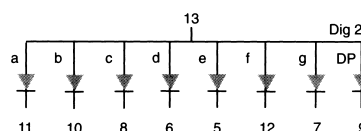
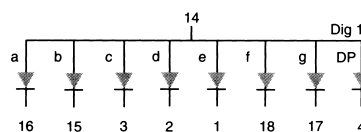
Package Dimensions

DA56-11-Series
DC56-11-Series

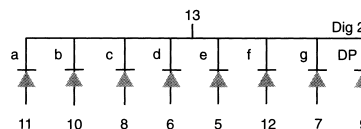
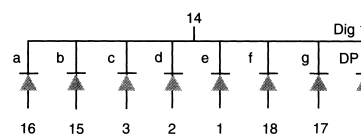


25.0 x 19.05 x 8.0 mm³

DA56-11:



DC56-11:



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



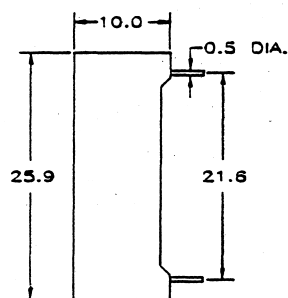
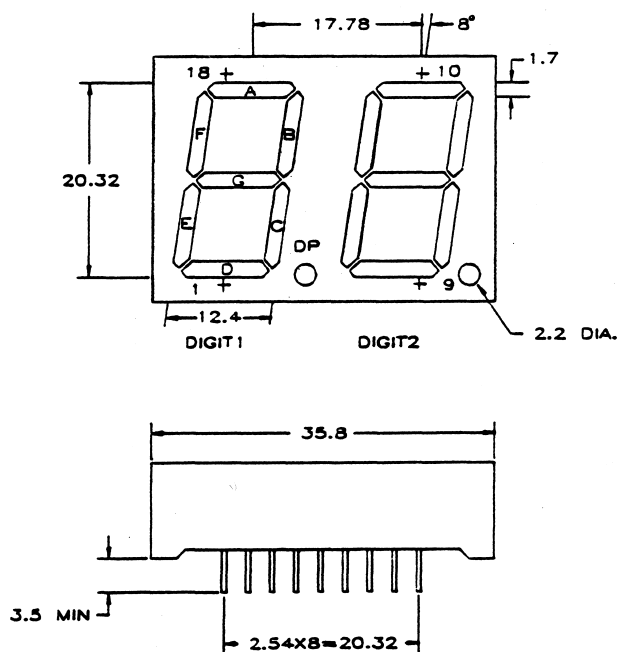
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7-Segment Display 20mm/ Dual

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
LA8012-11EWRN	e012057	GaAsP	655	red	400 - 700	Common Anode
LC8012-11EWRN	e012258	GaAsP	655	red	400 - 700	Common Cathode
LA8052-11EWRN	e012259	GaP	700	red	600 - 1000	Common Anode
LC8052-11EWRN	e012260	GaP	700	red	600 - 1000	Common Cathode
LA8022-11EWRN	e012261	GaP	567	green	2000 - 3300	Common Anode
LC8022-11EWRN	e012262	GaP	567	green	2000 - 3300	Common Cathode
LA8032-11EWRN	e012263	GaAsP/GaP	585	yellow	1600 - 2700	Common Anode
LC8032-11EWRN	e012264	GaAsP/GaP	585	yellow	1600 - 2700	Common Cathode
LA8042-11EWRN	e012265	GaAsP/GaP	635	super-red	2300 - 3800	Common Anode
LC8042-11EWRN	e012266	GaAsP/GaP	635	super-red	2300 - 3800	Common Cathode
LA8042R-11RRRN	e012267	GaAsP/GaP	635	hi.-eff.-red	2300 - 3800	Common Anode
LC8042R-11RRRN	e012268	GaAsP/GaP	635	hi.-eff.-red	2300 - 3800	Common Cathode
LA8072-11EWRN	e012604	GaAlAs/GaAs	660	hyper-red	8900 - 21400	Common Anode
LC8072-11EWRN	e012564	GaAlAs/GaAs	660	hyper-red	8900 - 21400	Common Cathode

Package Dimensions

LA-80X2-11-Series
LC-80X2-11-Series



LA80X2-11 COMMON ANODE PIN NO. FUNCTION

1. CATHODE E (DIGIT 1)
2. CATHODE D (DIGIT 1)
3. CATHODE C (DIGIT 1)
4. CATHODE DP (DIGIT 1)
5. CATHODE E (DIGIT 2)
6. CATHODE D (DIGIT 2)
7. CATHODE C (DIGIT 2)
8. CATHODE DP (DIGIT 2)
9. CATHODE B (DIGIT 2)
10. CATHODE A (DIGIT 2)
11. CATHODE F (DIGIT 2)
12. CATHODE F (DIGIT 2)
13. DIGIT 2 COMMON CATHODE
14. DIGIT 1 COMMON CATHODE
15. CATHODE B (DIGIT 1)
16. CATHODE A (DIGIT 1)
17. CATHODE G (DIGIT 1)
18. CATHODE F (DIGIT 1)

LC80X2-11 COMMON CATHODE PIN NO. FUNCTION

1. ANODE E (DIGIT 1)
2. ANODE D (DIGIT 1)
3. ANODE C (DIGIT 1)
4. ANODE DP (DIGIT 1)
5. ANODE E (DIGIT 2)
6. ANODE D (DIGIT 2)
7. ANODE C (DIGIT 2)
8. ANODE DP (DIGIT 2)
9. ANODE B (DIGIT 2)
10. ANODE A (DIGIT 2)
11. ANODE F (DIGIT 2)
12. ANODE F (DIGIT 2)
13. DIGIT 2 COMMON CATHODE
14. DIGIT 1 COMMON CATHODE
15. ANODE B (DIGIT 1)
16. ANODE A (DIGIT 1)
17. ANODE G (DIGIT 1)
18. ANODE F (DIGIT 1)

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



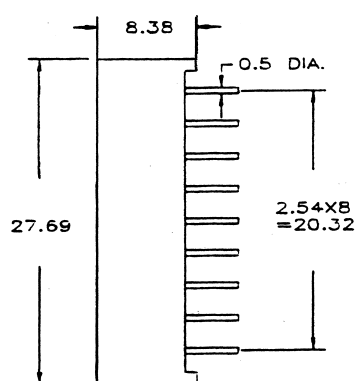
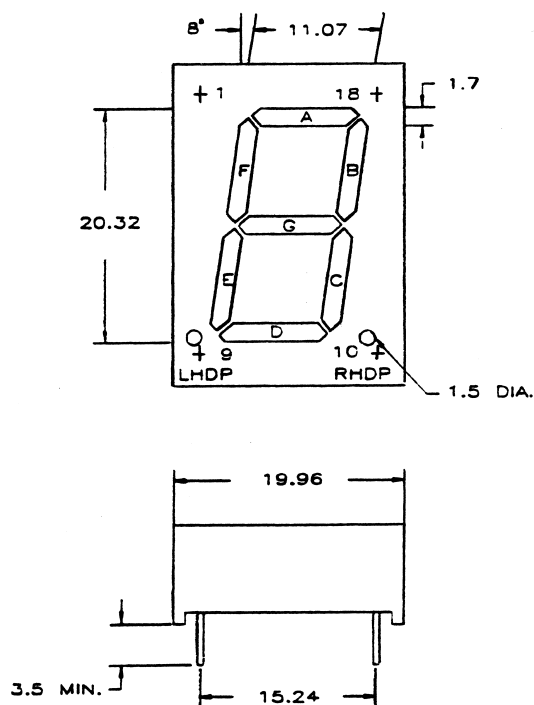
Optoelektronik

7-Segment Display 20mm/ Bicolour

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
LC8061-GO EWEW	e012176	GaP GaAsP/GaP	567 635	green super-red	2000 - 3300 2300 - 3800	Common Cathode
LC8061-GP EWEW	e012177	GaP GaP	567 700	green red	2000 - 3300 600 - 1000	Common Cathode

Package Dimensions

LC8061-Series



LCX8061-GO	LC8061-GP
PIN NO. FUNCTION	PIN NO. FUNCTION
1. ANODE A (GREEN)	1. ANODE A (GREEN)
2. ANODE A (ORANGE)	2. ANODE A (RED)
3. ANODE F (ORANGE)	3. ANODE F (RED)
4. ANODE F (GREEN)	4. ANODE F (GREEN)
5. COMMON CATHODE	5. COMMON CATHODE
6. ANODE E (ORANGE)	6. ANODE E (RED)
7. ANODE E (GREEN)	7. ANODE E (GREEN)
8. ANODE D (GREEN)	8. ANODE D (GREEN)
9. ANODE D (ORANGE)	9. ANODE D (RED)
10. ANODE RHDP (GREEN)	10. ANODE RHDP (GREEN)
11. ANODE RHDP (ORANGE)	11. ANODE RHDP (RED)
12. ANODE C (GREEN)	12. ANODE C (GREEN)
13. ANODE C (ORANGE)	13. ANODE C (RED)
14. ANODE G (GREEN)	14. ANODE G (GREEN)
15. ANODE G (ORANGE)	15. ANODE G (RED)
16. ANODE B (GREEN)	16. ANODE B (GREEN)
17. ANODE B (ORANGE)	17. ANODE B (RED)
18. COMMON CATHODE	18. COMMON CATHODE

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



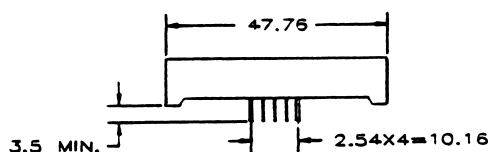
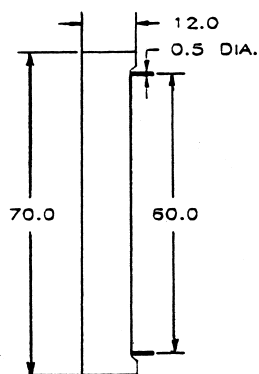
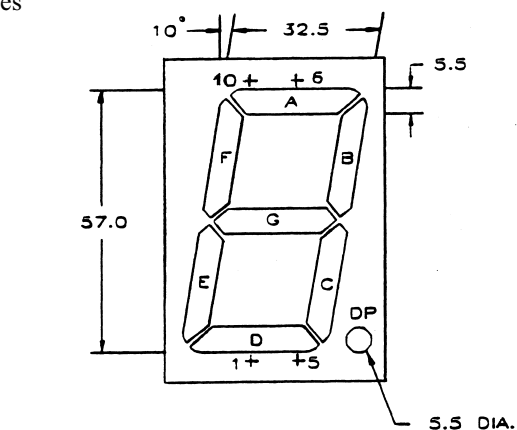
Optoelektronik

7-Segment Display 57mm/ Bicolour

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
LA2361-GO EWRN	e012178	GaP GaAsP/GaP	567 635	green super-red	7600 - 10700 8800 - 12300	Common Anode
LC2361-GO EWRN	e012179	GaP GaAsP/GaP	567 635	green super-red	7600 - 10700 8800 - 12300	Common Cathode
LA2361-GP EWRN	e012180	GaP GaP	567 700	green red	7600 - 10700 2050 - 2900	Common Anode
LC2361-GP EWRN	e012181	GaP GaP	567 700	green red	7600 - 10700 2050 - 2900	Common Cathode

Package Dimensions

LA2361-Series
LC2361-Series



LA2361-XX
COMMON ANODE
PIN NO. FUNCTION

1. COMMON ANODE (ORANGE OR RED)
2. CATHODE E
3. CATHODE D
4. CATHODE C
5. COMMON ANODE (GREEN)
6. CATHODE B
7. CATHODE A
8. CATHODE DP
9. CATHODE F
10. CATHODE G

LC2361-XX
COMMON CATHODE
PIN NO. FUNCTION

1. COMMON CATHODE (ORANGE OR RED)
2. ANODE E
3. ANODE D
4. ANODE C
5. COMMON CATHODE (GREEN)
6. ANODE B
7. ANODE A
8. ANODE DP
9. ANODE F
10. ANODE G

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



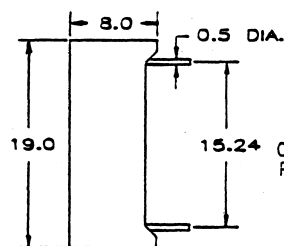
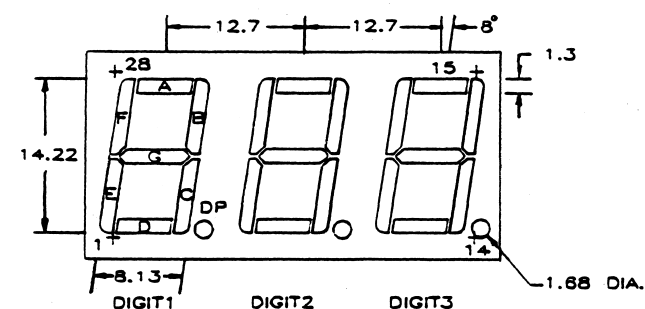
Optoelektronik

7-Segment Display 14mm/ Three Digit

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
LA5613-11EWRN	e012380	GaAsP	655	red	300 - 500	Common Anode
LC5613-11EWRN	e012381	GaAsP	655	red	300 - 500	Common Cathode
LA5653-11EWRN	e012382	GaP	700	red	500 - 800	Common Anode
LC5653-11EWRN	e012383	GaP	700	red	500 - 800	Common Cathode
LA5623-11EWRN	e012384	GaP	567	green	1700 - 2900	Common Anode
LC5623-11EWRN	e012385	GaP	567	green	1700 - 2900	Common Cathode
LA5633-11EWRN	e012386	GaAsP/GaP	585	yellow	1400 - 2300	Common Anode
LC5633-11EWRN	e012387	GaAsP/GaP	585	yellow	1400 - 2300	Common Cathode
LA5643-11EWRN	e012388	GaAsP/GaP	635	super-red	2000 - 3300	Common Anode
LC5643-11EWRN	e012389	GaAsP/GaP	635	super-red	2000 - 3300	Common Cathode
LA5643R-11RRRN	e012390	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Anode
LC5643R-11RRRN	e012391	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Cathode
LA5673-11EWRN	e012577	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Anode
LC5673-11EWRN	e012605	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Cathode

Package Dimensions

LA-56X3-11-Series
LC-56X3-11-Series



- LC56X3-11
COMMON CATHODE
PIN NO. FUNCTION
1. ANODE E (DIGIT 1)
 2. ANODE D (DIGIT 1)
 3. DIGIT 1 COMMON CATHODE
 4. ANODE C (DIGIT 1)
 5. ANODE DP (DIGIT 1)
 6. ANODE E (DIGIT 2)
 7. ANODE D (DIGIT 2)
 8. ANODE C (DIGIT 2)
 9. ANODE DP (DIGIT 2)
 10. ANODE E (DIGIT 3)
 11. ANODE D (DIGIT 3)
 12. ANODE C (DIGIT 3)
 13. ANODE DP (DIGIT 3)
 14. ANODE B (DIGIT 3)
 15. ANODE A (DIGIT 3)
 16. ANODE F (DIGIT 3)
 17. ANODE G (DIGIT 3)
 18. DIGIT 3 COMMON CATHODE
 19. DIGIT 2 COMMON CATHODE
 20. ANODE B (DIGIT 2)
 21. ANODE A (DIGIT 2)
 22. ANODE G (DIGIT 2)
 23. ANODE F (DIGIT 2)
 24. ANODE B (DIGIT 1)
 25. ANODE A (DIGIT 1)
 26. DIGIT 1 COMMON CATHODE
 27. ANODE F (DIGIT 1)
 28. ANODE G (DIGIT 1)

- LA56X3-11
COMMON ANODE
PIN NO. FUNCTION

1. CATHODE E (DIGIT 1)
2. CATHODE D (DIGIT 1)
3. CATHODE C (DIGIT 1)
4. CATHODE DP (DIGIT 1)
5. CATHODE E (DIGIT 2)
6. CATHODE D (DIGIT 2)
7. CATHODE C (DIGIT 2)
8. DIGIT 2 COMMON ANODE
9. CATHODE DP (DIGIT 2)
10. CATHODE E (DIGIT 3)
11. CATHODE D (DIGIT 3)
12. CATHODE C (DIGIT 3)
13. CATHODE DP (DIGIT 3)
14. DIGIT 3 COMMON ANODE
15. CATHODE A (DIGIT 3)
16. CATHODE F (DIGIT 3)
17. CATHODE G (DIGIT 3)
18. CATHODE B (DIGIT 3)
19. CATHODE A (DIGIT 2)
20. CATHODE F (DIGIT 2)
21. DIGIT 2 COMMON ANODE
22. CATHODE A (DIGIT 2)
23. CATHODE F (DIGIT 2)
24. CATHODE B (DIGIT 2)
25. CATHODE G (DIGIT 2)
26. DIGIT 1 COMMON ANODE
27. CATHODE A (DIGIT 1)
28. CATHODE F (DIGIT 1)

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



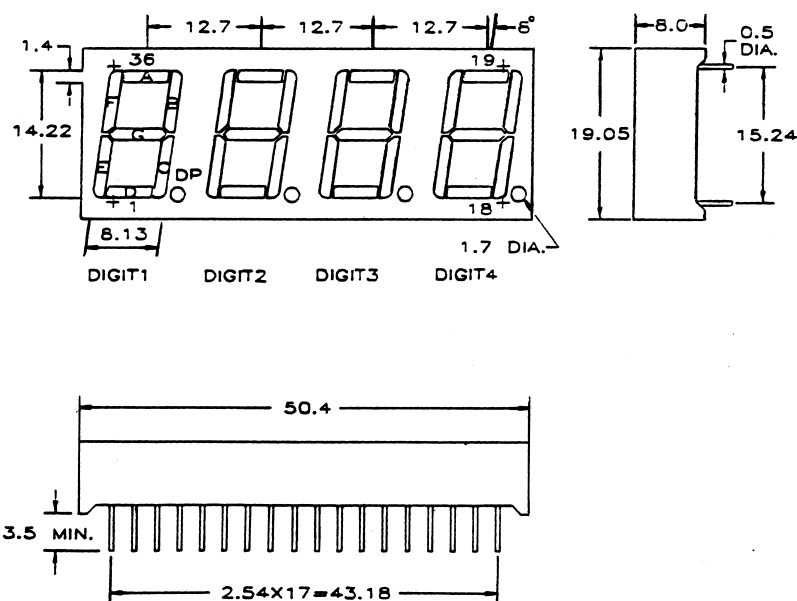
Optoelektronik

7-Segment Display 14mm/ Four Digit

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
LA5614-11EWRN	e012061	GaAsP	655	red	300 - 500	Common Anode
LC5614-11EWRN	e012392	GaAsP	655	red	300 - 500	Common Cathode
LA5654-11EWRN	e012393	GaP	700	red	500 - 800	Common Anode
LC5654-11EWRN	e012394	GaP	700	red	500 - 800	Common Cathode
LA5624-11EWRN	e012395	GaP	567	green	1700 - 2900	Common Anode
LC5624-11EWRN	e012396	GaP	567	green	1700 - 2900	Common Cathode
LA5634-11EWRN	e012397	GaAsP/GaP	585	yellow	1400 - 2300	Common Anode
LC5634-11EWRN	e012398	GaAsP/GaP	585	yellow	1400 - 2300	Common Cathode
LA5644-11EWRN	e012399	GaAsP/GaP	635	super-red	2000 - 3300	Common Anode
LC5644-11EWRN	e012400	GaAsP/GaP	635	super-red	2000 - 3300	Common Cathode
LA5644R-11RRRN	e012401	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Anode
LC5644R-11RRRN	e012402	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Common Cathode
LA5674-11EWRN	e012606	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Anode
LC5674-11EWRN	e012607	GaAlAs/GaAs	660	hyper-red	7700 - 23100	Common Cathode

Package Dimensions

LA-56X4-11-Series
LC-56X4-11-Series



LA56X4-11 COMMON ANODE		LC56X4-11 COMMON CATHODE	
PIN NO.	FUNCTION	PIN NO.	FUNCTION
1.	CATHODE E (DIGIT 1)	1.	ANODE E (DIGIT 1)
2.	CATHODE D (DIGIT 1)	2.	ANODE D (DIGIT 1)
3.	CATHODE C (DIGIT 1)	3.	ANODE C (DIGIT 1)
4.	CATHODE DP (DIGIT 1)	4.	ANODE DP (DIGIT 1)
5.	CATHODE E (DIGIT 2)	5.	ANODE E (DIGIT 2)
6.	CATHODE D (DIGIT 2)	6.	ANODE D (DIGIT 2)
7.	CATHODE G (DIGIT 2)	7.	ANODE G (DIGIT 2)
8.	CATHODE C (DIGIT 2)	8.	ANODE C (DIGIT 2)
9.	CATHODE DP (DIGIT 2)	9.	ANODE DP (DIGIT 2)
10.	CATHODE E (DIGIT 3)	10.	ANODE E (DIGIT 3)
11.	CATHODE D (DIGIT 3)	11.	ANODE D (DIGIT 3)
12.	CATHODE C (DIGIT 3)	12.	ANODE C (DIGIT 3)
13.	CATHODE DP (DIGIT 3)	13.	ANODE DP (DIGIT 3)
14.	CATHODE E (DIGIT 4)	14.	ANODE E (DIGIT 4)
15.	CATHODE D (DIGIT 4)	15.	ANODE D (DIGIT 4)
16.	CATHODE G (DIGIT 4)	16.	ANODE G (DIGIT 4)
17.	CATHODE C (DIGIT 4)	17.	ANODE C (DIGIT 4)
18.	CATHODE DP (DIGIT 4)	18.	ANODE DP (DIGIT 4)
19.	CATHODE B (DIGIT 4)	19.	ANODE B (DIGIT 4)
20.	CATHODE A (DIGIT 4)	20.	ANODE A (DIGIT 4)
21.	CATHODE F (DIGIT 4)	21.	ANODE F (DIGIT 4)
22.	DIGIT 4 COMMON ANODE	22.	DIGIT 4 COMMON CATHODE
23.	DIGIT 3 COMMON ANODE	23.	DIGIT 3 COMMON CATHODE
24.	CATHODE B (DIGIT 3)	24.	ANODE B (DIGIT 3)
25.	CATHODE A (DIGIT 3)	25.	ANODE A (DIGIT 3)
26.	CATHODE G (DIGIT 3)	26.	ANODE G (DIGIT 3)
27.	CATHODE F (DIGIT 3)	27.	ANODE F (DIGIT 3)
28.	CATHODE B (DIGIT 2)	28.	ANODE B (DIGIT 2)
29.	CATHODE A (DIGIT 2)	29.	ANODE A (DIGIT 2)
30.	CATHODE F (DIGIT 2)	30.	ANODE F (DIGIT 2)
31.	DIGIT 2 COMMON ANODE	31.	DIGIT 2 COMMON CATHODE
32.	DIGIT 1 COMMON ANODE	32.	DIGIT 1 COMMON CATHODE
33.	CATHODE B (DIGIT 1)	33.	ANODE B (DIGIT 1)
34.	CATHODE A (DIGIT 1)	34.	ANODE A (DIGIT 1)
35.	CATHODE G (DIGIT 1)	35.	ANODE G (DIGIT 1)
36.	CATHODE F (DIGIT 1)	36.	ANODE F (DIGIT 1)

1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



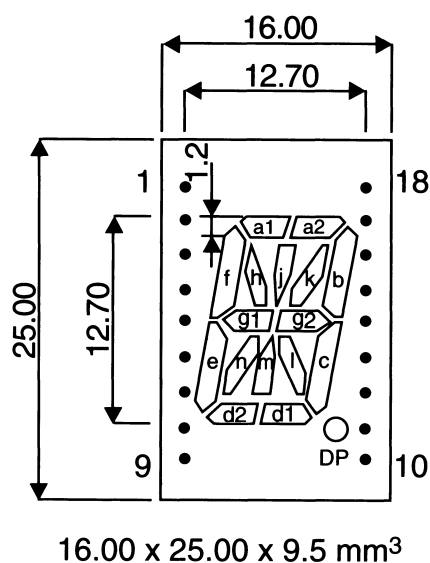
Optoelektronik

Alphanumeric Display 13mm

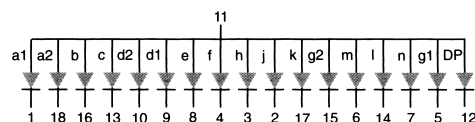
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
PSA05-11HWA	e012269	GaP	700	red	900 - 2200	Common Anode
PSC05-11HWA	e012270	GaP	700	red	900 - 2200	Common Cathode
PSA05-11GWA	e012271	GaP	565	green	2200 - 5600	Common Anode
PSC05-11GWA	e012272	GaP	565	green	2200 - 5600	Common Cathode
PSA05-11YWA	e012273	GaAsP/GaP	590	yellow	2200 - 5600	Common Anode
PSC05-11YWA	e012274	GaAsP/GaP	590	yellow	2200 - 5600	Common Cathode
PSA05-11EWA	e012275	GaAsP/GaP	625	super-red	2200 - 5600	Common Anode
PSC05-11EWA	e012276	GaAsP/GaP	625	super-red	2200 - 5600	Common Cathode
PSA05-11SRWA	e012277	GaAlAs	660	hyper-red	5600 - 21000	Common Anode
PSC05-11SRWA	e012278	GaAlAs	660	hyper-red	5600 - 21000	Common Cathode

Package Dimensions

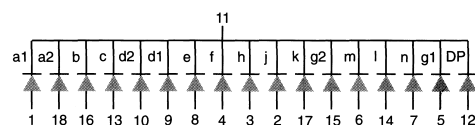
PSA05-11-Series
PSC05-11-Series



PSA05-11:



PSC05-11:



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



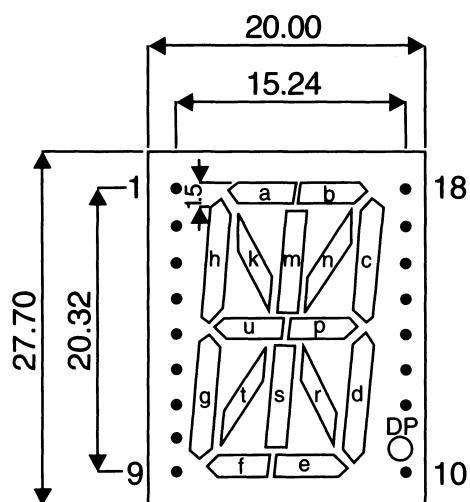
Optoelektronik

Alphanumeric Display 20mm

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
PSA08-11HWA	e012289	GaP	700	red	560 - 1400	Common Anode
PSC08-11HWA	e012290	GaP	700	red	560 - 1400	Common Cathode
PSA08-11GWA	e012291	GaP	565	green	1400 - 3600	Common Anode
PSC08-11GWA	e012292	GaP	565	green	1400 - 3600	Common Cathode
PSA08-11YWA	e012293	GaAsP/GaP	590	yellow	1400 - 3600	Common Anode
PSC08-11YWA	e012294	GaAsP/GaP	590	yellow	1400 - 3600	Common Cathode
PSA08-11EWA	e012295	GaAsP/GaP	625	super-red	2200 - 9000	Common Anode
PSC08-11EWA	e012296	GaAsP/GaP	625	super-red	2200 - 9000	Common Cathode
PSA08-11SRWA	e012297	GaAlAs	660	hyper-red	9000 - 21000	Common Anode
PSC08-11SRWA	e012298	GaAlAs	660	hyper-red	9000 - 21000	Common Cathode

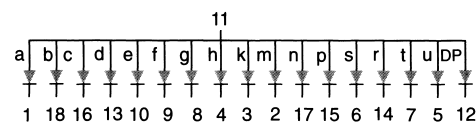
Package Dimensions

PSA08-11-Series
PSC08-11-Series

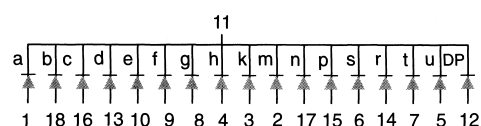


20.00 x 27.70 x 8.50 mm³

PSA08-11:



PSC08-11:

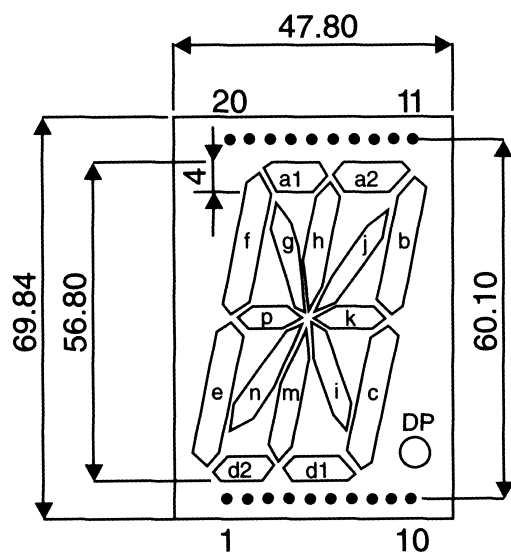


1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.

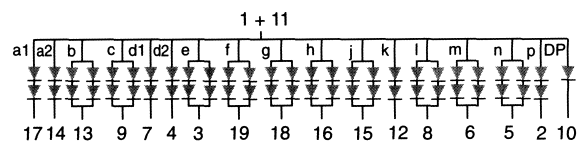


Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
PSA23-11HWA	e012299	GaP	700	red	900 - 2200	Common Anode
PSC23-11HWA	e012301	GaP	700	red	900 - 2200	Common Cathode
PSA23-11GWA	e012302	GaP	565	green	3600 - 9000	Common Anode
PSC23-11GWA	e012303	GaP	565	green	3600 - 9000	Common Cathode
PSA23-11YWA	e012304	GaAsP/GaP	590	yellow	3600 - 9000	Common Anode
PSC23-11YWA	e012306	GaAsP/GaP	590	yellow	3600 - 9000	Common Cathode
PSA23-11EWA	e012307	GaAsP/GaP	625	super-red	5600 - 14000	Common Anode
PSC23-11EWA	e012308	GaAsP/GaP	625	super-red	5600 - 14000	Common Cathode
PSA23-11SRWA	e012309	GaAlAs	660	hyper-red	14000 - 31000	Common Anode
PSC23-11SRWA	e012311	GaAlAs	660	hyper-red	14000 - 31000	Common Cathode

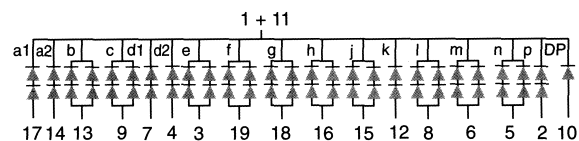
PSA23-11-Series
PSC23-11-Series



PSA23-11:



PSC23-11:



II-132



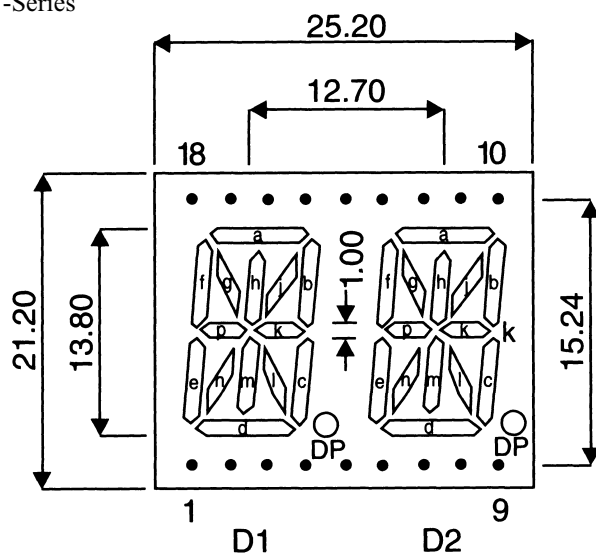
Optoelektronik

Alphanumeric Display 14mm/ Dual

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
PDA54-11HWA	e012279	GaP	700	red	360 - 1400	Common Anode
PDC54-11HWA	e012280	GaP	700	red	360 - 1400	Common Cathode
PDA54-11GWA	e012281	GaP	565	green	1400 - 3600	Common Anode
PDC54-11GWA	e012282	GaP	565	green	1400 - 3600	Common Cathode
PDA54-11YWA	e012283	GaAsP/GaP	590	yellow	1400 - 3600	Common Anode
PDC54-11YWA	e012284	GaAsP/GaP	590	yellow	1400 - 3600	Common Cathode
PDA54-11EWA	e012285	GaAsP/GaP	625	super-red	1400 - 5600	Common Anode
PDC54-11EWA	e012286	GaAsP/GaP	625	super-red	1400 - 5600	Common Cathode
PDA54-11SRWA	e012287	GaAlAs	660	hyper-red	3600 - 14000	Common Anode
PDC54-11SRWA	e012288	GaAlAs	660	hyper-red	3600 - 14000	Common Cathode

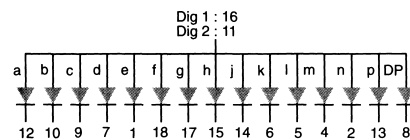
Package Dimensions

PDA54-11-Series
PDC54-11-Series

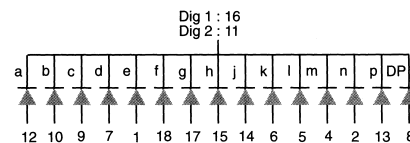


25.30 x 21.20 x 7.80 mm³

PDA54-11:



PDC54-11:



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



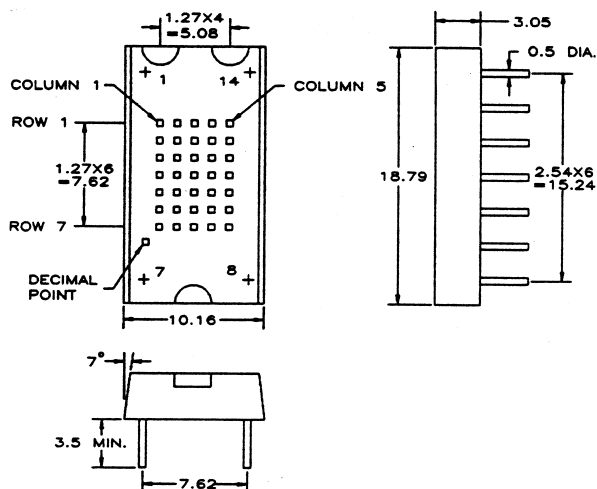
Optoelektronik

Dot Matrix Display 8mm/ 5 x 7

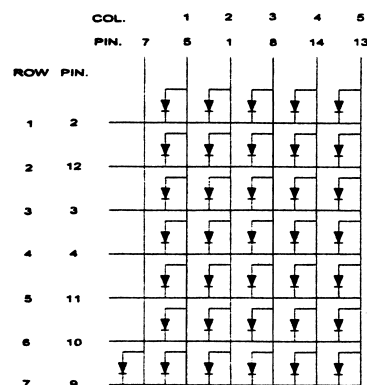
Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
LJ3511-11NRRN	e012610	GaAsP	655	red	200 - 400	Column Anode
LJ3511-21NRRN	e012313	GaAsP	655	red	200 - 400	Column Cathode
LJ3551-11NRRN	e012314	GaP	700	red	400 - 600	Column Anode
LJ3551-21NRRN	e012315	GaP	700	red	400 - 600	Column Cathode
LJ3521-11NGRN	e012316	GaP	567	green	1400 - 2300	Column Anode
LJ3521-21NGRN	e012317	GaP	567	green	1400 - 2300	Column Cathode
LJ3531-11NRRN	e012608	GaAsP/GaP	585	yellow	1100 - 1800	Column Anode
LJ3531-21NRRN	e012609	GaAsP/GaP	585	yellow	1100 - 1800	Column Cathode
LJ3541-11NORN	e012318	GaAsP/GaP	635	super-red	1600 - 2600	Column Anode
LJ3541-21NORN	e012319	GaAsP/GaP	635	super-red	1600 - 2600	Column Cathode
LJ3541R-11NRRN	e012320	GaAsP/GaP	635	hi.-eff.-red	1600 - 2600	Column Anode
LJ3541R-21NRRN	e012321	GaAsP/GaP	635	hi.-eff.-red	1600 - 2600	Column Cathode
LJ3571-11NRRN	e012611	GaAlAs/GaAs	660	hyper-red	6100 - 10000	Column Anode
LJ3571-21NRRN	e012612	GaAlAs/GaAs	660	hyper-red	6100 - 10000	Column Cathode

Package Dimensions

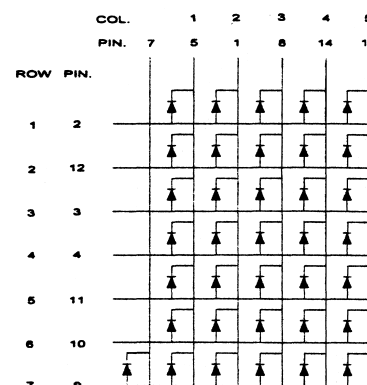
LJ35X1-11-Series
LJ35X1-21-Series



LJ35X1-11



LJ35X1-21



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

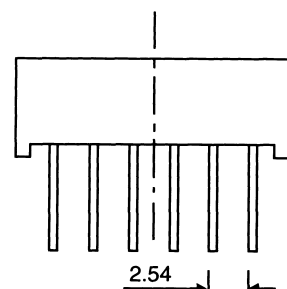
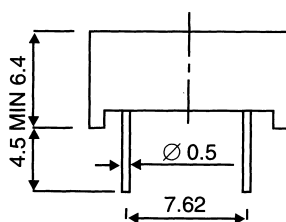
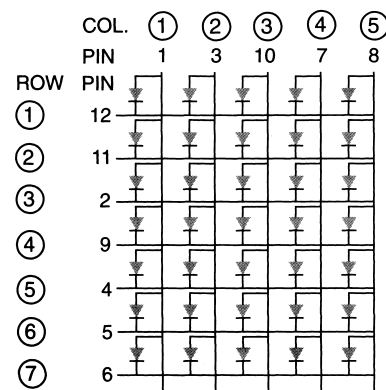
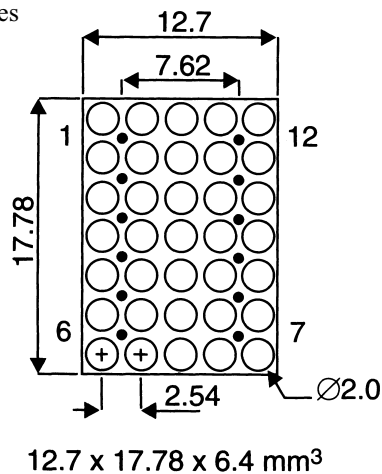
Dot Matrix Display 18mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
TA07-11HWA	e012322	GaP	700	red	360 - 900	Column Anode
TA07-11GWA	e012324	GaP	565	green	2200 - 5600	Column Anode
TA07-11YWA	e012326	GaAsP/GaP	590	yellow	2200 - 5600	Column Anode
TA07-11EWA	e012328	GaAsP/GaP	625	super-red	2200 - 5600	Column Anode
TA07-11SRWA	e012330	GaAlAs	660	hyper-red	5600 - 14000	Column Anode

LJ7011-12EWRN	e012755	GaAsP	655	red	300 - 500	Column Anode
LJ7051-12EWRN	e012756	GaP	700	red	500 - 800	Column Anode
LJ7021-12EWRN	e012757	GaP	567	green	1700 - 2900	Column Anode
LJ7031-12EWRN	e012758	GaAsP/GaP	585	yellow	1400 - 2300	Column Anode
LJ7041-12EWRN	e012759	GaAsP/GaP	635	super-red	2000 - 3300	Column Anode
LJ7041R-12RRRN	e012760	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Column Anode
LJ7071-12EWRN	e012761	GaAlAs/GaAs	660	hyper-red	7700 - 18500	Column Anode

Package Dimensions

TA07-11-Series
LJ70X1-12-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

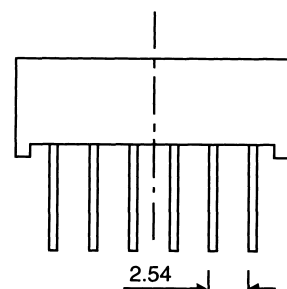
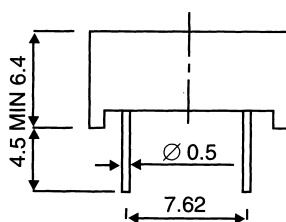
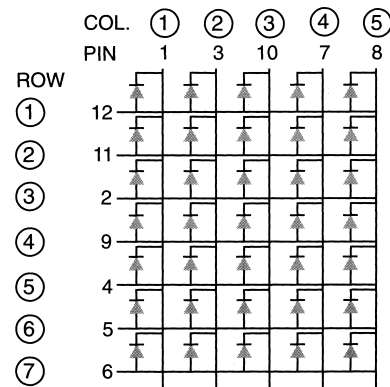
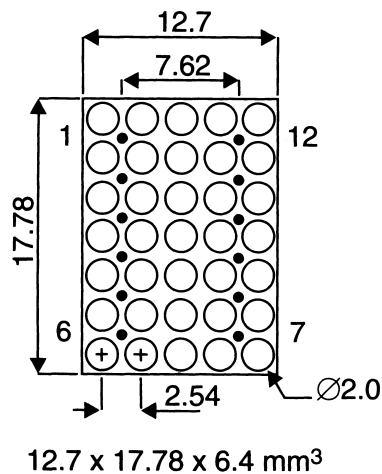
Dot Matrix Display 18mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TC07-11HWA	e012323	GaP	700	red	360 - 900	Column Cathode
TC07-11GWA	e012325	GaP	565	green	2200 - 5600	Column Cathode
TC07-11YWA	e012327	GaAsP/GaP	590	yellow	2200 - 5600	Column Cathode
TC07-11EWA	e012329	GaAsP/GaP	625	super-red	2200 - 5600	Column Cathode
TC07-11SRWA	e012331	GaAlAs	660	hyper-red	5600 - 14000	Column Cathode

LJ7011-22EWRN	e012762	GaAsP	655	red	300 - 500	Column Cathode
LJ7051-22EWRN	e012763	GaP	700	red	500 - 800	Column Cathode
LJ7021-22EWRN	e012437	GaP	567	green	1700 - 2900	Column Cathode
LJ7031-22EWRN	e012764	GaAsP/GaP	585	yellow	1400 - 2300	Column Cathode
LJ7041-22EWRN	e012765	GaAsP/GaP	635	super-red	2000 - 3300	Column Cathode
LJ7041R-22RRRN	e012766	GaAsP/GaP	635	hi.-eff.-red	2000 - 3300	Column Cathode
LJ7071-22EWRN	e012767	GaAlAs/GaAs	660	hyper-red	7700 - 18500	Column Cathode

Package Dimensions

TC07-11-Series
LJ70X1-22-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

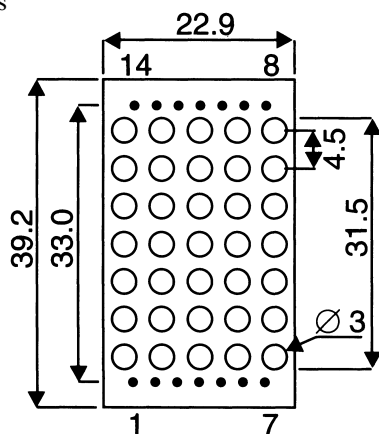
Dot Matrix Display 30mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TA12-11HWA	e012332	GaP	700	red	560 - 1400	Column Anode
TA12-11GWA	e012334	GaP	565	green	2200 - 5600	Column Anode
TA12-11YWA	e012336	GaAsP/GaP	590	yellow	2200 - 5600	Column Anode
TA12-11EWA	e012338	GaAsP/GaP	625	super-red	3600 - 9000	Column Anode
TA12-11SRWA	e012340	GaAlAs	660	hyper-red	5600 - 14000	Column Anode

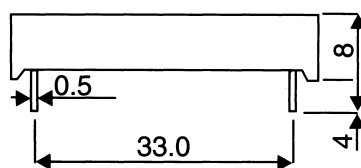
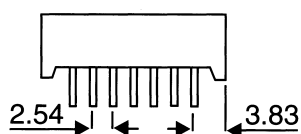
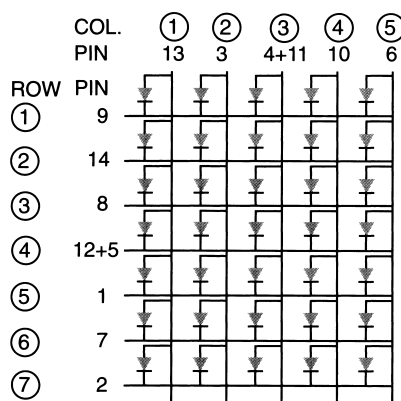
LJ5711-11EWRN	e012768	GaAsP	655	red	430 - 700	Column Anode
LJ5751-11EWRN	e012769	GaP	700	red	700 - 1100	Column Anode
LJ5721-11EWRN	e012770	GaP	567	green	2400 - 4000	Column Anode
LJ5721-11HE EWRN	e012828	GaP	567	hi.-eff.-green	7000 - 17100	Column Anode
LJ5731-11EWRN	e012829	GaAsP/GaP	585	yellow	2200 - 5100	Column Anode
LJ5731-11M1 EWRN	e012830	GaAsP/GaP	595	super-yellow	5700 - 13300	Column Anode
LJ5741-11EWRN	e012771	GaAsP/GaP	635	super-red	2800 - 4600	Column Anode
LJ5741R-11RRRN	e012772	GaAsP/GaP	635	hi.-eff.-red	2800 - 4600	Column Anode
LJ5771-11EWRN	e012773	GaAlAs/GaAs	660	hyper-red	10800 - 18000	Column Anode

Package Dimensions

TA12-11-Series
LJ57X1-11-Series



22.9 x 39.2 x 8 mm³



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

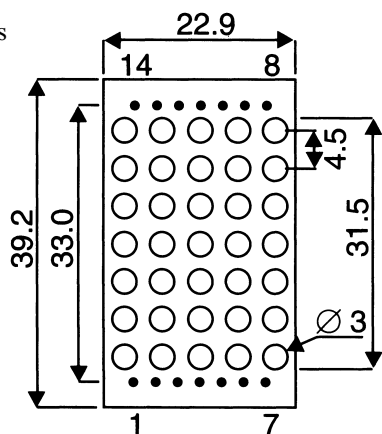
Dot Matrix Display 30mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TC12-11HWA	e012333	GaP	700	red	560 - 1400	Column Cathode
TC12-11GWA	e012335	GaP	565	green	2200 - 5600	Column Cathode
TC12-11YWA	e012337	GaAsP/GaP	590	yellow	2200 - 5600	Column Cathode
TC12-11EWA	e012339	GaAsP/GaP	625	super-red	3600 - 9000	Column Cathode
TC12-11SRWA	e012341	GaAlAs	660	hyper-red	5600 - 14000	Column Cathode

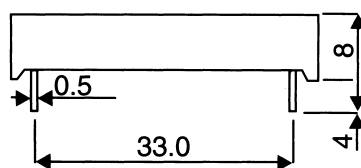
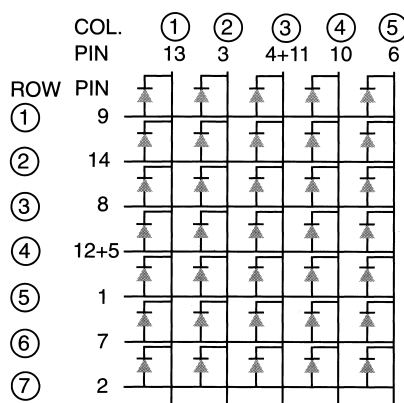
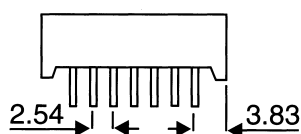
LJ5711-21EWRN	e012774	GaAsP	655	red	430 - 700	Column Cathode
LJ5751-21EWRN	e012776	GaP	700	red	700 - 1100	Column Cathode
LJ5721-21EWRN	e012775	GaP	567	green	2400 - 4000	Column Cathode
LJ5721-21HE EWRN	e012831	GaP	567	hi.-eff.-green	7000 - 17100	Column Cathode
LJ5731-21EWRN	e012832	GaAsP/GaP	585	yellow	2200 - 5100	Column Cathode
LJ5731-21M1 EWRN	e012833	GaAsP/GaP	595	super-yellow	5700 - 13300	Column Cathode
LJ5741-21EWRN	e012777	GaAsP/GaP	635	super-red	2800 - 4600	Column Cathode
LJ5741R-21RRRN	e012778	GaAsP/GaP	635	hi.-eff.-red	2800 - 4600	Column Cathode
LJ5771-21EWRN	e012779	GaAlAs/GaAs	660	hyper-red	10800 - 18000	Column Cathode

Package Dimensions

TC12-11-Series
LJ57X1-21-Series



22.9 x 39.2 x 8 mm³



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

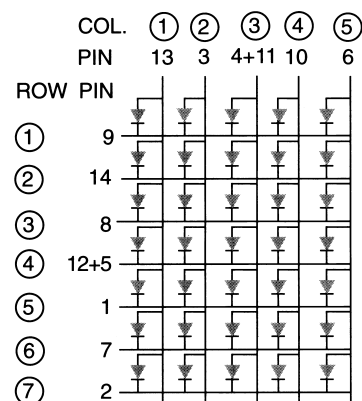
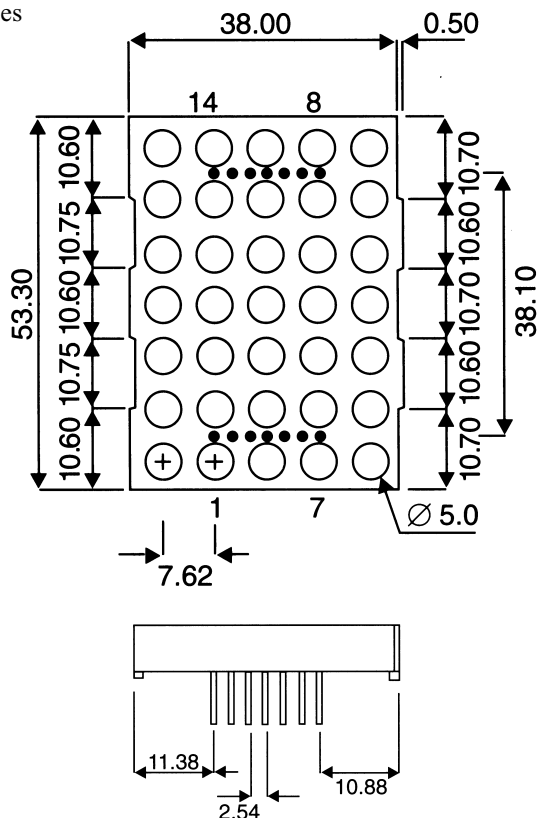
Dot Matrix Display 50mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TA20-11HWA	e012342	GaP	700	red	560 - 1400	Column Anode
TA20-11GWA	e012344	GaP	565	green	2200 - 5600	Column Anode
TA20-11YWA	e012346	GaAsP/GaP	590	yellow	2200 - 5600	Column Anode
TA20-11EWA	e012348	GaAsP/GaP	625	super-red	3600 - 9000	Column Anode
TA20-11SRWA	e012350	GaAlAs	660	hyper-red	9000 - 31000	Column Anode

LJ2051-11EWRN	e012780	GaP	700	red	900 - 1400	Column Anode
LJ2021-11EWRN	e012781	GaP	567	green	3100 - 5100	Column Anode
LJ2021-11HE EWRN	e012825	GaP	567	hi.-eff.-green	9300 - 18700	Column Anode
LJ2031-11EWRN	e012834	GaAsPGaP	585	yellow	2900 - 6900	Column Anode
LJ2031-11M1 EWRN	e012835	GaAsPGaP	595	super-yellow	7700 - 17900	Column Anode
LJ2041-11EWRN	e012782	GaAsP/GaP	635	super-red	3500 - 5900	Column Anode
LJ2041R-11RRRN	e012443	GaAsP/GaP	635	hi.-eff.-red	3500 - 5900	Column Anode
LJ2071-11EWRN	e012783	GaAlAs/GaAs	660	hyper-red	9600 - 33100	Column Anode

Package Dimensions

TA20-11-Series
LJ20X1-11Series



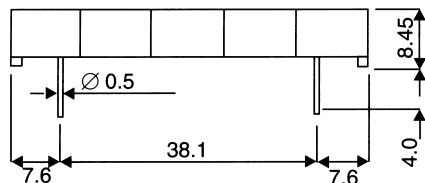
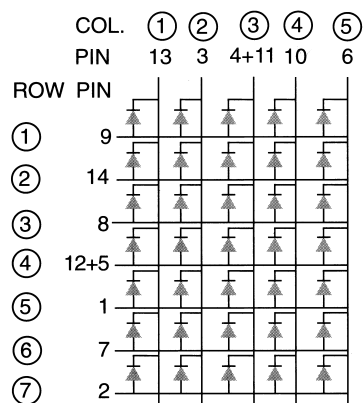
1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
TC20-11HWA	e012343	GaP	700	red	560 - 1400	Column Cathode
TC20-11GWA	e012345	GaP	565	green	2200 - 5600	Column Cathode
TC20-11YWA	e012347	GaAsP/GaP	590	yellow	2200 - 5600	Column Cathode
TC20-11EWA	e012349	GaAsP/GaP	625	super-red	3600 - 9000	Column Cathode
TC20-11SRWA	e012351	GaAlAs	660	hyper-red	9000 - 31000	Column Cathode

LJ2051-21EWRN	e012784	GaP	700	red	900 - 1400	Column Cathode
LJ2021-21EWRN	e012785	GaP	567	green	3100 - 5100	Column Cathode
LJ2021-21HE EWRN	e012836	GaP	567	hi.-eff.-green	9300 - 18700	Column Cathode
LJ2031-21EWRN	e012837	GaAsP/GaP	585	yellow	2900 - 6900	Column Cathode
LJ2031-21M1 EWRN	e012838	GaAsP/GaP	595	super-yellow	7700 - 17900	Column Cathode
LJ2041-21EWRN	e012786	GaAsP/GaP	635	super-red	3500 - 5900	Column Cathode
LJ2041R-21RRRN	e012787	GaAsP/GaP	635	hi.-eff.-red	3500 - 5900	Column Cathode
LJ2071-21EWRN	e012788	GaAlAs/GaAs	660	hyper-red	9600 - 33100	Column Cathode

TC20-11-Series
LJ20X1-21-Series



II-140



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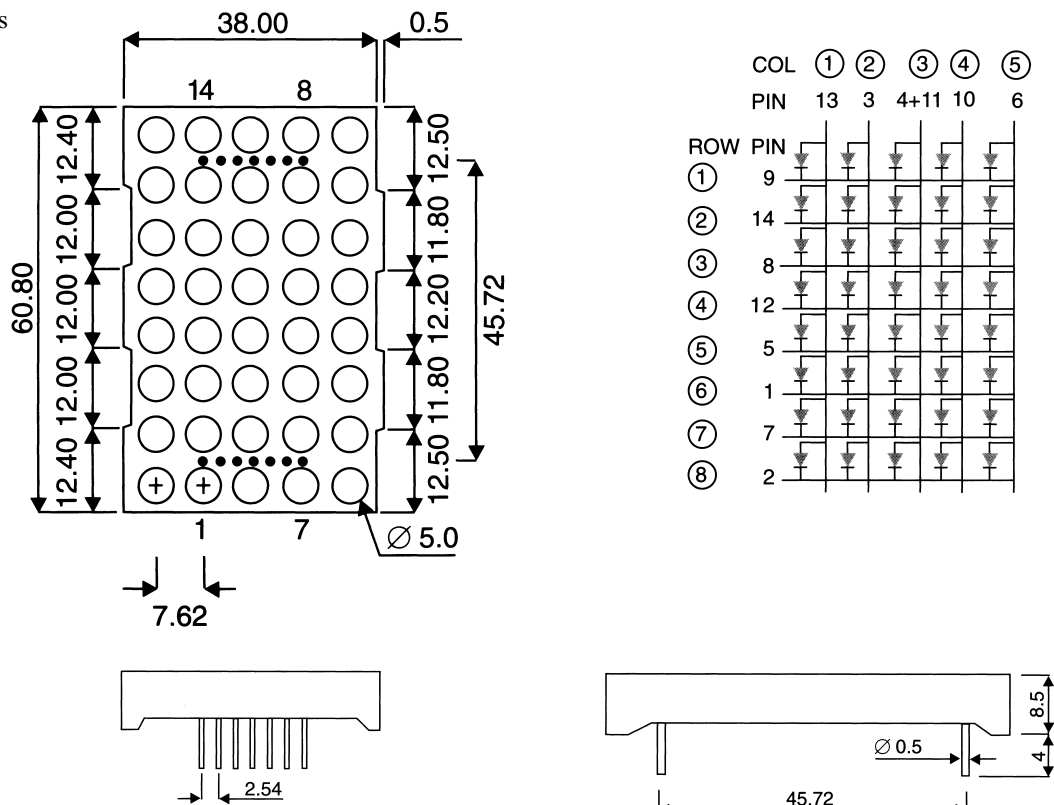
Dot Matrix Display 60mm/ 5 x 8

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
TA24-11HWA	e012352	GaP	700	red	560 - 1400	Column Anode
TA24-11GWA	e012354	GaP	565	green	2200 - 5600	Column Anode
TA24-11YWA	e012356	GaAsP/GaP	590	yellow	2200 - 5600	Column Anode
TA24-11EWA	e012358	GaAsP/GaP	625	super-red	3600 - 9000	Column Anode
TA24-11SRWA	e012360	GaAlAs	660	hyper-red	14000 - 31000	Column Anode

LJ2451-13EWRN	e012789	GaP	700	red	950 - 2240	Column Anode
LJ2421-13EWRN	e012790	GaP	567	green	3450 - 8050	Column Anode
LJ2421-13HE EWRN	e012791	GaP	567	hi.-eff.-green	9300 - 18700	Column Anode
LJ2431-13EWRN	e012792	GaAsP/GaP	585	yellow	2800 - 6650	Column Anode
LJ2431-13M1 EWRN	e012793	GaAsP/GaP	595	super-yellow	7400 - 17300	Column Anode
LJ2441-13EWRN	e012794	GaAsP/GaP	635	super-red	4000 - 9300	Column Anode
LJ2471-13EWRN	e012069	GaAlAs	660	hyper-red	15500 - 36300	Column Anode

Package Dimensions

TA24-11-Series
LJ24X1-13-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

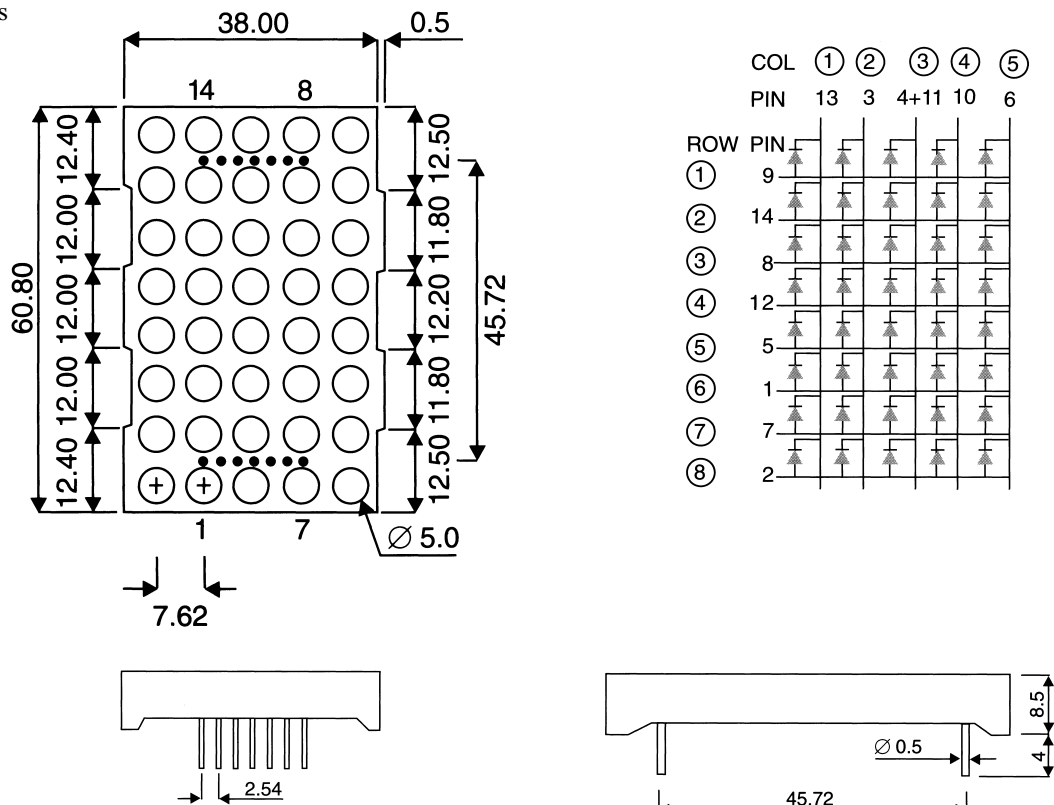
Dot Matrix Display 60mm/ 5 x 8

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
TC24-11HWA	e012353	GaP	700	red	560 - 1400	Column Cathode
TC24-11GWA	e012355	GaP	565	green	2200 - 5600	Column Cathode
TC24-11YWA	e012357	GaAsP/GaP	590	yellow	2200 - 5600	Column Cathode
TC24-11EWA	e012359	GaAsP/GaP	625	super-red	3600 - 9000	Column Cathode
TC24-11SRWA	e012361	GaAlAs	660	hyper-red	14000 - 31000	Column Cathode

LJ2451-23EWRN	e012795	GaP	700	red	950 - 2240	Column Cathode
LJ2421-23EWRN	e012796	GaP	567	green	3450 - 8050	Column Cathode
LJ2421-23HE EWRN	e012797	GaP	567	hi.-eff.-green	9300 - 18700	Column Cathode
LJ2431-23EWRN	e012798	GaAsP/GaP	585	yellow	2800 - 6650	Column Cathode
LJ2431-23M1 EWRN	e012799	GaAsP/GaP	595	super-yellow	7400 - 17300	Column Cathode
LJ2441-23EWRN	e012800	GaAsP/GaP	635	super-red	4000 - 9300	Column Cathode
LJ2471-23EWRN	e012801	GaAlAs	660	hyper-red	15500 - 36300	Column Cathode

Package Dimensions

TC24-11-Series
LJ24X1-23-Series





Optoelektronik

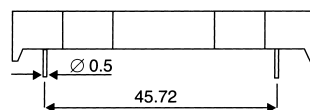
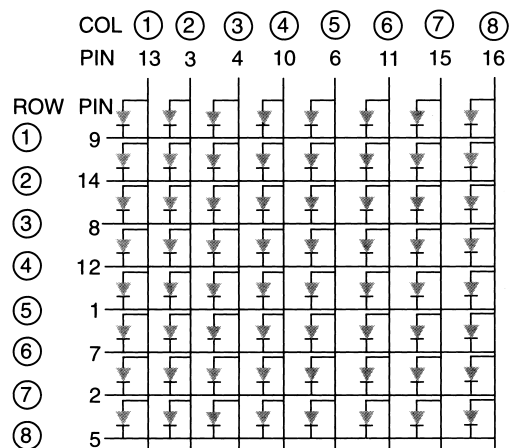
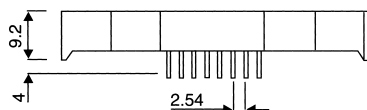
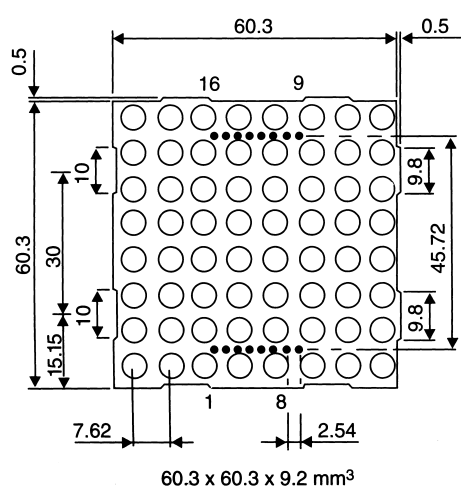
Dot Matrix Display 60mm/ 8 x 8

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] I_F =10mA Min. - Typ.	Description
TA23-11HWA	e012362	GaP	700	red	560 - 1400	Column Anode
TA23-11GWA	e012364	GaP	565	green	2200 - 5600	Column Anode
TA23-11YWA	e012366	GaAsP/GaP	590	yellow	2200 - 5600	Column Anode
TA23-11EWA	e012368	GaAsP/GaP	625	super-red	3600 - 9000	Column Anode
TA23-11SRWA	e012370	GaAlAs	660	hyper-red	14000 - 31000	Column Anode

LJ2351-11EWRW	e012802	GaP	700	red	950 - 1400	Column Anode
LJ2321-11EWRW	e012803	GaP	567	green	3100 - 5100	Column Anode
LJ2321-11HE EWRW	e012470	GaP	567	hi.-eff.-green	9300 - 18700	Column Anode
LJ2331-11EWRW	e012804	GaAsP/GaP	585	yellow	2800 - 5800	Column Anode
LJ2331-11M1 EWRW	e012805	GaAsP/GaP	595	super-yellow	7400 - 14800	Column Anode
LJ2341-11EWRW	e012806	GaAsP/GaP	635	super-red	4000 - 7900	Column Anode
LJ2371-11EWRW	e012807	GaAlAs	660	hyper-red	15500 - 36300	Column Anode

Package Dimensions

TA23-11-Series
LJ23X1-11-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

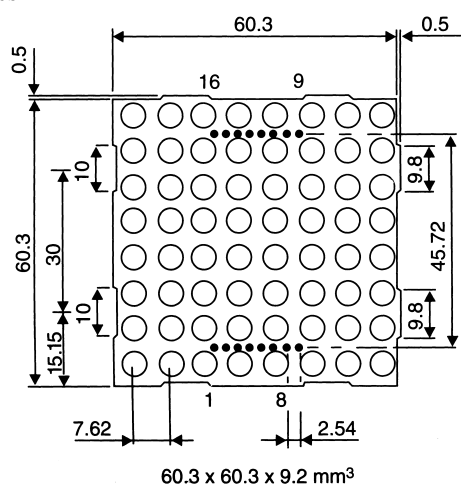
Dot Matrix Display 60mm/ 8 x 8

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TC23-11HWA	e012363	GaP	700	red	560 - 1400	Column Cathode
TC23-11GWA	e012365	GaP	565	green	2200 - 5600	Column Cathode
TC23-11YWA	e012367	GaAsP/GaP	590	yellow	2200 - 5600	Column Cathode
TC23-11EWA	e012369	GaAsP/GaP	625	super-red	3600 - 9000	Column Cathode
TC23-11SRWA	e012371	GaAlAs	660	hyper-red	14000 - 31000	Column Cathode

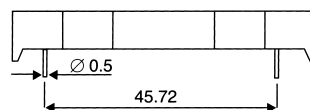
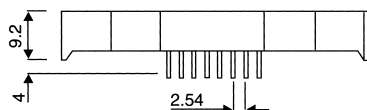
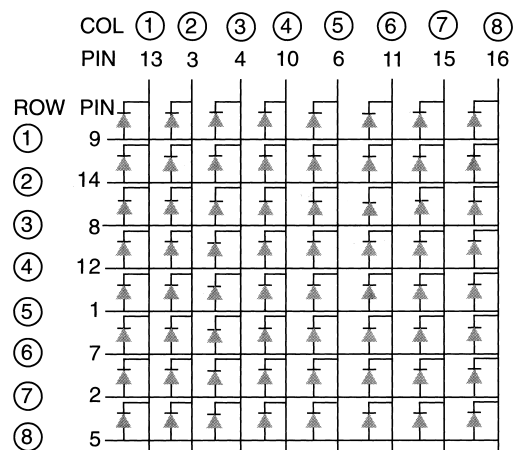
LJ2351-21EWRW	e012808	GaP	700	red	950 - 1400	Column Cathode
LJ2321-21EWRW	e012809	GaP	567	green	3100 - 5100	Column Cathode
LJ2321-21HE EWRW	e012810	GaP	567	hi.-eff.-green	9300 - 18700	Column Cathode
LJ2331-21EWRW	e012811	GaAsP/GaP	585	yellow	2800 - 5800	Column Cathode
LJ2331-21M1 EWRW	e012812	GaAsP/GaP	595	super-yellow	7400 - 14800	Column Cathode
LJ2341-21EWRW	e012813	GaAsP/GaP	635	super-red	4000 - 7900	Column Cathode
LJ2371-21EWRW	e012814	GaAlAs	660	hyper-red	15500 - 36300	Column Cathode

Package Dimensions

TC23-11-Series
LJ23X1-21-Series



60.3 x 60.3 x 9.2 mm³



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

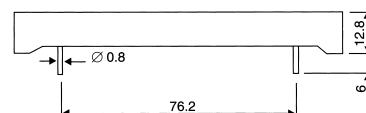
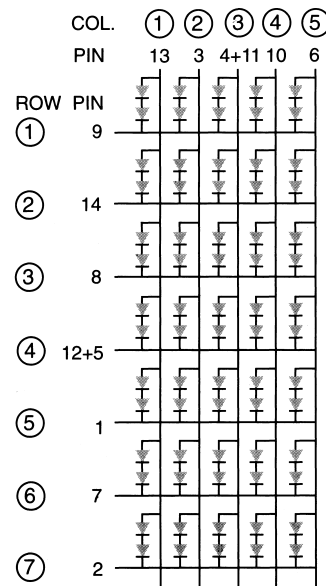
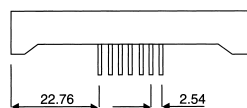
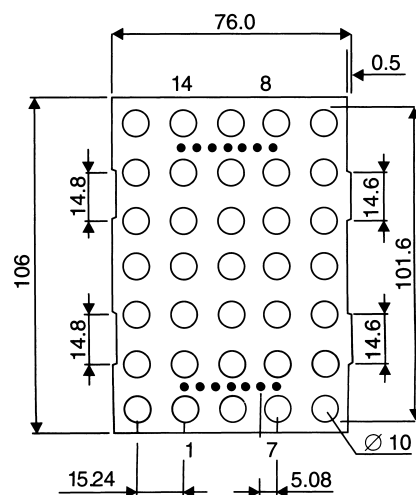
Dot Matrix Display 100mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_V [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TA40-11EWA	e012372	GaAsP/GaP	625	super-red	3600 - 9000	Column Anode
TA40-11GWA	e012374	GaP	565	green	2200 - 5600	Column Anode
TA40-11YWA	e012376	GaAsP/GaP	590	yellow	2200 - 5600	Column Anode
TA40-11SRWA	e012378	GaAlAs	660	hyper-red	14000 - 31000	Column Anode

LJ4051-12EWEW	e012815	GaP	700	red	1200 - 2500	Column Anode
LJ4021-12EWEW	e012816	GaP	567	green	4600 - 9200	Column Anode
LJ4021-12HE EWEW	e012557	GaP	567	hi.-eff.-green	12400 - 24600	Column Anode
LJ4031-12EWEW	e012817	GaAsP/GaP	585	yellow	3700 - 7600	Column Anode
LJ4031-12M1 EWEW	e012818	GaAsP/GaP	595	super-yellow	9800 - 20000	Column Anode
LJ4041-12EWEW	e012819	GaAsP/GaP	635	super-red	5300 - 10600	Column Anode
LJ4071-12EWEW	e012519	GaAlAs	660	hyper-red	20500 - 41000	Column Anode

Package Dimensions

TA40-11-Series
LJ40X1-12-Series



1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

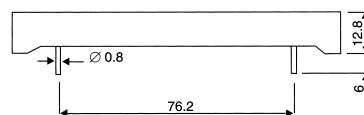
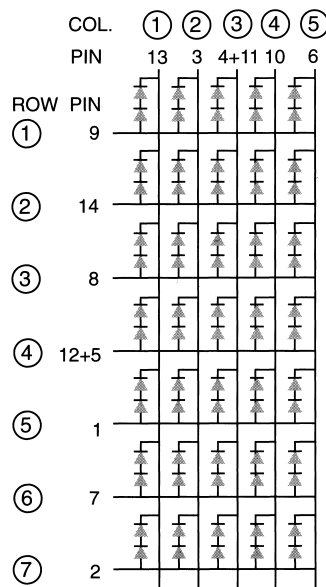
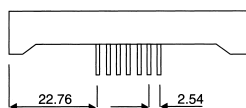
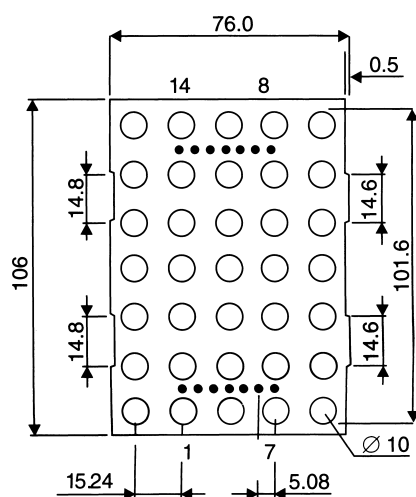
Dot Matrix Display 100mm/ 5 x 7

Type	Part-No.	Material	Wave- Length λ_{Peak} [nm]	Emitting Colour	Luminous Intensity I_v [μcd] $I_F=10\text{mA}$ Min. - Typ.	Description
TC40-11EWA	e012373	GaAsP/GaP	625	super-red	3600 - 9000	Column Cathode
TC40-11GWA	e012375	GaP	565	green	2200 - 5600	Column Cathode
TC40-11YWA	e012377	GaAsP/GaP	590	yellow	2200 - 5600	Column Cathode
TC40-11SRWA	e012379	GaAlAs	660	hyper-red	14000 - 31000	Column Cathode

LJ4051-22EWEW	e012820	GaP	700	red	1200 - 2500	Column Cathode
LJ4021-22EWEW	e012821	GaP	567	green	4600 - 9200	Column Cathode
LJ4021-22HE EWEW	e012822	GaP	567	hi.-eff.-green	12400 - 24600	Column Cathode
LJ4031-22EWEW	e012823	GaAsP/GaP	585	yellow	3700 - 7600	Column Cathode
LJ4031-22M1 EWEW	e012824	GaAsP/GaP	595	super-yellow	9800 - 20000	Column Cathode
LJ4041-22EWEW	e012826	GaAsP/GaP	635	super-red	5300 - 10600	Column Cathode
LJ4071-22EWEW	e012827	GaAlAs	660	hyper-red	20500 - 41000	Column Cathode

Package Dimensions

TC40-11-Series
LJ40X1-22-Series



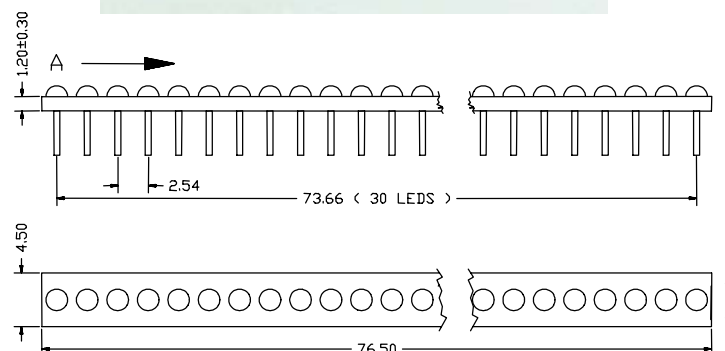
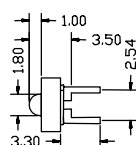
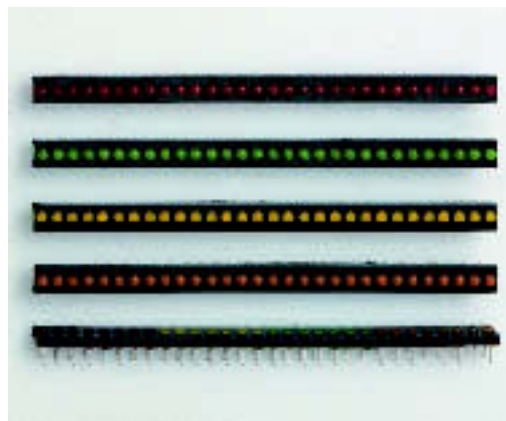
1. All dimensions are in [mm], Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.



Optoelektronik

WU-30...M...
Miniatur LED-Reihe
Miniature LED-Array
Mit miniaur LEDs
30-fach max.
30-fold max.

Typenbez. Type Design.	Art.Nr. Part.No.		Typenbez. Type Design.	Art.Nr. Part.No.		Typenbez. Type Design.	Art.Nr. Part.No.		Typenbez. Type Design.	Art.Nr. Part No.	
WU-2-M- 2R	10009		WU-10-M-10R	10165		WU-18-M-18R	10330		WU-26-M-26R	10490	
2G	10010		10G	10170		18G	10335		26G	10495	
2Y	10015		10Y	10175		18Y	10340		26Y	10500	
2O	10020		10O	10180		18O	10345		26O	10505	
WU-3-M- 3R	10025		WU-11-M-11R	10185		WU-19-M-19R	10350		WU-27-M-27R	10510	
3G	10030		11G	10190		19G	10355		27G	10515	
3Y	10035		11Y	10195		19Y	10360		27Y	10520	
3O	10040		11O	10200		19O	10365		27O	10525	
WU-4-M- 4R	10045		WU-12-M-12R	10205		WU-20-M-20R	10370		WU-28-M-28R	10530	
4G	10050		12G	10210		20G	10375		28G	10535	
4Y	10055		12Y	10215		20Y	10380		28Y	10540	
4O	10060		12O	10220		20O	10385		28O	10545	
WU-5-M- 5R	10065		WU-13-M-13R	10225		WU-21-M-21R	10390		WU-29-M-29R	10550	
5G	10070		13G	10230		21G	10395		29G	10555	
5Y	10075		13Y	10235		21Y	10400		29Y	10560	
5O	10080		13O	10240		21O	10405		29O	10565	
WU-6-M- 6R	10085		WU-14-M-14R	10245		WU-22-M-22R	10410		WU-30-M-30R	10570	
6G	10090		14G	10250		22G	10415		30G	10575	
6Y	10095		14Y	10255		22Y	10420		30Y	10580	
6O	10100		14O	10260		22O	10425		30O	10585	
WU-7-M- 7R	10105		WU-15-M-15R	10265		WU-23-M-23R	10430				
7G	10110		15G	10270		23G	10435				
7Y	10115		15Y	10275		23Y	10440				
7O	10120		15O	10280		23O	10445				
WU-8-M- 8R	10125		WU-16-M-16R	10285		WU-24-M-24R	10450				
8G	10130		16G	10295		24G	10455				
8Y	10135		16Y	10300		24Y	10460				
8O	10140		16O	10305		24O	10465				
WU-9-M- 9R	10145		WU-17-M-17R	10310		WU-25-M-25R	10470				
9G	10150		17G	10315		25G	10475				
9Y	10155		17Y	10320		25Y	10480				
9O	10160		17O	10325		25O	10485				



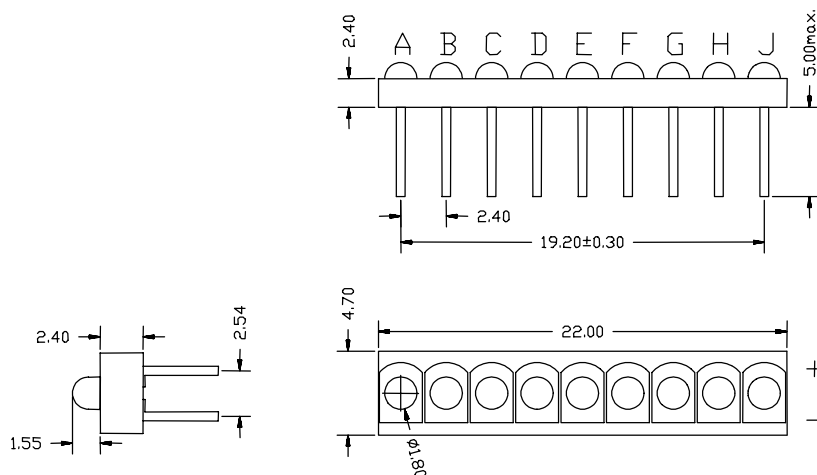
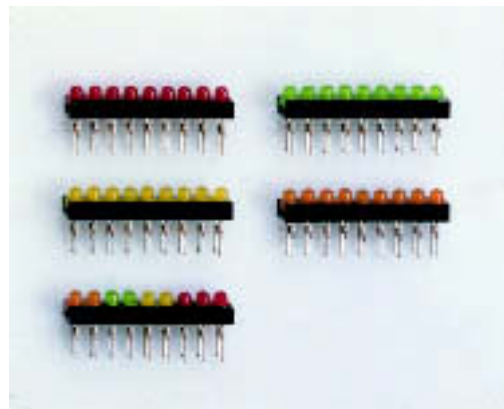
Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-9...MS...
 Miniatur LED-Reihe
 Miniature LED-Array
 mit miniatur LEDs
 with miniature LEDs
 9-fach max.
 9-fold max.

Typenbez. Type Design.	Art.Nr. Part No.		Typenbez. Type Design.	Art.Nr. Part No.		Typenbez. Type Design.	Art.Nr. Part No.	
WU-3-MS-3R	10670		WU-6-MS-6R	10730		WU-9-MS-9R	10790	
3G	10675		6G	10735		9G	10795	
3Y	10680		6Y	10740		9Y	10800	
3O	10685		6O	10745		9O	10805	
WU-4-MS-4R	10690		WU-7-MS-7R	10750				
4G	10695		7G	10755				
4Y	10700		7Y	10760				
4O	10705		7O	10765				
WU-5-MS-5R	10710		WU-8-MS-8R	10770				
5G	10715		8G	10775				
5Y	10720		8Y	10780				
5O	10725		8O	10785				



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1905...

LED Halter für Leiterplatten-Montage

LED holder for PCB

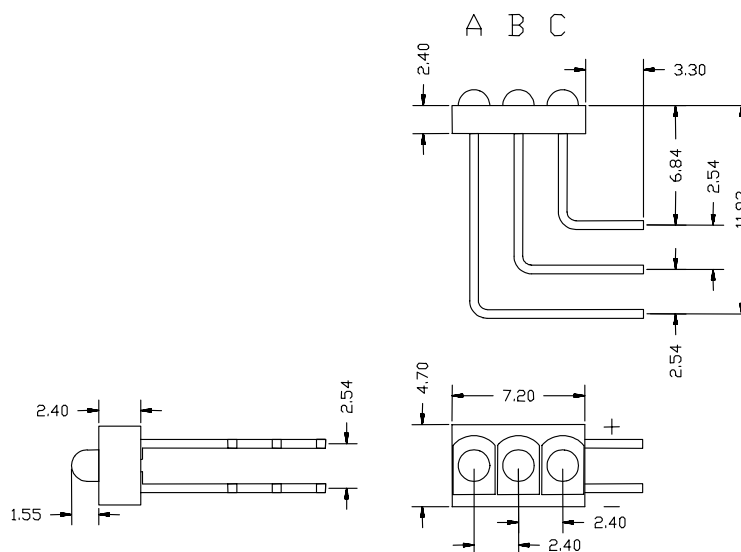
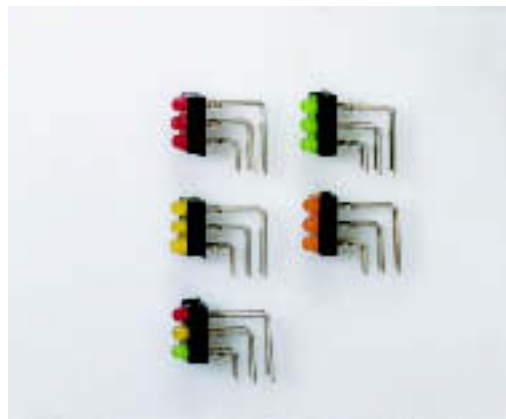
mit miniatur LEDs

with miniature LEDs

3-fach

3-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C
WU-1905.8720LC	10610			
WU-1905.2220LC	10615			
WU-1905.7770LC	10620			
WU-1905.8880LC	10625			
WU-1905.6660LC	10626			



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-2300...

LED Halter für Leiterplatten-Montage

LED holder for PCB

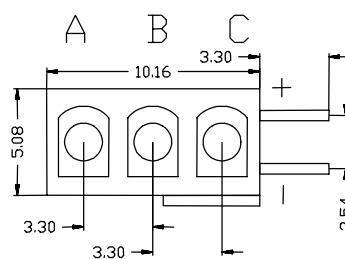
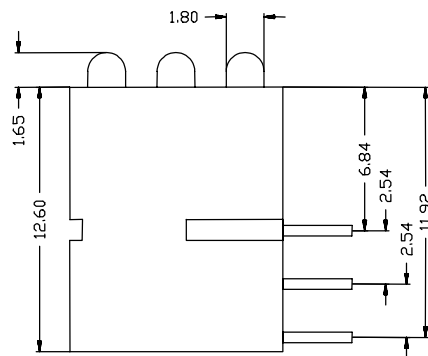
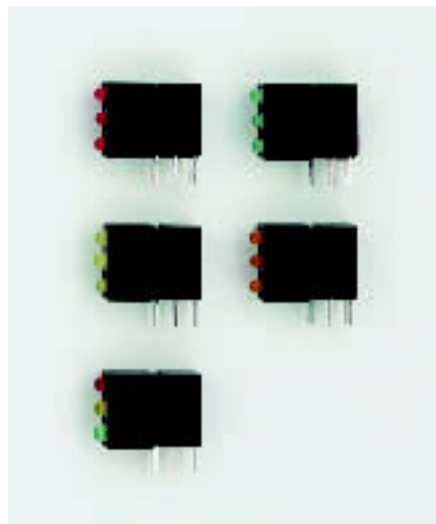
mit miniatur LEDs

with miniature LEDs

3-fach

3-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C
WU-2301	10590			
WU-2302	10595			
WU-2303	10600			
WU-2304	10605			
WU-2305	10606			



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-184...

LED Halter für Leiterplatten-Montage

LED holder for PCB

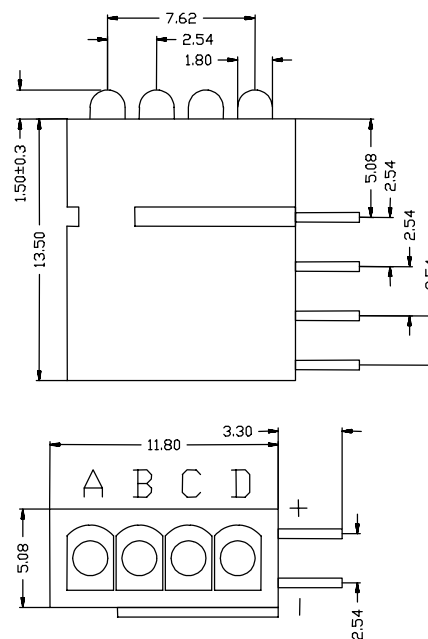
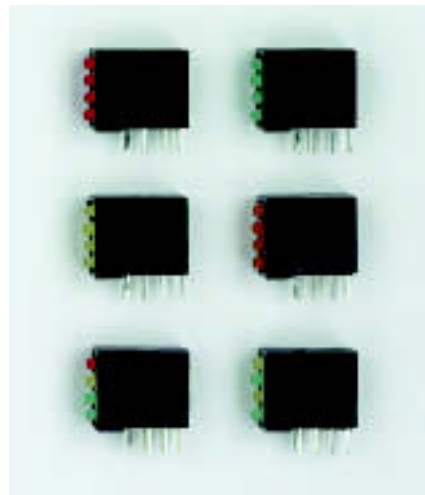
mit miniatur LEDs

with miniature LEDs

4-fach

4-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D
WU-1841	18100				
WU-1842	18101				
WU-1843	18102				
WU-1844	18103				



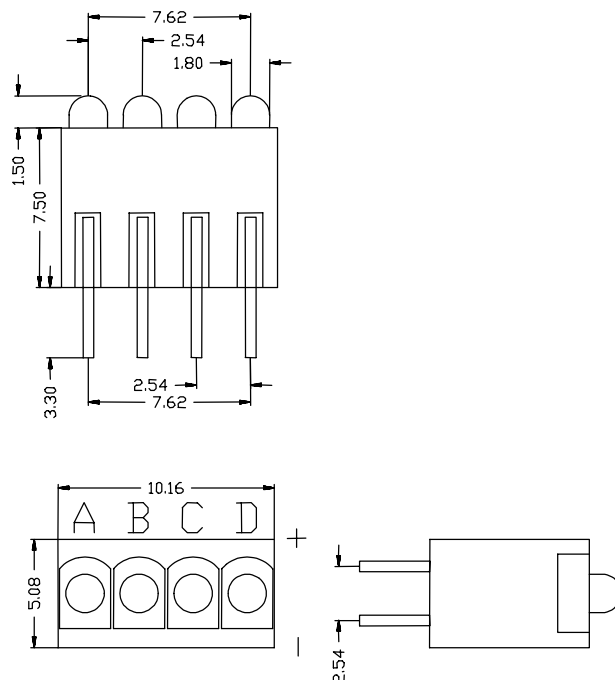
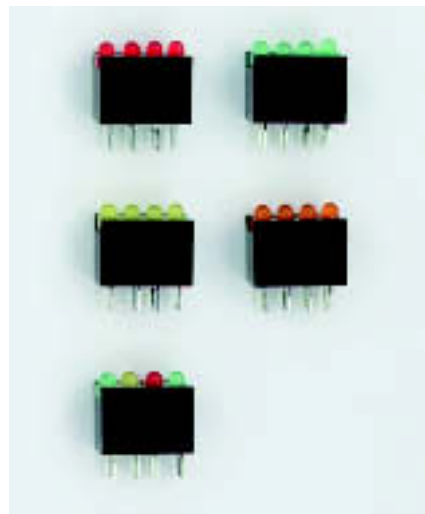
Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1840...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB
 mit miniatur LEDs
 with miniature LEDs
 4-fach
 4-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D
WU-18401	18104				
WU-18402	18105				
WU-18403	18106				
WU-18404	18107				



Unit: [mm] Tolerance: ± 0.25

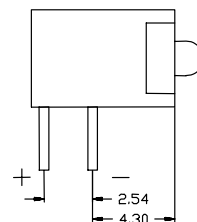
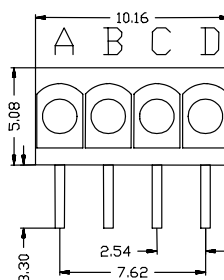
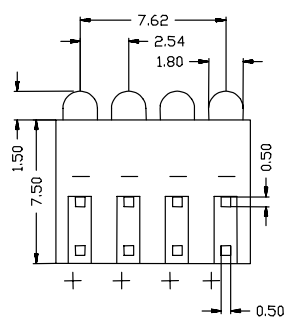
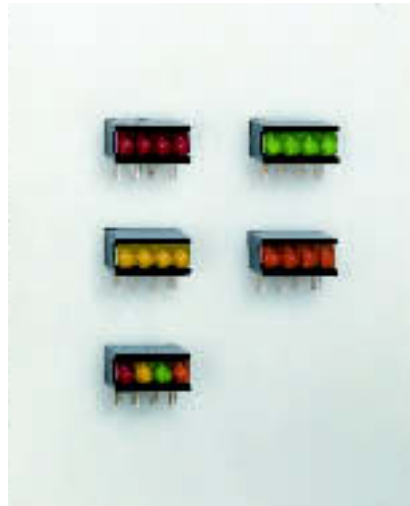


Optoelektronik

WU-18400...

LED Halter für Leiterplatten-Montage
LED holder for PCB
mit miniatur LEDs
with miniature LEDs
4-fach
4-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D
WU-184001	18108				
WU-184002	18109				
WU-184003	18110				
WU-184004	18111				



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-185...

LED Halter für Leiterplatten-Montage

LED holder for PCB

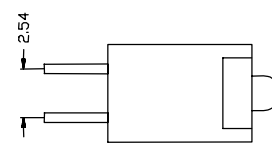
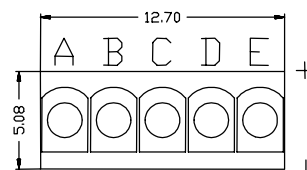
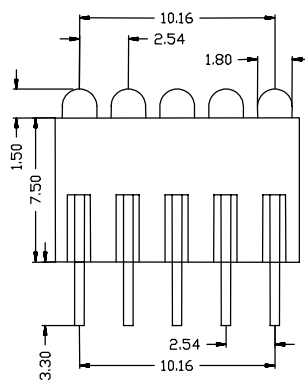
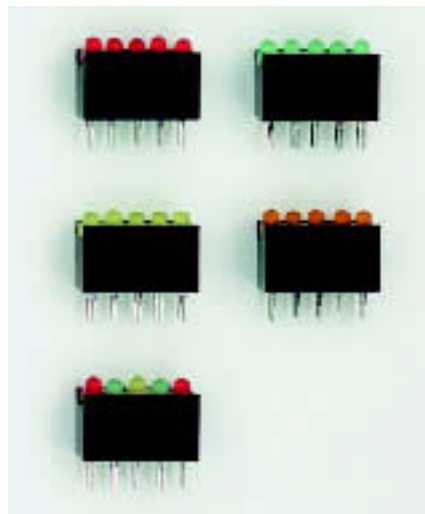
mit miniatur LEDs

with miniature LEDs

5-fach

5-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E
WU-1852	18112					
WU-1853	18113					
WU-1854	18114					
WU-1855	18115					



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1850...

LED Halter für Leiterplatten-Montage

LED holder for PCB

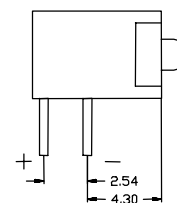
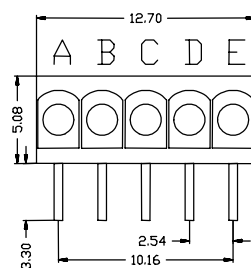
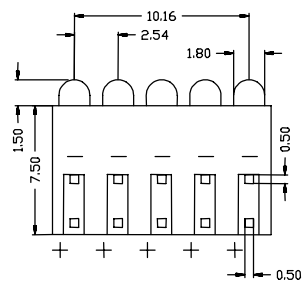
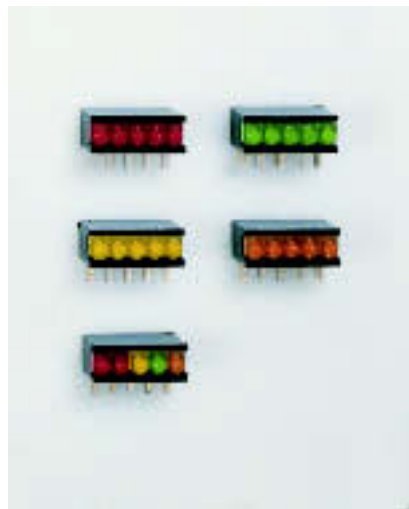
mit miniatur LEDs

with miniature LEDs

5-fach

5-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E
WU-18501	18116					
WU-18502	18117					
WU-18503	18118					
WU-18504	18119					



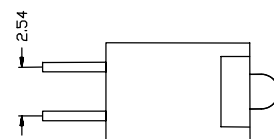
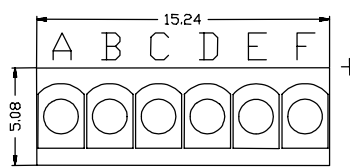
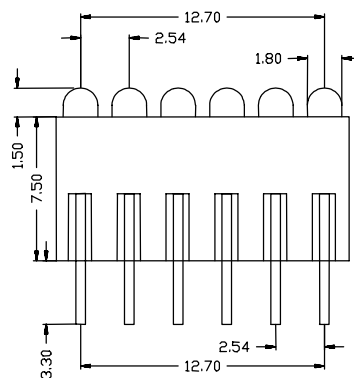
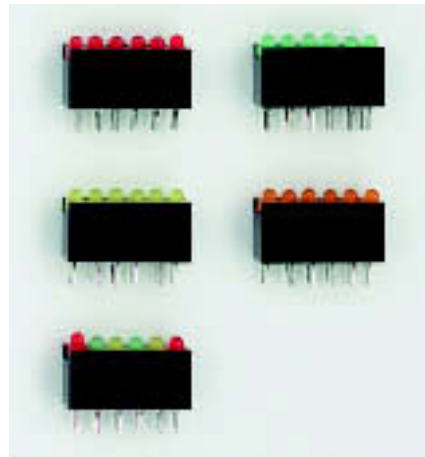
Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-186...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB
 mit miniatur LEDs
 with miniature LEDs
 6-fach
 6-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F
WU-1861	18120						
WU-1862	18121						
WU-1863	18122						
WU-1864	18123						



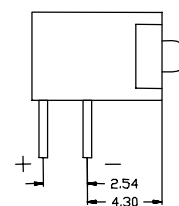
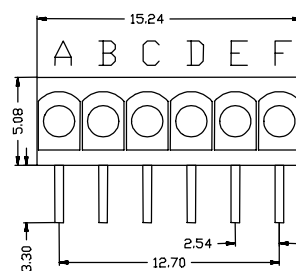
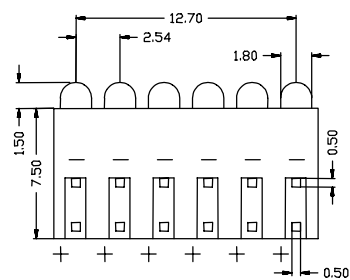
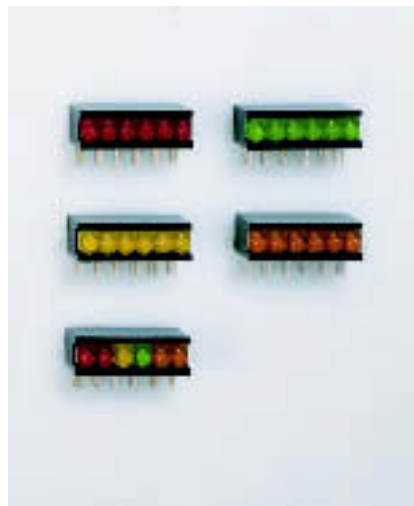
Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1860...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB
 mit miniatur LEDs
 with miniature LEDs
 6-fach
 6-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F
WU-18601	18124						
WU-18602	18125						
WU-18603	18126						
WU-18604	18127						



Unit: [mm] Tolerance: ± 0.25



®

Optoelektronik

WU-188...

LED Halter für Leiterplatten-Montage

LED holder for PCB

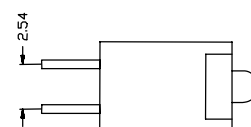
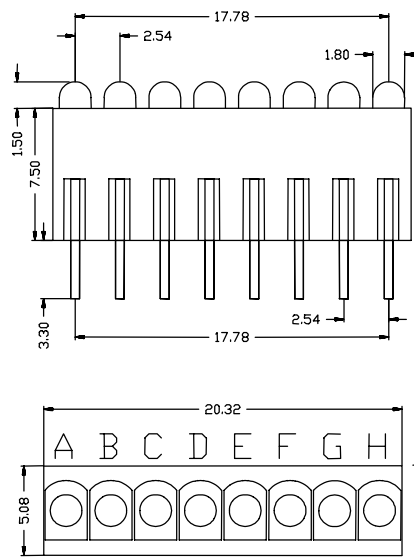
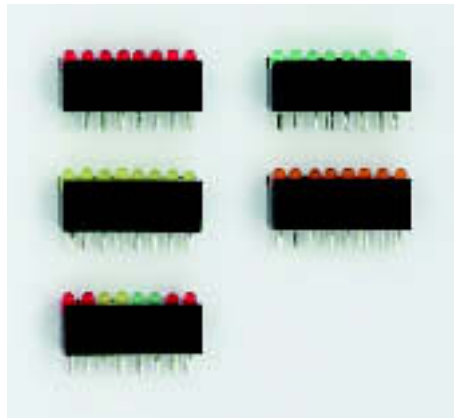
mit miniatur LEDs

with miniature LEDs

8-fach

8-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F	G	H
WU-1881	18128								
WU-1882	18129								
WU-1883	18130								
WU-1884	18131								



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1880...

LED Halter für Leiterplatten-Montage

LED holder for PCB

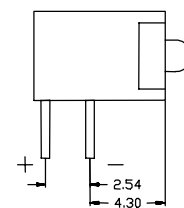
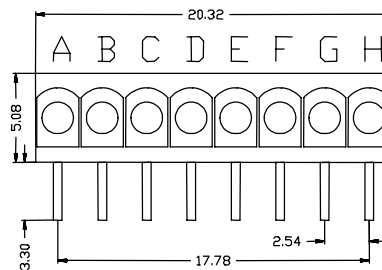
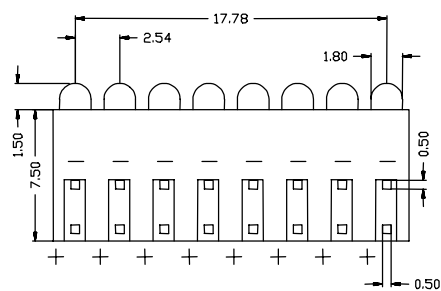
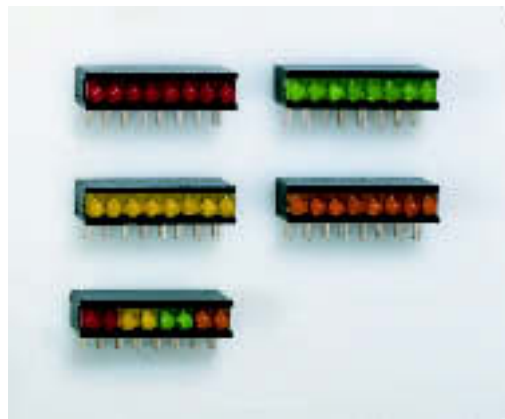
mit miniatur LEDs

with miniature LEDs

8-fach

8-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F	G	H
WU-18801	18132								
WU-18802	18133								
WU-18803	18134								
WU-18804	18135								



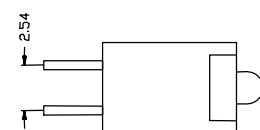
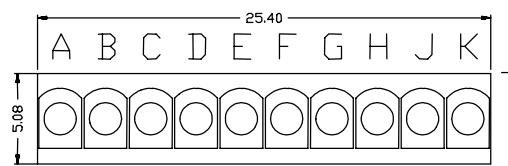
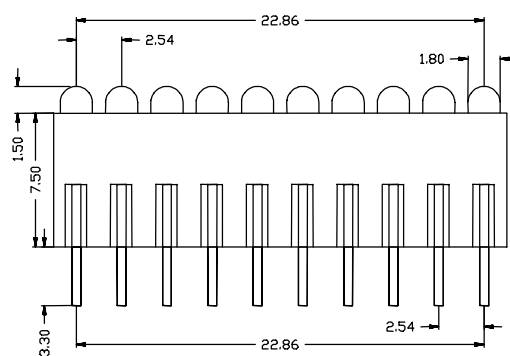
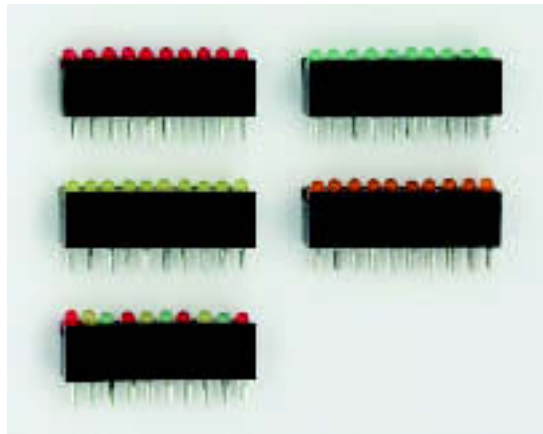
Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1810...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB
 mit miniatur LEDs
 with miniature LEDs
 10-fach
 10-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F	G	H	J	K
WU-18101	18136										
WU-18102	18137										
WU-18103	18138										
WU-18104	18139										



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-18100...

LED Halter für Leiterplatten-Montage

LED holder for PCB

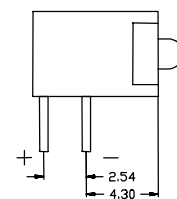
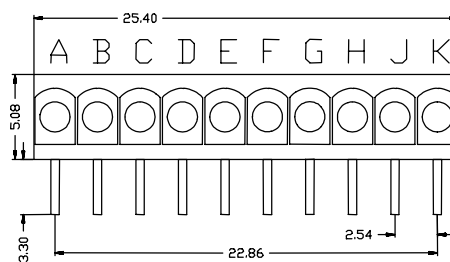
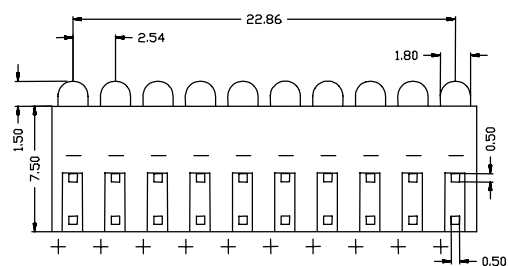
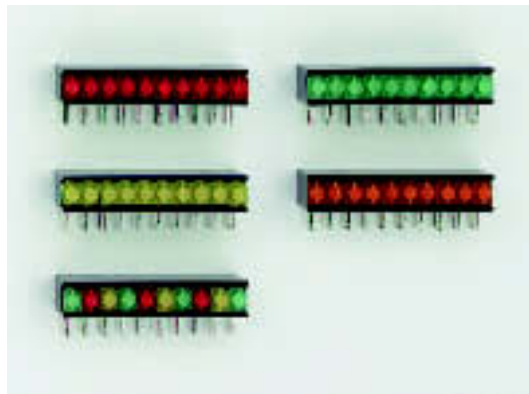
mit miniatur LEDs

with miniature LEDs

10-fach

10-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F	G	H	J	K
WU-181001	18140										
WU-181002	18141										
WU-181003	18142										
WU-181004	18143										



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-1812...

LED Halter für Leiterplatten-Montage

LED holder for PCB

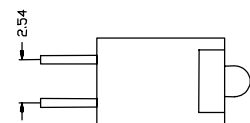
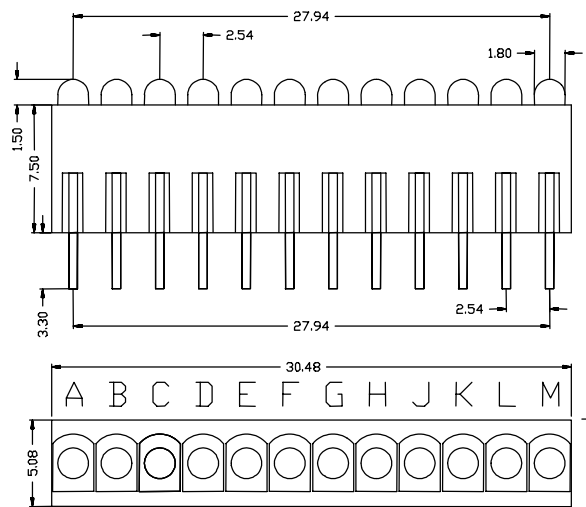
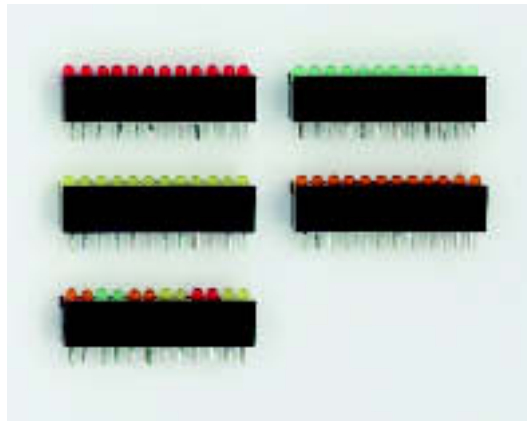
mit miniatur LEDs

with miniature LEDs

12-fach

12-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F	G	H	J	K	L	M
WU-18121	18144												
WU-18122	18145												
WU-18123	18146												
WU-18124	18147												



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-18120...

LED Halter für Leiterplatten-Montage

LED holder for PCB

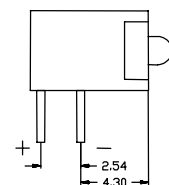
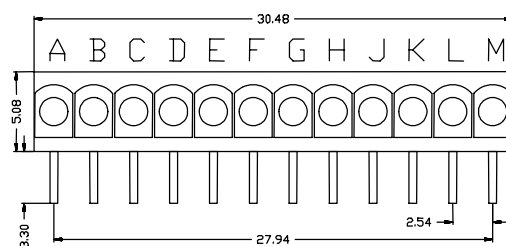
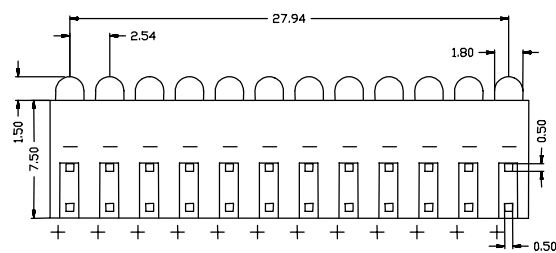
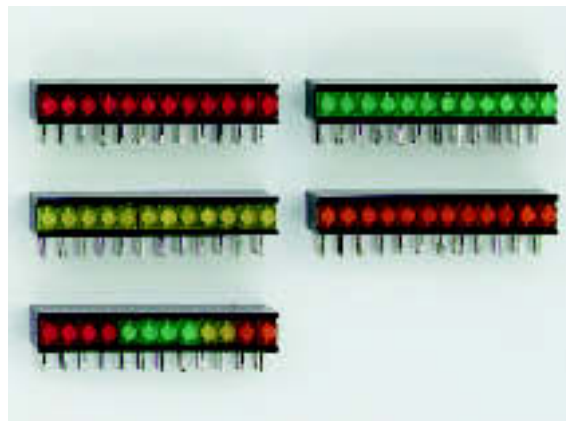
mit miniatur LEDs

with miniature LEDs

12-fach

12-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	D	E	F	G	H	J	K	L	M
WU-181201	18148												
WU-181202	18149												
WU-181203	18150												
WU-181204	18151												



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

555-2.../ 555-4...

LED Halter für Leiterplatten-Montage

LED holder for PCB

mit miniatur LEDs

with miniature LEDs

mit integriertem Vorwiderstand

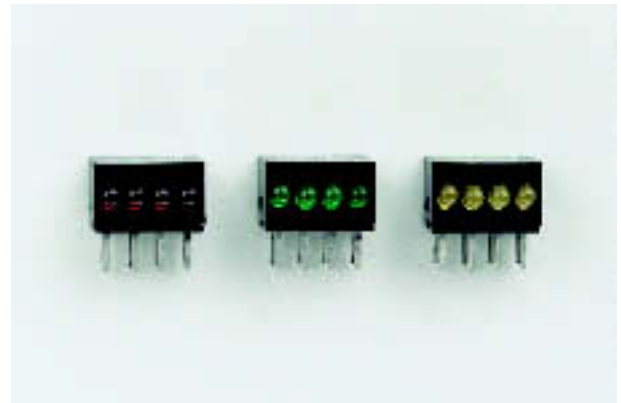
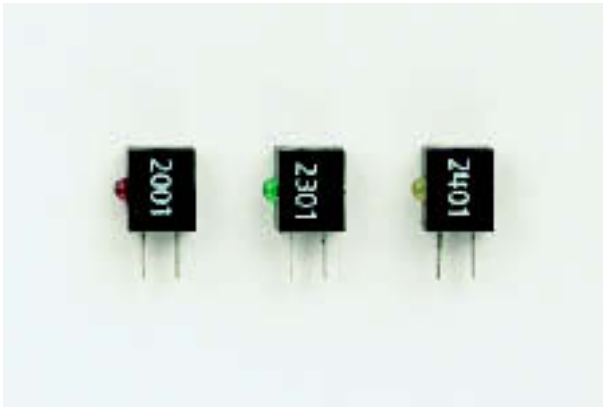
with integrated resistor

ohne Vorwiderstand

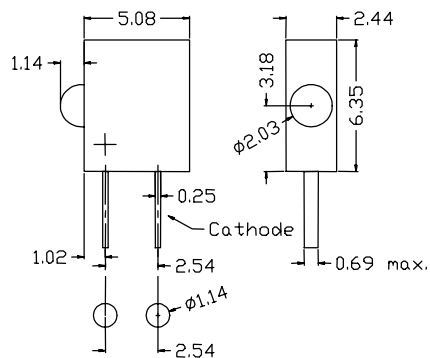
without resistor

3,6 Volt – 24 Volt

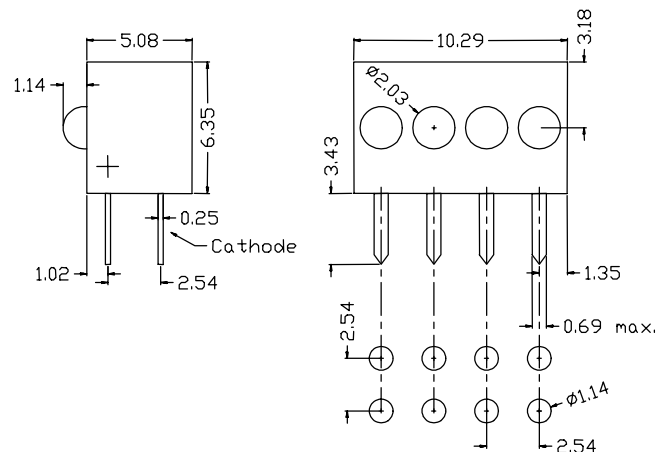
Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
555-2001R	e027016		555-4001R	e027073	
555-2301G	e027050		555-4301G	e027074	
555-2401Y	e027051		555-4401Y	e027075	
555-2004R/5V	e027052		555-4004R/5V	e027076	
555-2009R/5V-LC	e027053		555-4009R/5V-LC	e027077	
555-2303G/5V	e027054		555-4303G/5V	e027078	
555-2403Y/5V	e027055		555-4403Y/5V	e027079	
555-2002R/3,6V	e027056				
555-2005R/10V	e027057				
555-2006R/14V	e027058				
555-2008R/24V	e027059				
555-2010R/15V	e027060				



555-2...



555-4...



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

555-3.../ 555-5...

LED Halter für Leiterplatten-Montage

LED holder for PCB

mit miniatur LEDs

with miniature LEDs

mit integriertem Vorwiderstand

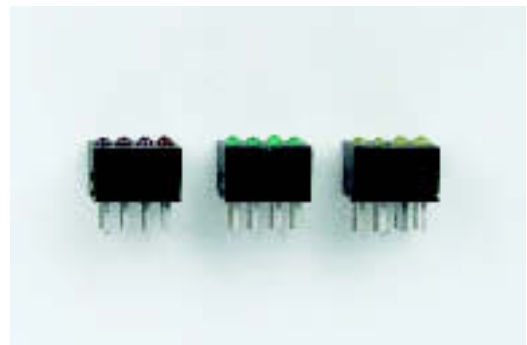
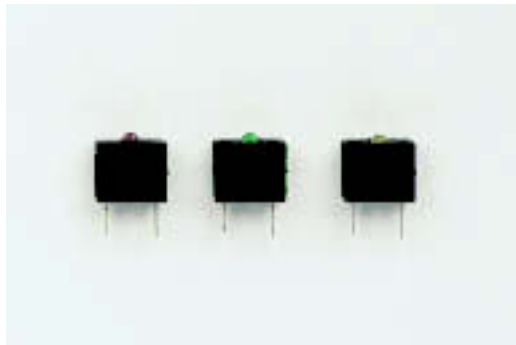
with integrated resistor

ohne Vorwiderstand

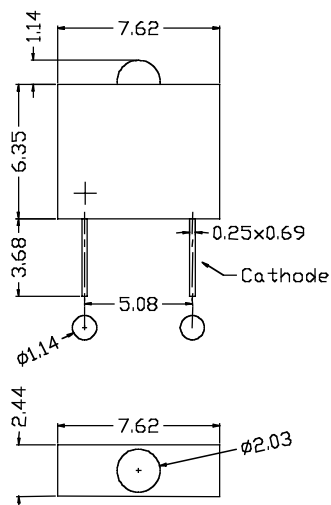
without resistor

3,6 Volt – 24 Volt

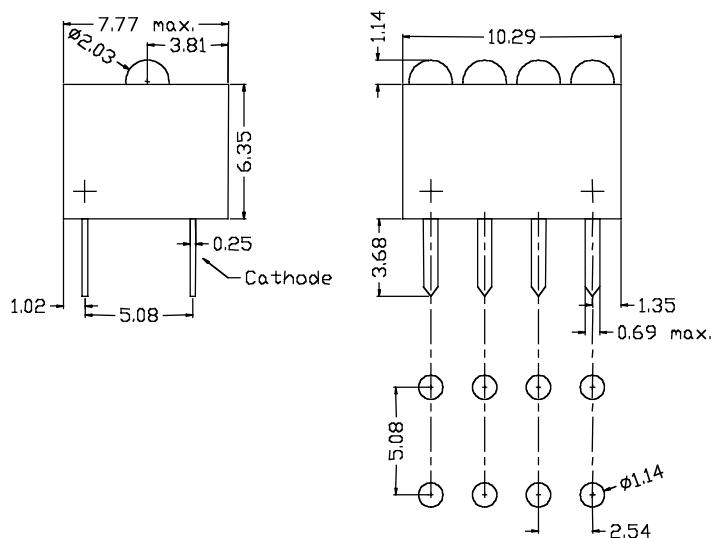
Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
555-3001R	e027061		555-5001R	e027080	
555-3301G	e027062		555-5301G	e027081	
555-3401Y	e027063		555-5401Y	e027082	
555-3004R/5V	e027064		555-5004R/5V	e027083	
555-3009R/5V-LC	e027065		555-5009R/5V-LC	e027084	
555-3303G/5V	e027066		555-5303G/5V	e027085	
555-3403Y/5V	e027067		555-5403Y/5V	e027086	
555-3002R/3,6V	e027068				
555-3005R/10V	e027069				
555-3006R/14V	e027070				
555-3008R/24V	e027071				
555-3010R/15V	e027072				



555-3...



555-5...





Optoelektronik

WU-V...

LED Halter für Leiterplatten-Montage

LED holder for PCB

mit miniatur LEDs

with miniature LEDs

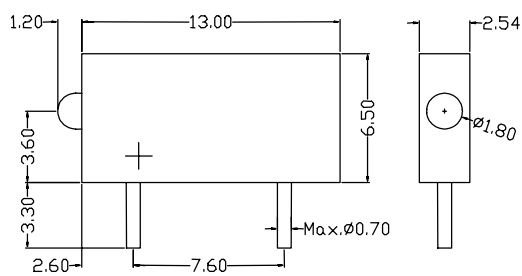
mit integriertem Vorwiderstand

with integrated resistor

ohne Vorwiderstand

without resistor

5 Volt – 24 Volt



Typenbezeichnung Type Designation	Artikel- Nr. Part No.	
WU-V-R	10809	
WU-V-R5	10810	
WU-V-R6	10816	
WU-V-R8	10820	
WU-V-R12	10825	
WU-V-R15	10830	
WU-V-R18	10835	
WU-V-R24	10840	
WU-V-G	10844	
WU-V-G5	10845	
WU-V-G6	10850	
WU-V-G8	10855	
WU-V-G12	10860	
WU-V-G15	10865	
WU-V-G18	10870	
WU-V-G24	10875	
WU-V-Y	10879	
WU-V-Y5	10880	
WU-V-Y6	10885	
WU-V-Y8	10890	
WU-V-Y12	10895	
WU-V-Y15	10900	
WU-V-Y18	10905	
WU-V-Y24	10910	
WU-V-O	10914	
WU-V-O5	10915	
WU-V-O6	10920	
WU-V-O8	10925	
WU-V-O12	10930	
WU-V-O15	10935	
WU-V-O18	10940	
WU-V-O24	10942	



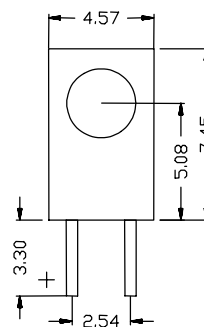
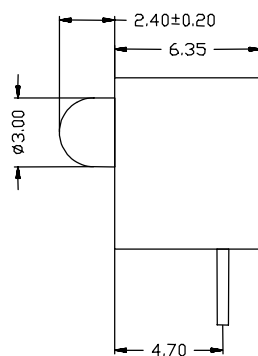
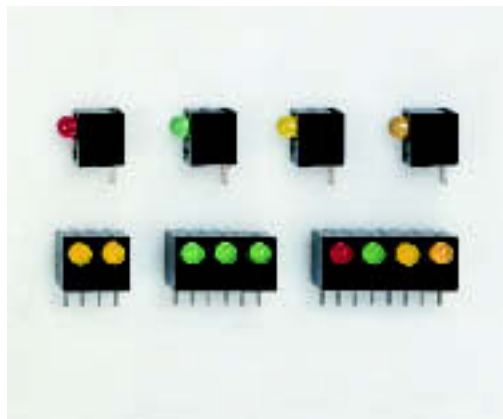
Optoelektronik

WU-B...3

LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 3mm
with LED 3mm

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-R3	11490	
WU-B-G3	11495	
WU-B-Y3	11500	
WU-B-O3	11505	



Rastermaß neu 2,54mm
Rastermaß alt 2,29mm



Optoelektronik

WU-2311... (B)
LED Halter für Leiterplatten-Montage
LED holder for PCB

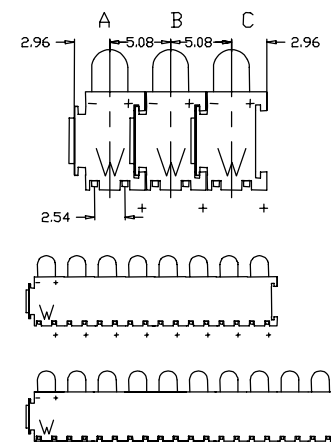
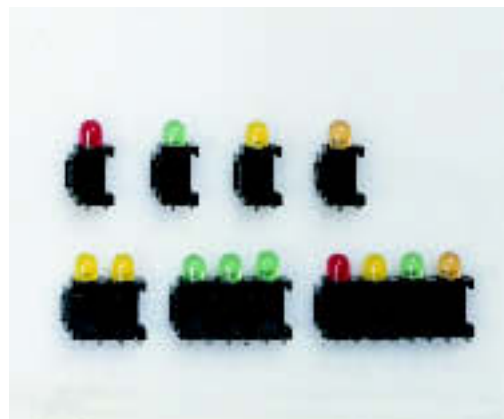
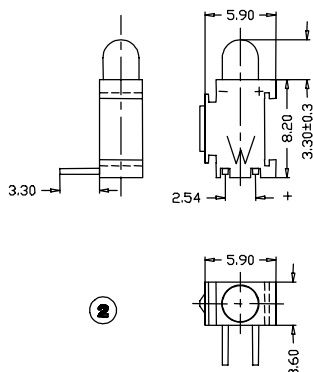
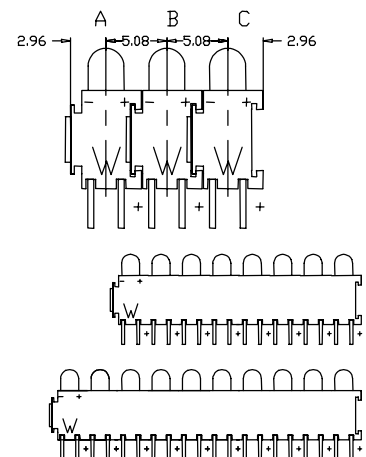
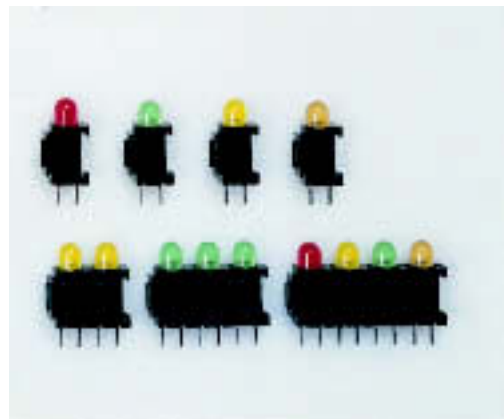
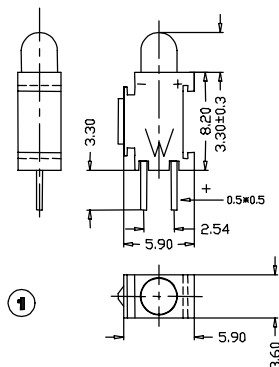
mit LED 3mm
with LED 3mm

mechanisch anreihbar
mechanical combinable

1-fach, 4-fach, 8-fach und 10-fach
1-fold, 4-fold, 8-fold and 10-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Art.Nr. Part No.	
WU-2311.2031	12275		WU-2311.2031B	12290	
WU-2311.8031	12280		WU-2311.8031B	12295	
WU-2311.7031	12285		WU-2311.7031B	12300	
WU-2311.6031	12286		WU-2311.6031B	12301	
WU-2311.X-4*			WU-2311.XB-4*		
WU-2311.X-8*			WU-2311.XB-8*		
WU-2311.X-10* ①			WU-2311.XB-10* ②		

*NEU! Auch als 4-fach, 8-fach, und 10-fach-Leiste in sämtlichen Farbkombinationen erhältlich.
*NEW! Also available as 4-fold, 8-fold, and 10-fold-array in all colour combinations.





Optoelektronik

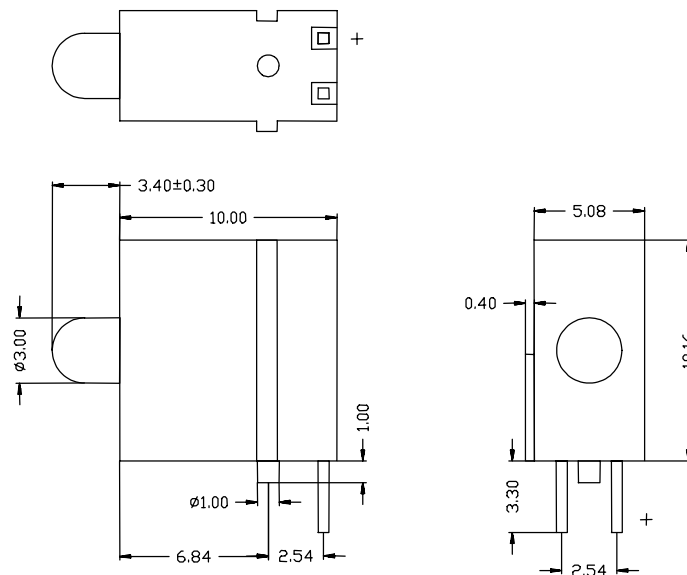
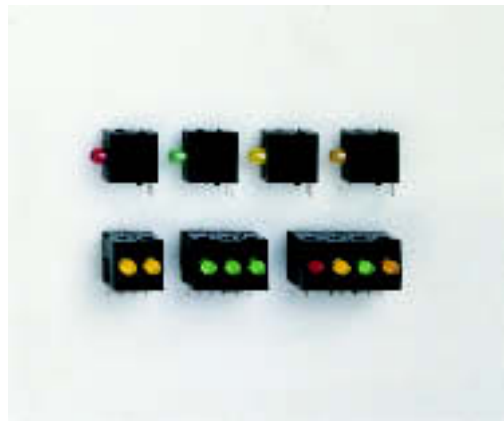
WU-B-E-3101

LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 3mm
with LED 3mm

anreihbar
combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-E-3101R	12645	
WU-B-E-3101G	12650	
WU-B-E-3101Y	12655	
WU-B-E-3101O	12660	
<i>NEU!</i> Auch in super-bright, blauer und weißer Ausführung erhältlich. <i>NEW!</i> Also available as super-bright, blue and white type.		



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

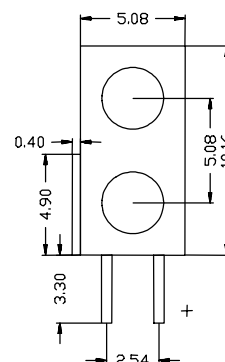
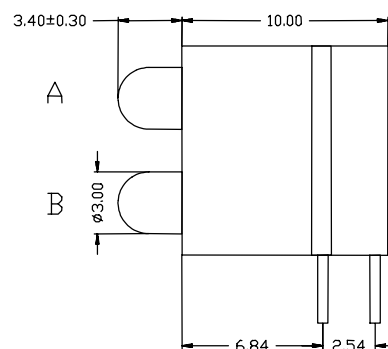
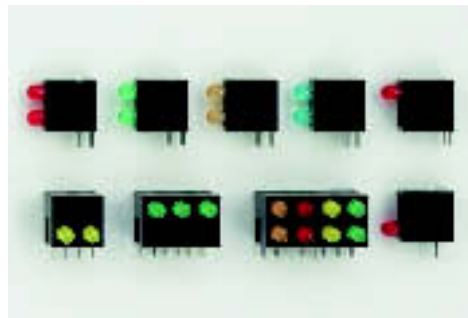
WU-B-E-3102-3200...
WU-B-D-3102-3200...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB

mit LED 3mm
 with LED 3mm

anreihbar
 combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B
WU-B-E-3102-3200-1	12665			WU-B-D-3102-3200-1	12705		
WU-B-E-3102-3200-2	12670			WU-B-D-3102-3200-2	12710		
WU-B-E-3102-3200-3	12675			WU-B-D-3102-3200-3	12715		
WU-B-E-3102-3200-4	12680			WU-B-D-3102-3200-4	12720		
WU-B-E-3102-3200-5	12685			WU-B-D-3102-3200-5	12725		
WU-B-E-3102-3200-6	12690			WU-B-D-3102-3200-6	12730		
WU-B-E-3102-3200-7	12695			WU-B-D-3102-3200-7	12735		
WU-B-E-3102-3200-8	12700			WU-B-D-3102-3200-8	12740		
				WU-B-D-3102-3200-9	12745		
				WU-B-D-3102-3200-10	12750		
				WU-B-D-3102-3200-11	12755		
				WU-B-D-3102-3200-12	12760		
				WU-B-D-3102-3200-13	12765		
				WU-B-D-3102-3200-14	12770		
				WU-B-D-3102-3200-15	12775		
				WU-B-D-3102-3200-16	12780		

NEU! Auch in super-bright, blauer und weißer Ausführung erhältlich.
NEW! Also available as super-bright, blue and white type.



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

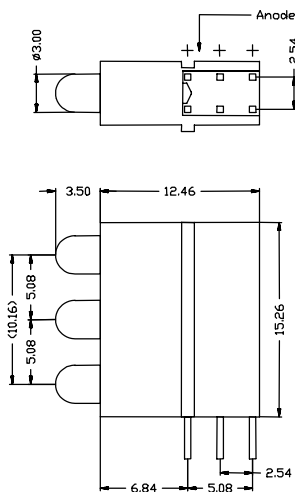
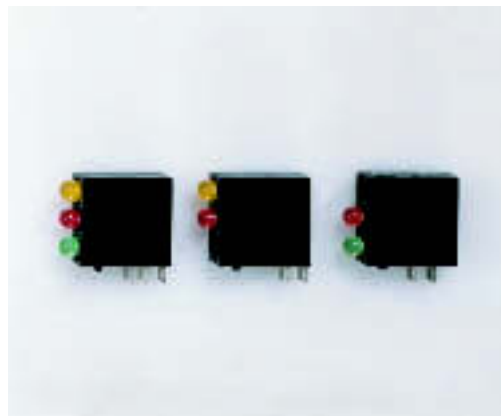
WU-44...
WU-44... (P)
 LED Halter für Leiterplatten-Montage
 LED holder for PCB

mit 3mm LEDs
 with 3mm LEDs

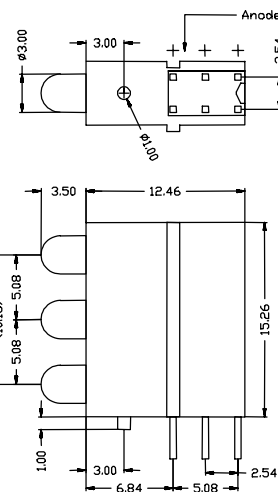
3-fach
 3-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C	Typenbezeichnung Type Designation	Artikel-Nr. Part No.	A	B	C
WU-441	30500	Red	Yellow	Green	WU-441P	30505	Red	Yellow	Green
WU-442	30501	Red	Red	Red	WU-442P	30506	Red	Red	Red
WU-443	30502	Green	Green	Green	WU-443P	30507	Green	Green	Green
WU-444	30503	Yellow	Yellow	Yellow	WU-444P	30508	Yellow	Yellow	Yellow
WU-445 ①	30504	Orange	Orange	Orange	WU-445P ②	30509	Orange	Orange	Orange

NEU! Auch in super-bright, blauer und weißer Ausführung erhältlich.
NEW! Also available as super-bright, blue and white type.



1



2

Unit: [mm] Tolerance: ± 0.25



Optoelektronik

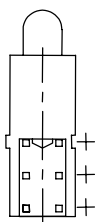
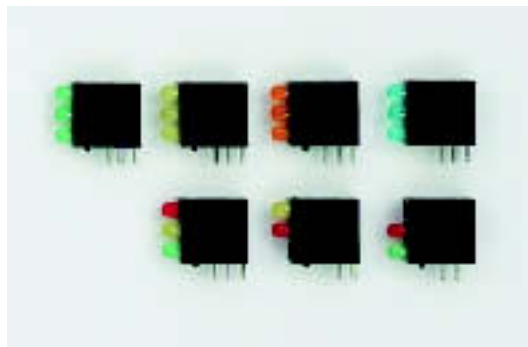
WU-33...
WU-33... (P)
 LED Halter für Leiterplatten-Montage
 LED holder for PCB

mit 3mm LEDs
 with 3mm LEDs

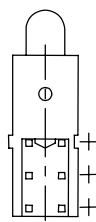
3-fach
 3-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.				Typenbezeichnung Type Designation	Artikel-Nr. Part No.			
WU-331	20560				WU-331P	30990			
WU-332	20562				WU-332P	30991			
WU-333	20563				WU-333P	30992			
WU-334	20564				WU-334P	30993			
WU-335	20565				WU-335P	30994			

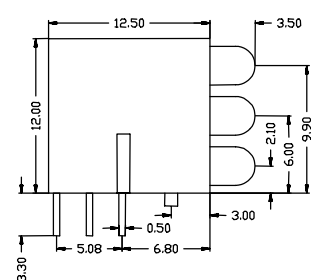
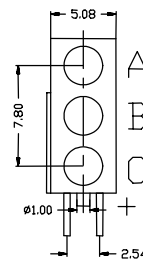
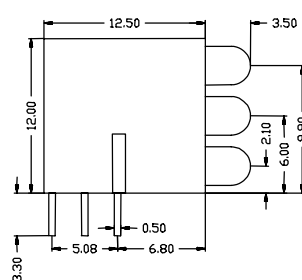
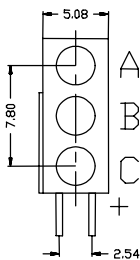
NEU! Auch in super-bright, blauer und weißer Ausführung erhältlich.
NEW! Also available as super-bright, blue and white type.



1



2





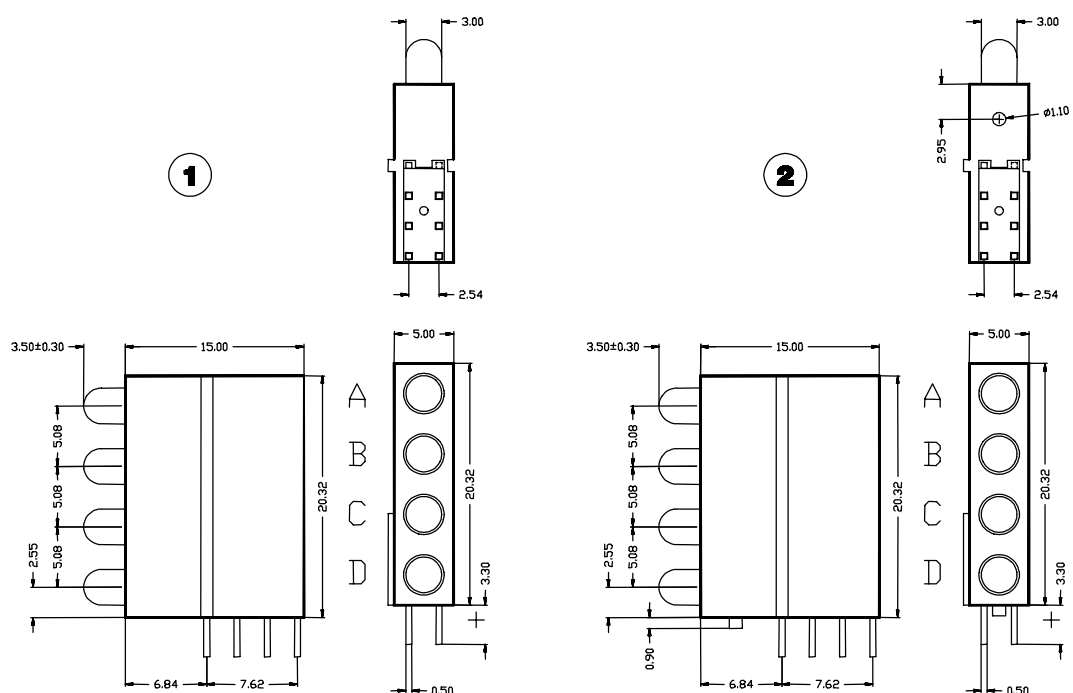
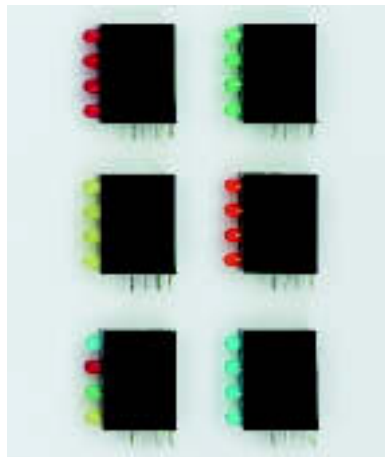
Optoelektronik

WU-43...
WU-43... (P)
 LED Halter für Leiterplatten-Montage
 LED holder for PCB

mit 3mm LEDs
 with 3mm LEDs

4-fach
 4-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.					Typenbezeichnung Type Designation	Artikel-Nr. Part No.				
WU-431	43000					WU-431P	43005				
WU-432	43001					WU-432P	43006				
WU-433	43002					WU-433P	43007				
WU-434	43003					WU-434P	43008				
WU-435	43004					WU-435P	43009				
<i>NEU!</i> Auch in super-bright, blauer und weißer Ausführung erhältlich. <i>NEW!</i> Also available as super-bright, blue and white type.											



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-3103...

WU-3105...

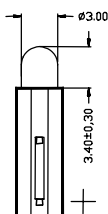
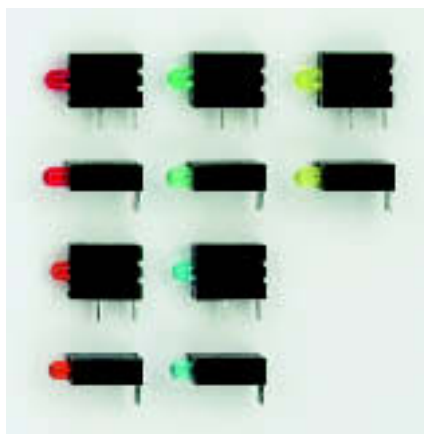
LED Halter für Leiterplatten-Montage

LED holder for PCB

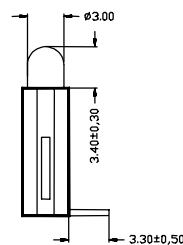
mit LED 3mm

with LED 3mm

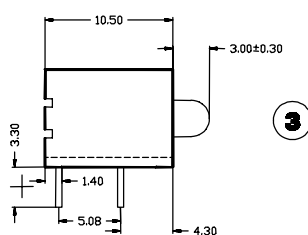
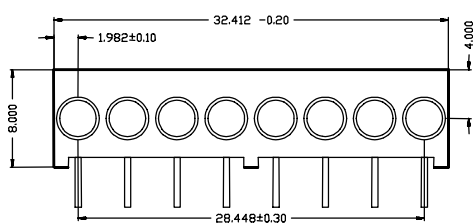
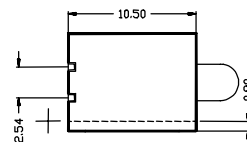
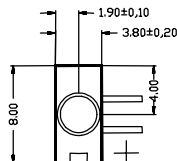
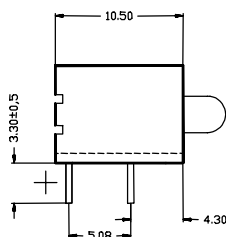
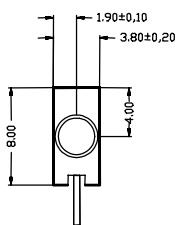
Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-3103 R ①	13015		WU-3105 R ②	13055	
WU-3103 G	13020		WU-3105 G	13060	
WU-3103 Y	13025		WU-3105 Y	13065	
WU-3103 O	13030		WU-3105 O	13070	
WU-3103-8 R ③	43500				
WU-3103-8 G	43501				
WU-3103-8 Y	43502				
WU-3103-8 O	43503				



1



2



3

Unit: [mm] Tolerance: ± 0.25



Optoelektronik

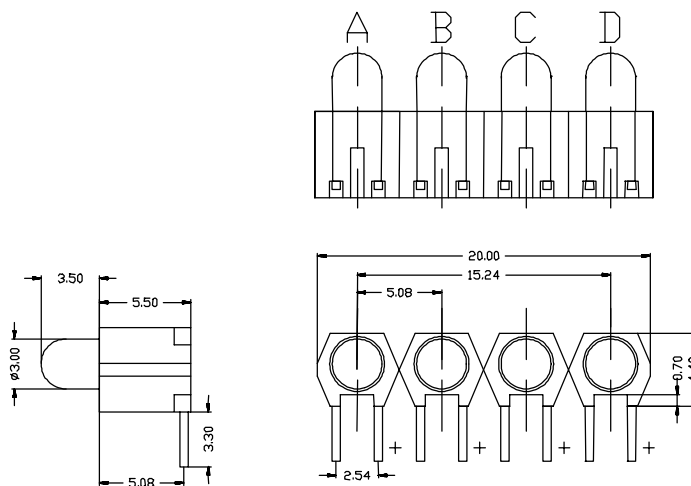
WU-340...

LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 3mm
with LED 3mm

1-fach - 4-fach
1-fold - 4-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-340-R-1	20610		WU-340-R-3	20650	
WU-340-G-1	20615		WU-340-G-3	20655	
WU-340-Y-1	20620		WU-340-Y-3	20660	
WU-340-O-1	20625		WU-340-O-3	20665	
WU-340-R-2	20630		WU-340-R-4	20670	
WU-340-G-2	20635		WU-340-G-4	20675	
WU-340-Y-2	20640		WU-340-Y-4	20680	
WU-340-O-2	20645		WU-340-O-4	20685	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

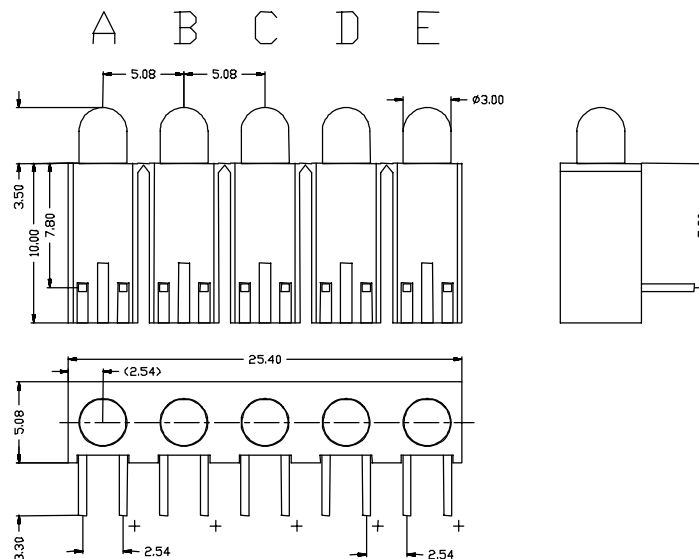
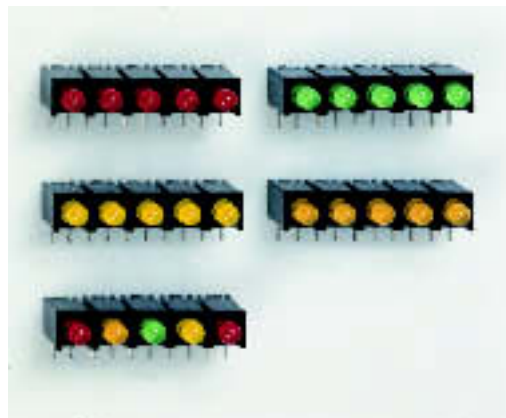
WU-350...

LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 3mm
with LED 3mm

1-fach - 5-fach
1-fold - 5-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-350-R-1	20915		WU-350-R-4	20930	
WU-350-G-1	20940		WU-350-G-4	20955	
WU-350-Y-1	20965		WU-350-Y-4	20980	
WU-350-O-1	20990		WU-350-O-4	21005	
WU-350-R-2	20920		WU-350-R-5	20935	
WU-350-G-2	20945		WU-350-G-5	20960	
WU-350-Y-2	20970		WU-350-Y-5	20985	
WU-350-O-2	20995		WU-350-O-5	21010	
WU-350-R-3	20925				
WU-350-G-3	20950				
WU-350-Y-3	20975				
WU-350-O-3	21000				



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-BD...

LED Halter für Leiterplatten-Montage
LED holder for PCB

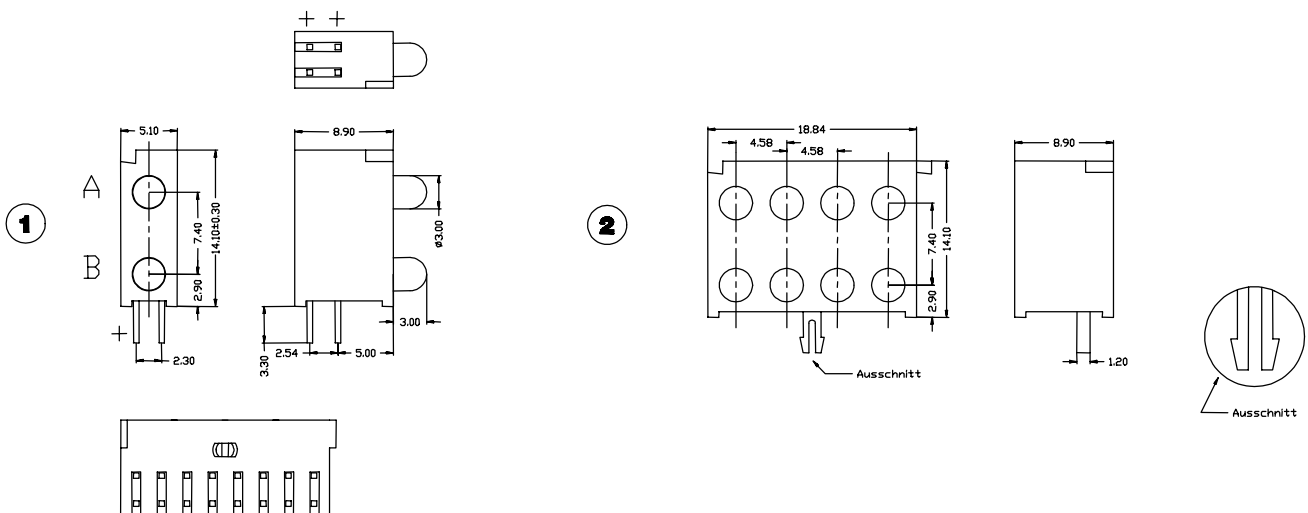
mit LED 3mm
with LED 3mm

2-fach und 8-fach
2-fold and 8-fold

mechanisch anreihbar
mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-BD-A/R	12785		WU-BD-AB/R	12825	
WU-BD-A/G	12790		WU-BD-AB/G	12830	
WU-BD-A/Y	12795		WU-BD-AB/Y	12835	
WU-BD-A/O	12800		WU-BD-AB/O	12840	
WU-BD-B/R	12805		WU-BD-A-H/R*	12845	
WU-BD-B/G	12810		WU-BD-A-H/G*	12850	
WU-BD-B/Y	12815		WU-BD-A-H/Y*	12855	
WU-BD-B/O	12820		WU-BD-A-H/O*	12860	

***Dieser Block ist nur noch unbestückt in Verbindung mit LEDs lieferbar!**



Unit: [mm] Tolerance: ± 0.25



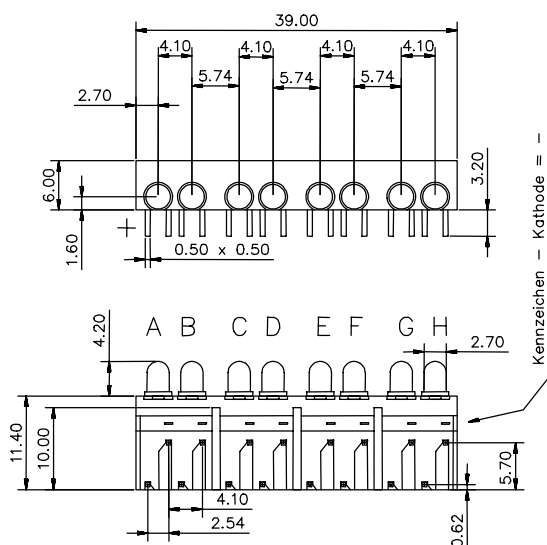
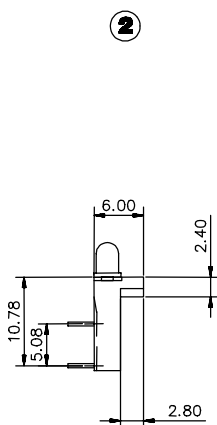
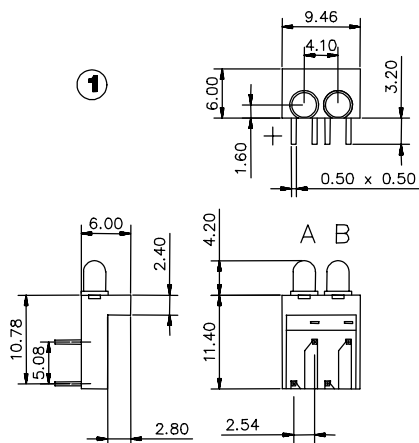
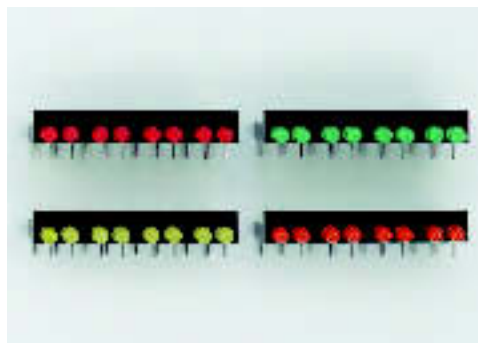
Optoelektronik

WU-B-2 /WU-B-8(3)
LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 3mm
with LED 3mm

2-fach und 8-fach
2-fold and 8-fold

Typenbezeichnungen Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-2 R ①	43100		WU-B-8(3)-8 R ②	43104	
WU-B-2 G	43101		WU-B-8(3)-8 G	43105	
WU-B-2 Y	43102		WU-B-8(3)-8 Y	43106	
WU-B-2 O	43103		WU-B-8(3)-8 O	43107	



Unit: [mm] Tolerance: ± 0.25



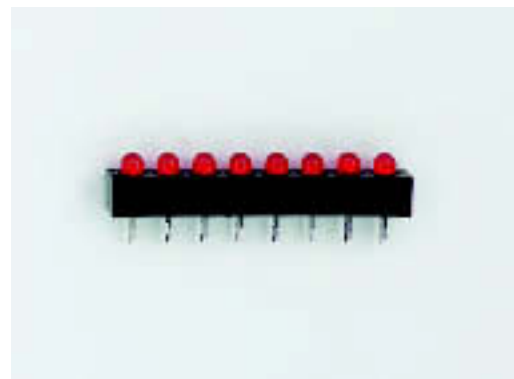
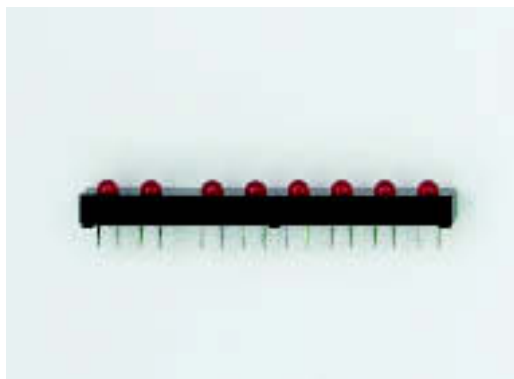
Optoelektronik

WU-B-8S-(1).../WU-B-8S-(2)...
LED Halter für Leiterplatten-Montage
LED holder for PCB

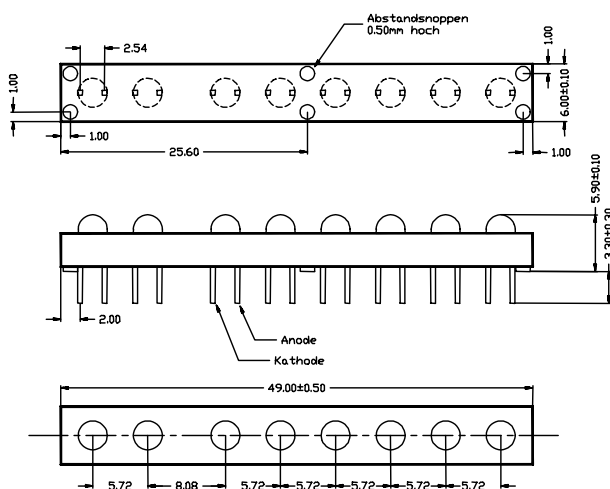
mit LED 3mm
with LED 3mm

8-fach
8-fold

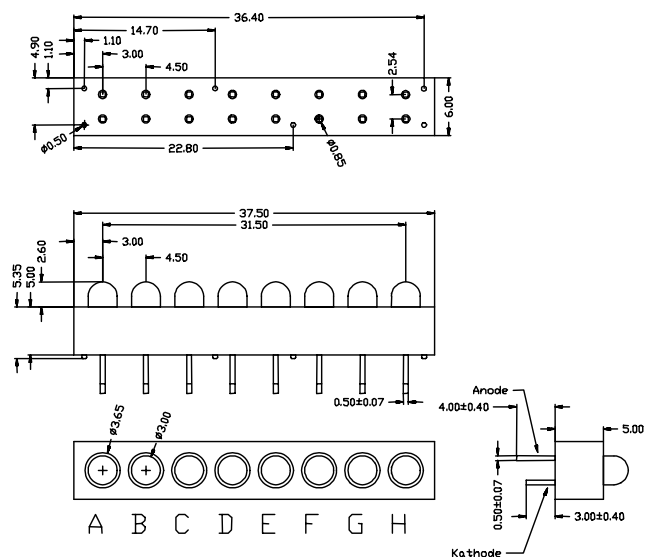
Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-8S-(1) R	43108		WU-B-8S-(2)-8 R	43112	
WU-B-8S-(1) G	43109		WU-B-8S-(2)-8 G	43113	
WU-B-8S-(1) Y	43110		WU-B-8S-(2)-8 Y	43114	
WU-B-8S-(1) O	43111		WU-B-8S-(2)-8 O	43115	
Keine Farbkombination möglich. Nur einfarbig lieferbar. No colour combinations. Monochromatic only.					



WU-B-8S-(1)



WU-B-8S-(2)



Unit: [mm] Tolerance: ± 0.25



1-fach und 8-fach
1-fold and 8-fold

***NEU!** Auch als 8-fach-Leiste in sämtlichen Farbkombinationen erhältlich.
***NEW!** Also available as 8-fold-array in all colour combinations.



III-39



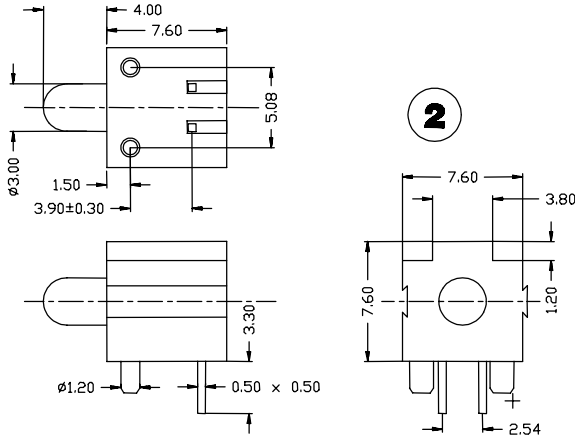
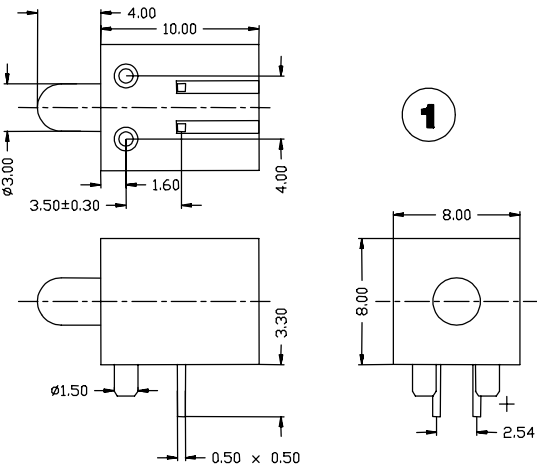
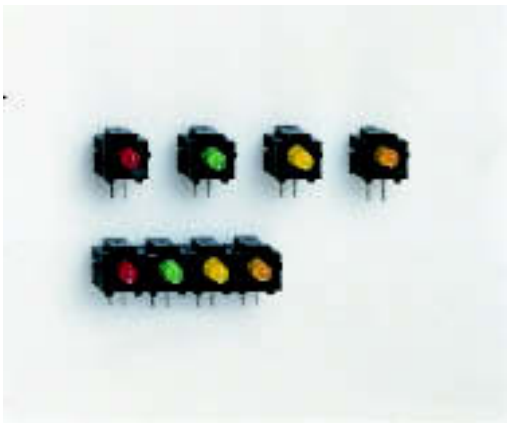
Optoelektronik

WU-DH-3W...
WU-DH-3R...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB

mit LED 3mm
 with LED 3mm

mechanisch anreihbar
 mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-DH-3W-R	30800		WU-DH-3R-R	30804	
WU-DH-3W-G	30801		WU-DH-3R-G	30805	
WU-DH-3W-Y	30802		WU-DH-3R-Y	30806	
WU-DH-3W-O ①	30803		WU-DH-3R-O ②	30807	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-B-15...

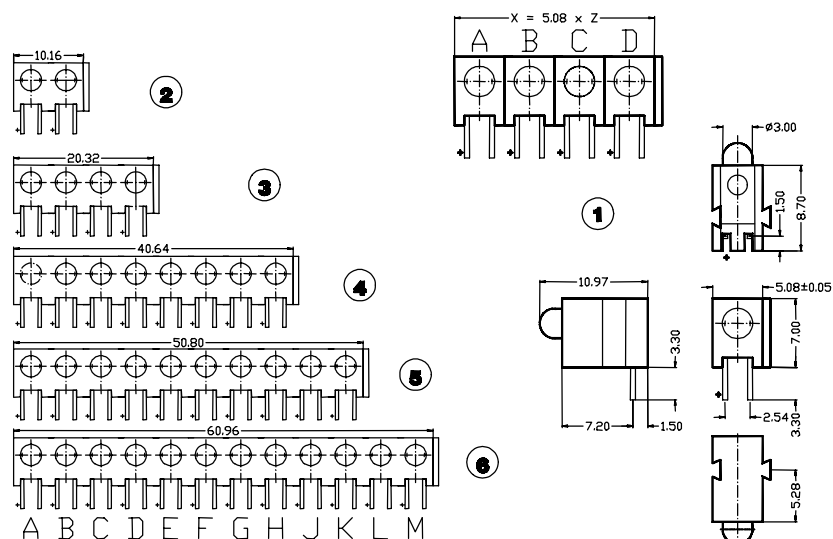
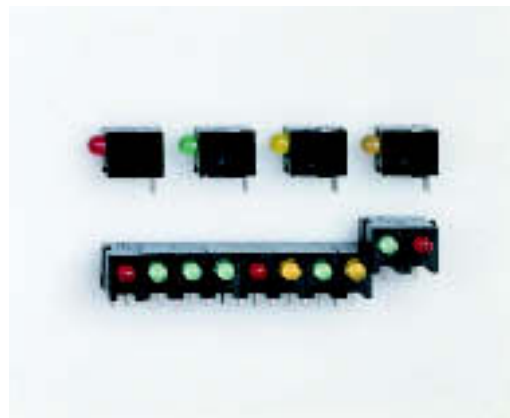
LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 3mm
with LED 3mm

mechanisch anreihbar
mechanical combinable

1-fach, 2-fach, 4-fach, 8-fach, 10-fach und 12-fach
1-fold, 2-fold, 4-fold, 8-fold, 10-fold and 12-fold

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-15R	30834	
WU-B-15G	30835	
WU-B-15Y	30836	
WU-B-15O	30837	
WU-B-15X-2 ②		
WU-B-15X-4 ③		
WU-B-15X-8 ④		
WU-B-15X-10 ⑤		
WU-B-15X-12 ⑥		
*NEU! Auch 2-fach, 4-fach, 8-fach, 10-fach und 12-fach in sämtlichen Farbkombinationen erhältlich. *NEW! Also available as 2-fold, 4-fold, 8-fold, 10-fold and 12-fold-array in all colour combinations.		





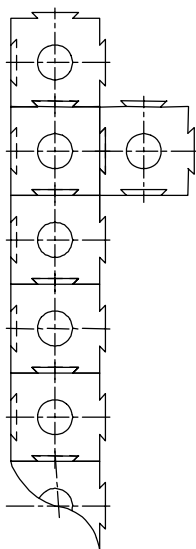
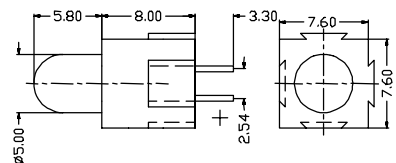
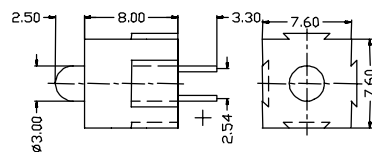
Optoelektronik

WU-B-5352/3
WU-B-5352/5
LED Halter für Leiterplatten-Montage
LED holder for PCB

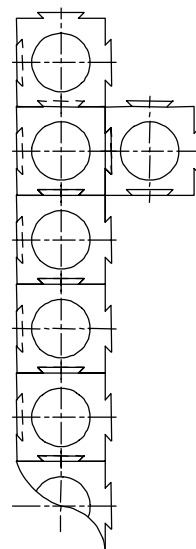
mit LED 3mm oder 5mm
with LED 3mm or 5mm

mechanisch anreihbar
mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-5352/3R	12605		WU-B-5352/5R	12625	
WU-B-5352/3G	12610		WU-B-5352/5G	12630	
WU-B-5352/3Y	12615		WU-B-5352/5Y	12635	
WU-B-5352/3O	12620		WU-B-5352/5O	12640	



1



2



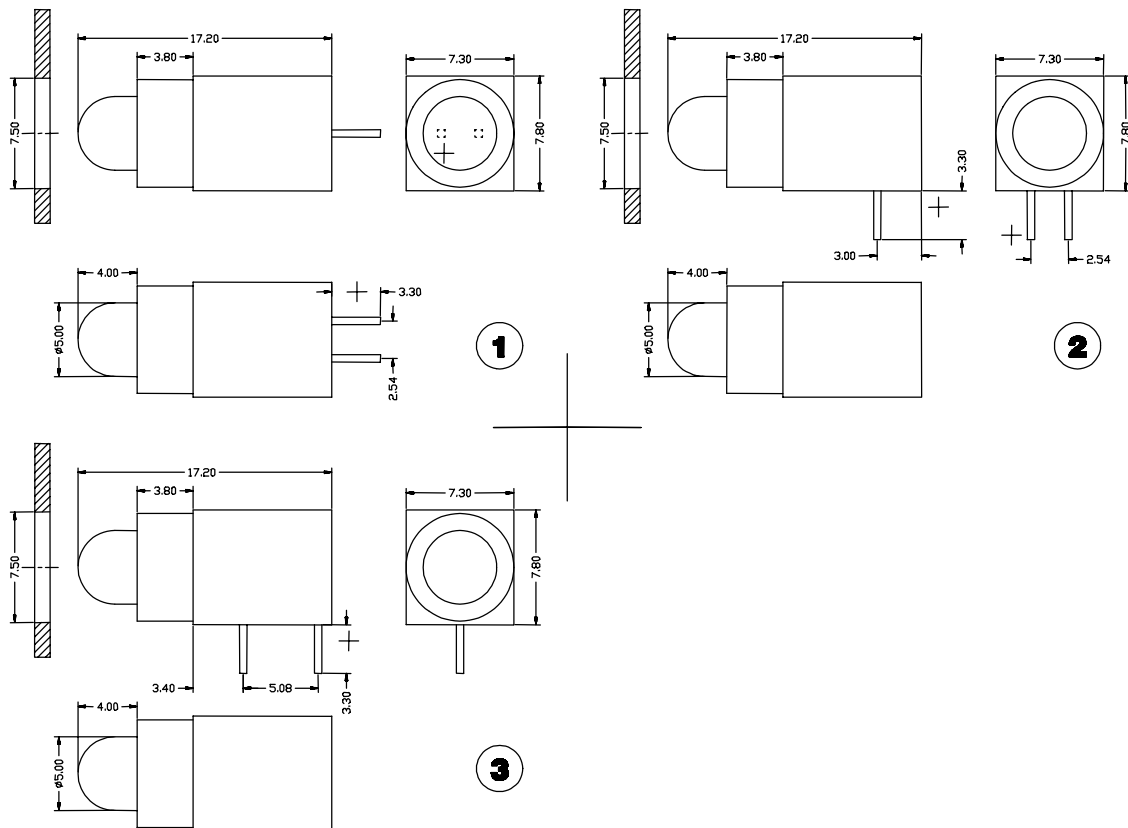
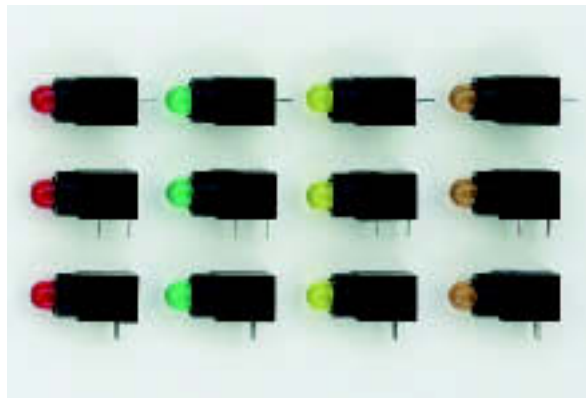
Optoelektronik

WU-035...

LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 5mm
with LED 5mm

Typenbez. Type Designation	Artikel-Nr. Part No.		Typenbez. Type Designation	Artikel-Nr. Part No.		Typenbez. Type Designation	Artikel-Nr. Part No.	
WU-035.1230	11430		WU-035.1240	11450		WU-035.1250	11470	
WU-035.1231	11435		WU-035.1241	11455		WU-035.1251	11475	
WU-035.1232	11440		WU-035.1242	11460		WU-035.1252	11480	
WU-035.1233	11445		WU-035.1243	11465		WU-035.1253	11485	
①			②			③		



Unit: [mm] Tolerance: ± 0.25



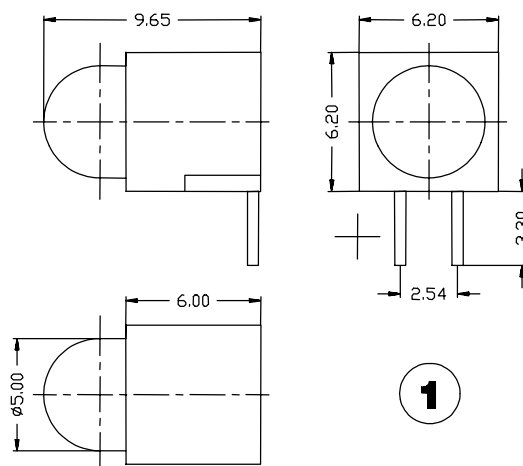
Optoelektronik

WU-B...5(L)

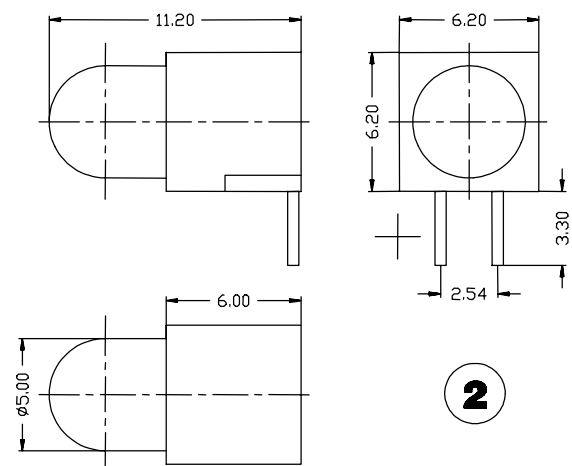
LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 5mm kurz-lang
with LED 5mm short-long

Typenbezeichnungen Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-R5	11510		WU-B-R5 L	11530	
WU-B-G5	11515		WU-B-G5 L	11535	
WU-B-Y5	11520		WU-B-Y5 L	11540	
WU-B-O5	11525		WU-B-O5 L	11545	



1



2

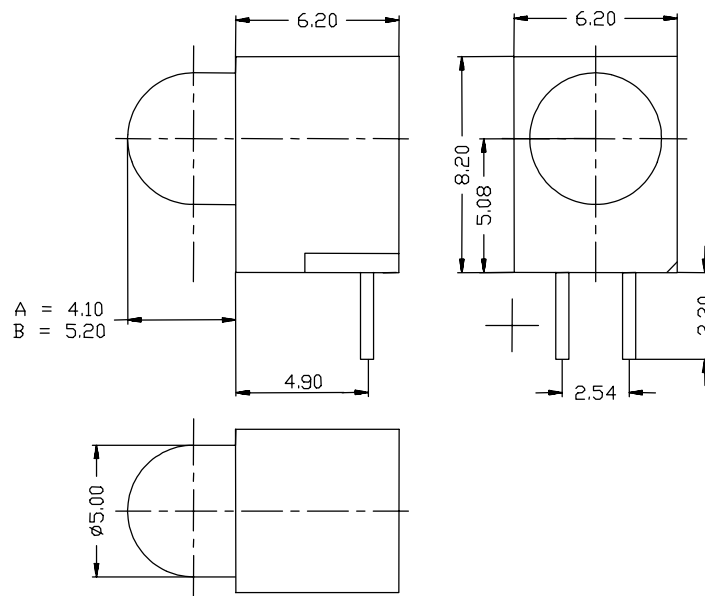


Optoelektronik

WU-B-...5-F-A
WU-B-...5-F-B
 LED Halter für Leiterplatten-Montage
 LED holder for PCB
 mit LED 5mm
 with LED 5mm

LED Körper kurz und lang
 LED housing short and long

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-R5-F-A	12135		WU-B-R5-F-B	12155	
WU-B-G5-F-A	12140		WU-B-G5-F-B	12160	
WU-B-Y5-F-A	12145		WU-B-Y5-F-B	12165	
WU-B-O5-F-A	12150		WU-B-O5-F-B	12170	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

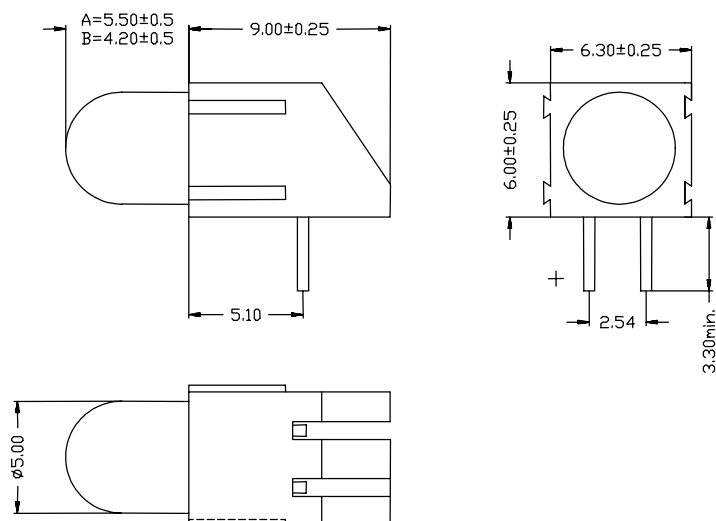
WU-H-400 MA...

LED Halter für Leiterplatten-Montage
LED holder for PCB
mit LED 5mm
with LED 5mm

LED Körper kurz und lang
LED housing short and long

mechanisch anreihbar
mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-H-400MA-RA	12095		WU-H-400MA-RB	12115	
WU-H-400MA-GA	12100		WU-H-400MA-GB	12120	
WU-H-400MA-YA	12105		WU-H-400MA-YB	12125	
WU-H-400MA-OA	12110		WU-H-400MA-OB	12130	





Optoelektronik

WU-H-401... (L)

LED Halter für Leiterplatten-Montage

LED holder for PCB

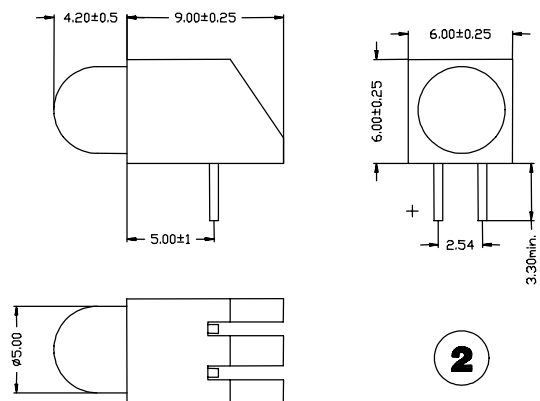
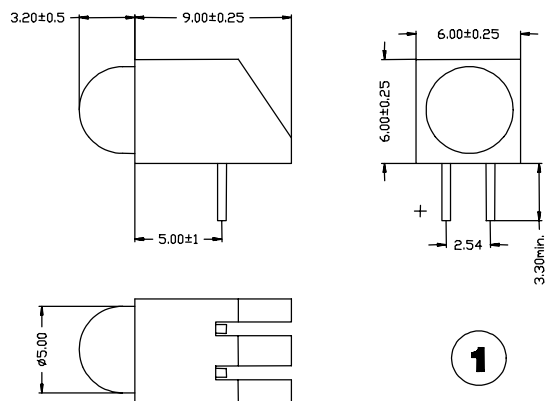
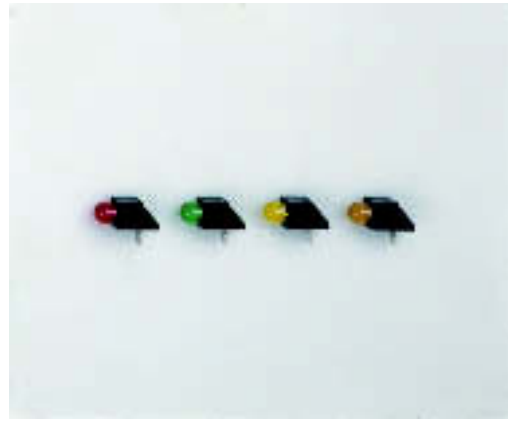
mit LED 5mm

with LED 5mm

LED Körper kurz und lang

LED housing short and long

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-H-401R	11550		WU-H-401-LR	11650	
WU-H-401G	11555		WU-H-401-LG	11655	
WU-H-401Y	11560		WU-H-401-LY	11660	
WU-H-401O	11566		WU-H-401-LO	11665	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-H-506MA...(L)

LED Halter für Leiterplatten-Montage

LED holder for PCB

mit LED 5mm

with LED 5mm

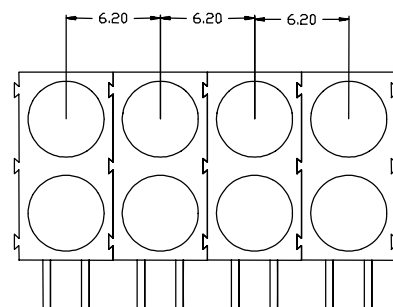
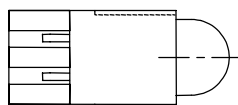
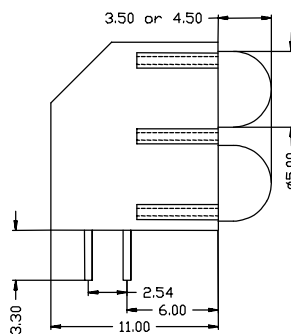
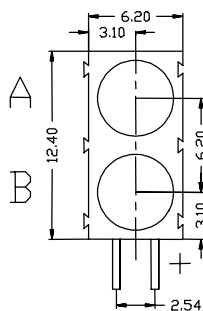
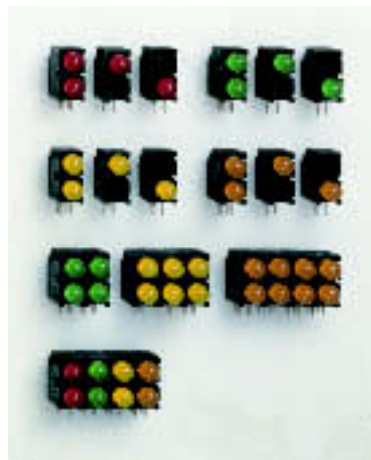
LED Körper kurz und lang

LED housing short and long

mechanisch anreihbar

mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-H-506MA-RA	20570		WU-H-506MA-R-AB-L	60004	
WU-H-506MA-GA	20575		WU-H-506MA-G-AB-L	60005	
WU-H-506MA-YA	20580		WU-H-506MA-Y-AB-L	60006	
WU-H-506MA-OA	20585		WU-H-506MA-O-AB-L	60007	
WU-H-506MA-RB	20590		WU-H-506MA-RA-L	60013	
WU-H-506MA-GB	20595		WU-H-506MA-GA-L	60014	
WU-H-506MA-YB	20600		WU-H-506MA-YA-L	60016	
WU-H-506MA-OB	20605		WU-H-506MA-OA-L	60017	
WU-H-506MA-R-AB	20576		WU-H-506MA-RB-L	60008	
WU-H-506MA-G-AB	60012		WU-H-506MA-GB-L	60009	
WU-H-506MA-Y-AB	51783		WU-H-506MA-YB-L	60010	
WU-H-506MA-O-AB	60015		WU-H-506MA-OB-L	60011	



Unit: [mm] Tolerance: ± 0.25

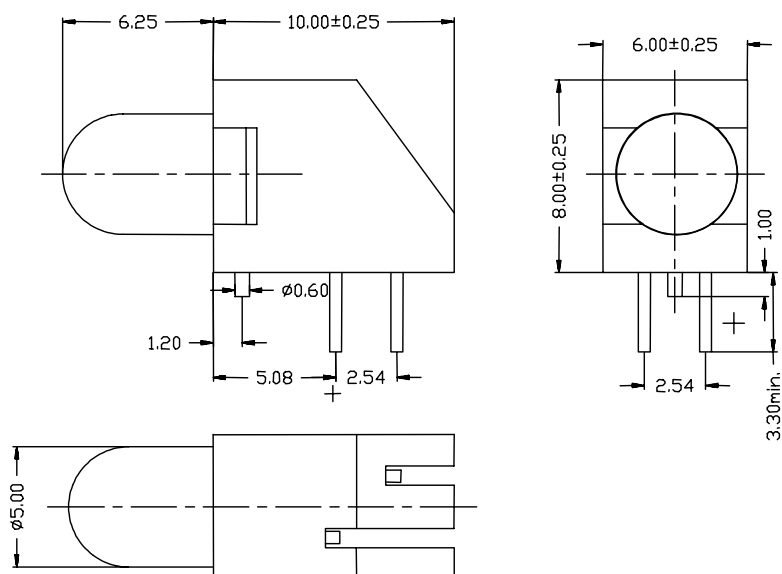


Optoelektronik

WU-2350...
LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 5mm
with LED 5mm

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-2350.2031	11915	
WU-2350.8031	11920	
WU-2350.7031	11925	
WU-2350.6031	11926	



Unit: [mm] Tolerance: ± 0.25



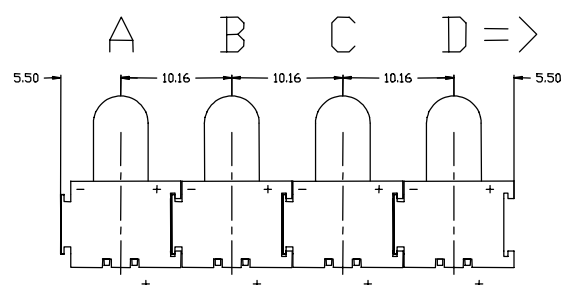
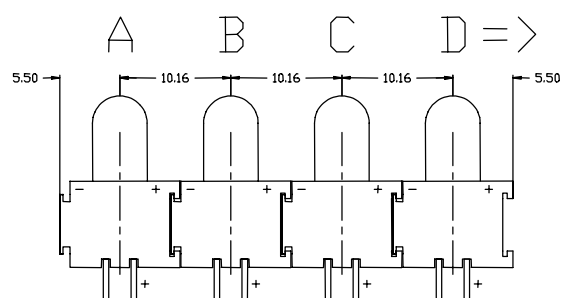
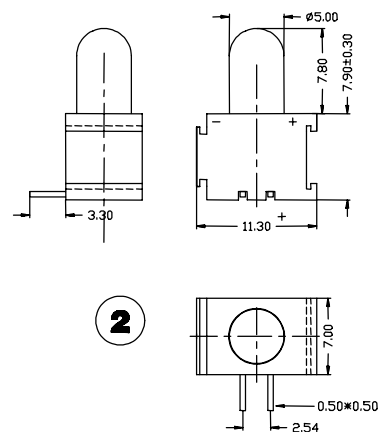
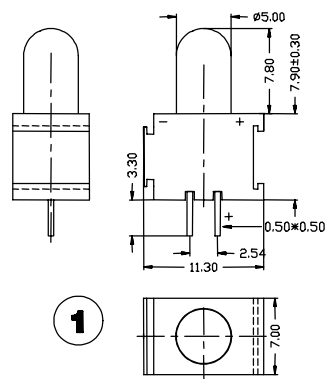
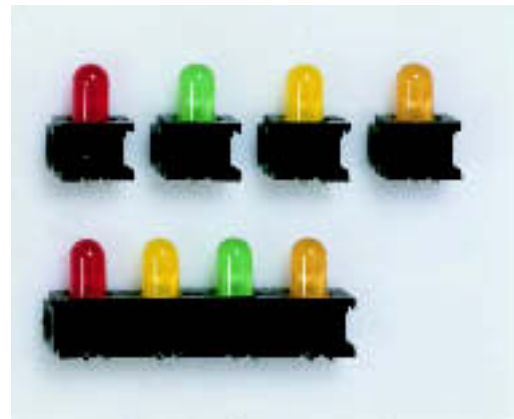
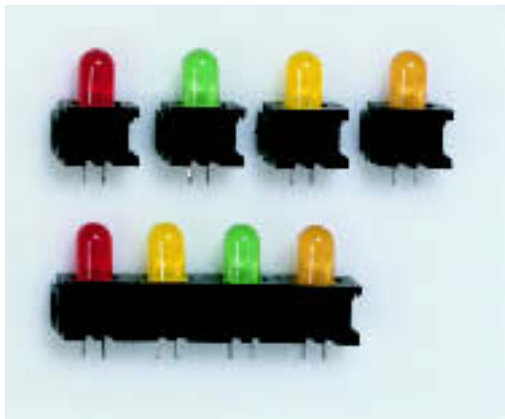
Optoelektronik

WU-2351... (B)
LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 5mm
with LED 5mm

mechanisch anreihbar
mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-2351.2031	11930		WU-2351.2031B	11945	
WU-2351.8031	11935		WU-2351.8031B	11950	
WU-2351.7031	11940		WU-2351.7031B	11955	
WU-2351.6031	11927		WU-2351.6031B	11956	



Unit: [mm] Tolerance: ± 0.25



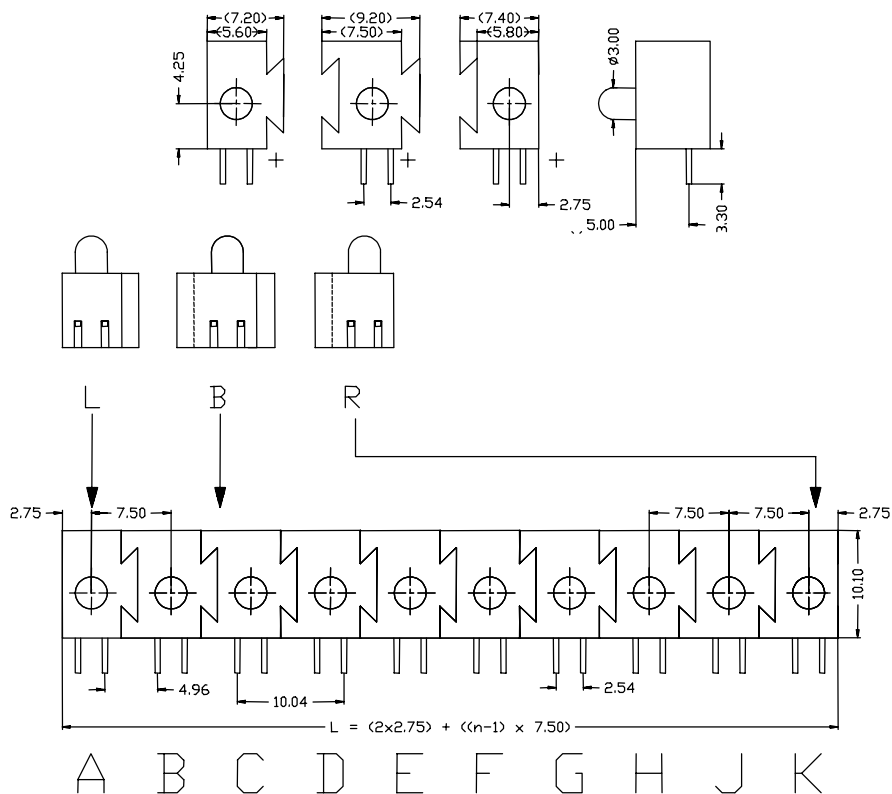
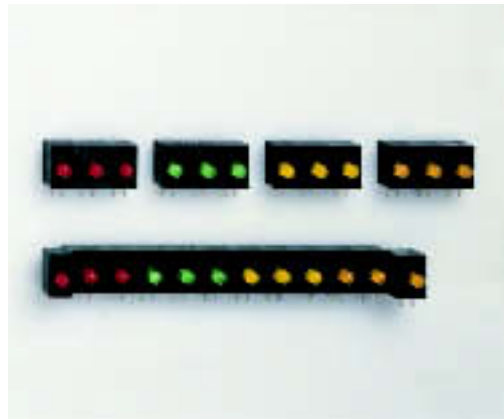
Optoelektronik

WU-L...
WU-B...
WU-R...
 LED Halter für Leiterplatten-Montage
 LED holder for PCB

mit LED 3mm
 with LED 3mm

mechanisch anreihbar
 mechanical combinable

Typenbez. Type Design.	Artikel-Nr. Part No.		Typenbez. Type Design.	Artikel-Nr. Part No.		Typenbez. Type Design.	Artikel-Nr. Part No.	
WU-L-R	12545		WU-B-R	12585		WU-R-R	12565	
WU-L-G	12550		WU-B-G	12590		WU-R-G	12570	
WU-L-Y	12555		WU-B-Y	12595		WU-R-Y	12575	
WU-L-O	12560		WU-B-O	12600		WU-R-O	12580	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-DH-5W...

WU-DH-5R...

LED Halter für Leiterplatten-Montage

LED holder for PCB

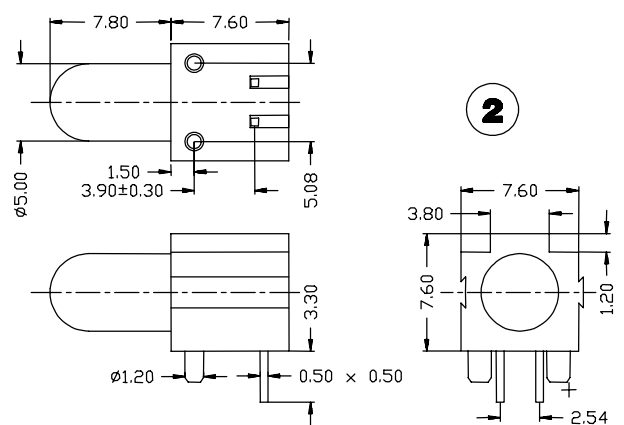
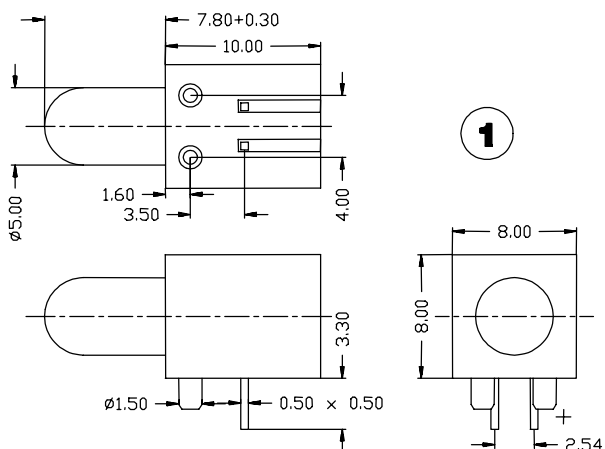
mit LED 5mm

with LED 5mm

mechanisch anreihbar

mechanical combinable

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-DH-5W-R	30808		WU-DH-5R-R	30812	
WU-DH-5W-G	30809		WU-DH-5R-G	30813	
WU-DH-5W-Y	30810		WU-DH-5R-Y	30814	
WU-DH-5W-O	30811		WU-DH-5R-O	30815	
WU-DH-5W-UG	41000		WU-DH-5R-UG	41003	
WU-DH-5W-B	41001		WU-DH-5R-B	41004	
WU-DH-5W-W	41002		WU-DH-5R-W	41005	



Unit: [mm] Tolerance: ± 0.25



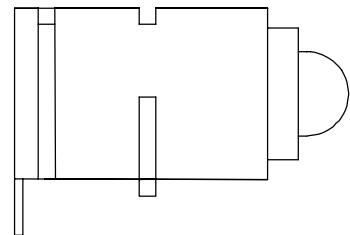
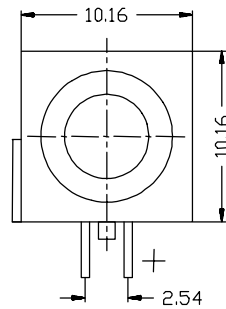
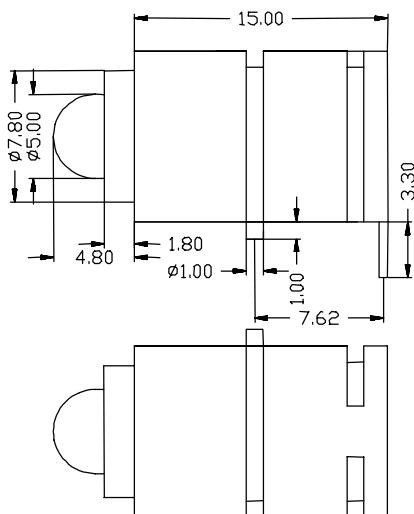
Optoelektronik

WU-B-51...

LED Halter für Leiterplatten-Montage
LED holder for PCB

mit LED 5mm
with LED 5mm

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-B-51R	30830	
WU-B-51G	30831	
WU-B-51Y	30832	
WU-B-51O	30833	



Unit: [mm] Tolerance: ± 0.25



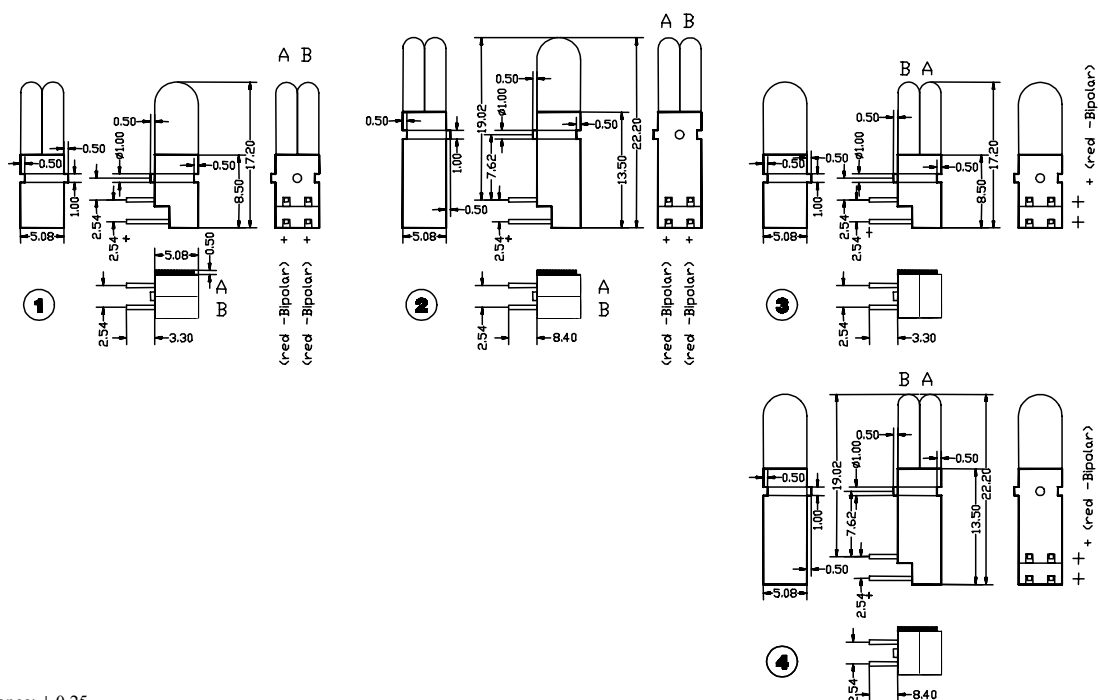
Optoelektronik

**WU-1802... WU-1803...
WU-1804... WU-1805...**
LED Halter für Leiterplatten-Montage
LED holder for PCB

mit Skalen LEDs 2,5mm x 5mm
with scale LED 2,5mm x 5mm

mechanisch anreihbar
mechanical combinable

Typenbez. Type Design.	Artikel-Nr. Part.No.	Typenbez. Type Design.	Artikel-Nr. Part.No.	Typenbez. Type Design.	Artikel-Nr. Part.No.	Typenbez. Type Design.	Artikel-Nr. Part.No.
WU-1802-A-R	21255	WU-1803-A-R	21260	WU-1804-A-R	21265	WU-1805-A-R	21270
WU-1802-B-R	21275	WU-1803-B-R	21280	WU-1804-B-R	21285	WU-1805-B-R	21290
WU-1802-AB-R	21295	WU-1803-AB-R	21300	WU-1804-AB-R	21305	WU-1805-AB-R	21310
WU-1802-A-G	21315	WU-1803-A-G	21320	WU-1804-A-G	21325	WU-1805-A-G	21330
WU-1802-B-G	21335	WU-1803-B-G	21340	WU-1804-B-G	21345	WU-1805-B-G	21350
WU-1802-AB-G	21355	WU-1803-AB-G	21360	WU-1804-AB-G	21365	WU-1805-AB-G	21370
WU-1802-A-Y	21375	WU-1803-A-Y	21380	WU-1804-A-Y	21385	WU-1805-A-Y	21390
WU-1802-B-Y	21395	WU-1803-B-Y	21400	WU-1804-B-Y	21405	WU-1805-B-Y	21410
WU-1802-AB-Y	21415	WU-1803-AB-Y	21420	WU-1804-AB-Y	21425	WU-1805-AB-Y	21430
WU-1802-A-O	21435	WU-1803-A-O	21440	WU-1804-A-O	21445	WU-1805-A-O	21450
WU-1802-B-O	21455	WU-1803-B-O	21460	WU-1804-B-O	21465	WU-1805-B-O	21470
WU-1802-AB-O	21475	WU-1803-AB-O	21480	WU-1804-AB-O	21485	WU-1805-AB-O	21490
	①		②		③		④



Unit: [mm] Tolerance: ± 0.25



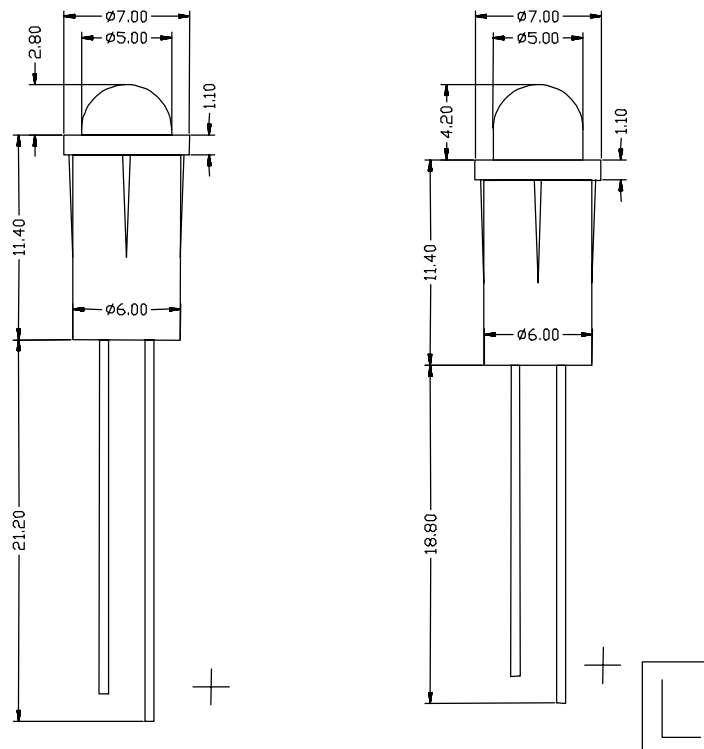
Optoelektronik

WU-600-1...
WU-600-1...(L)
 Montage-Clips für LED 5mm
 Mounting-Clips für LED 5mm

für Frontblende
 for frontpanel

LED Körper kurz und lang
 LED housing short and long

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-600-1R	10955		WU-600-1R-L	10975	
WU-600-1G	10960		WU-600-1G-L	10980	
WU-600-1Y	10965		WU-600-1Y-L	10985	
WU-600-1O	10970		WU-600-1O-L	10990	



Unit: [mm] Tolerance: ± 0.25



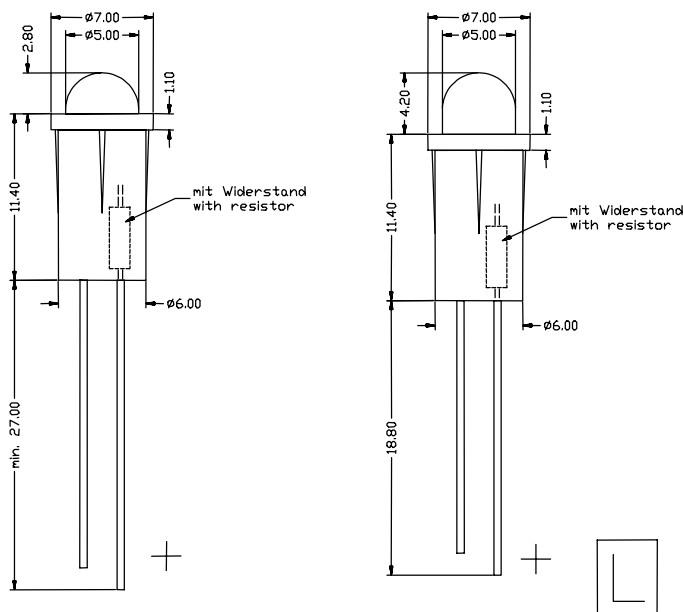
Optoelektronik

WU-600-1... 5V-12V-24V
WU-600-1...(L) 5V-12V-24V
 Montage-Clips für LED 5mm
 Mounting-Clips für LED 5mm

mit integriertem Vorwiderstand
 with integrated resistor
 für Frontblende
 for frontpanel

LED Körper kurz und lang
 LED housing short and long

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-600-1R-5V	21645		WU-600-1R-L-5V	21650	
WU-600-1G-5V	21675		WU-600-1G-L-5V	21680	
WU-600-1Y-5V	21705		WU-600-1Y-L-5V	21710	
WU-600-1O-5V	21735		WU-600-1O-L-5V	21740	
WU-600-1R-12V	21655		WU-600-1R-L-12V	21660	
WU-600-1G-12V	21685		WU-600-1G-L-12V	21690	
WU-600-1Y-12V	21715		WU-600-1Y-L-12V	21720	
WU-600-1O-12V	21745		WU-600-1O-L-12V	21750	
WU-600-1R-24V	21665		WU-600-1R-L-24V	21670	
WU-600-1G-24V	21695		WU-600-1G-L-24V	21700	
WU-600-1Y-24V	21725		WU-600-1Y-L-24V	21730	
WU-600-1O-24V	21755		WU-600-1O-L-24V	21760	



Unit: [mm] Tolerance: ± 0.25



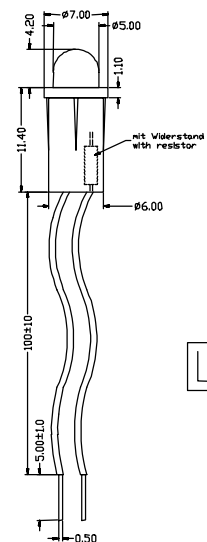
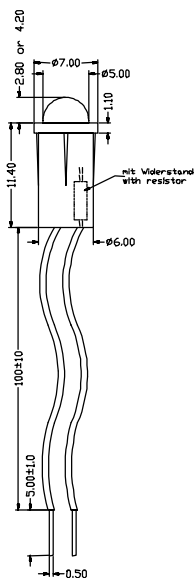
Optoelektronik

WU-600-1... flex. Anschlußdr./flex.legs
WU-600-1...(L) flex. Anschlußdr./flex.legs
 Montage-Clips für LED 5mm
 Mounting-Clips für LED 5mm

mit integriertem Vorwiderstand
 with integrated resistor
 ohne Vorwiderstand
 without resistor
 für Frontblende
 for frontpanel

LED Körper kurz und lang
 LED housing short and long

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-600-1R-flex.	21765		WU-600-1R-L-flex.	21770	
WU-600-1R-flex.-5V	21805		WU-600-1R-L-flex.-5V	21810	
WU-600-1R-flex.-12V	21815		WU-600-1R-L-flex.-12V	21820	
WU-600-1R-flex.-24V	21825		WU-600-1R-L-flex.-24V	21830	
WU-600-1G-flex.	21775		WU-600-1G-L-flex.	21780	
WU-600-1G-flex.-5V	21835		WU-600-1G-L-flex.-5V	21840	
WU-600-1G-flex.-12V	21845		WU-600-1G-L-flex.-12V	21850	
WU-600-1G-flex.-24V	21855		WU-600-1G-L-flex.-24V	21860	
WU-600-1Y-flex.	21785		WU-600-1Y-L-flex.	21790	
WU-600-1Y-flex.-5V	21865		WU-600-1Y-L-flex.-5V	21870	
WU-600-1Y-flex.-12V	21875		WU-600-1Y-L-flex.-12V	21880	
WU-600-1Y-flex.-24V	21885		WU-600-1Y-L-flex.-24V	21890	
WU-600-1O-flex.	21795		WU-600-1O-L-flex.	21800	
WU-600-1O-flex.-5V	21895		WU-600-1O-L-flex.-5V	21900	
WU-600-1O-flex.-12V	21905		WU-600-1O-L-flex.-12V	21910	
WU-600-1O-flex.-24V	21915		WU-600-1O-L-flex.-24V	21920	





Optoelektronik

WU-558... 5V-12V-24V

Montage-Clips für LED 3mm

Mounting-Clips für LED 3mm

für Frontblende

for frontpanel

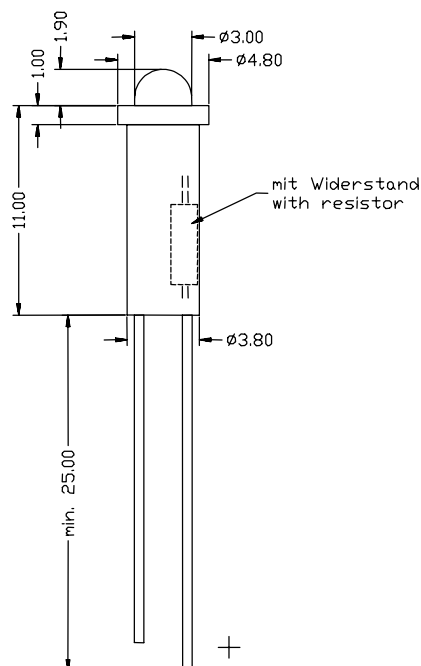
mit integriertem Vorwiderstand

with integrated resistor

ohne Vorwiderstand

without resistor

Typenbezeichnung Type Designation	ArtikelNr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-558R	10995		WU-558Y	11005	
WU-558R-5V	11015		WU-558Y-5V	11090	
WU-558R-12V	11030		WU-558Y-12V	11105	
WU-558-R-24V	11045		WU-558Y-24V	11120	
WU-558G	11000		WU-558O	11010	
WU-558G-5V	11050		WU-558O-5V	11125	
WU-558G-12V	11065		WU-558O-12V	11135	
WU-558G-24V	11085		WU-558O-24V	11155	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-558... flex. Anschlußdrähte/flex. legs

Montage-Clips für LED 3mm

Mounting-Clips for LED 3mm

für Frontblende

for frontpanel

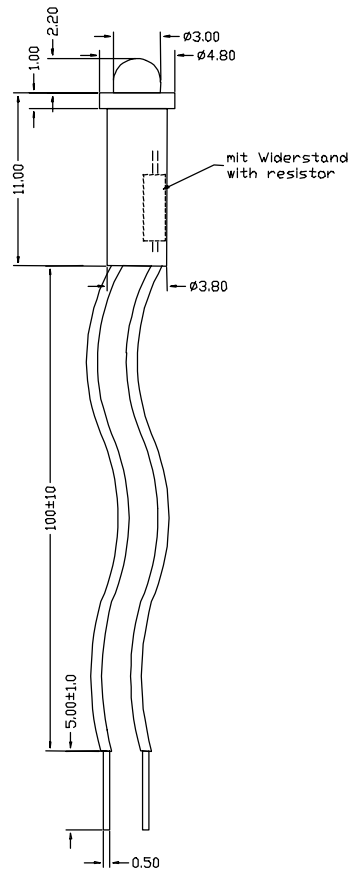
mit integriertem Vorwiderstand

with integrated resistor

ohne Vorwiderstand

without resistor

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-558R-flex.	11160		WU-558Y-flex.	11170	
WU-558R-flex.5V	11180		WU-558Y-flex.5V	11245	
WU-558R-flex.12V	11195		WU-558Y-flex.12V	11255	
WU-558-R-flex.24V	11210		WU-558Y-flex.24V	11270	
WU-558G-flex.	11165		WU-558O-flex.	11175	
WU-558G-flex.5V	11215		WU-558O-flex.5V	11275	
WU-558G-flex.12V	11225		WU-558O-flex.12V	11290	
WU-558G-flex.24V	11240		WU-558O-flex.24V	11305	





Optoelektronik

WU-I... 5ks

Montage-Clips für LED 5mm

Mounting-Clips for LED 5mm

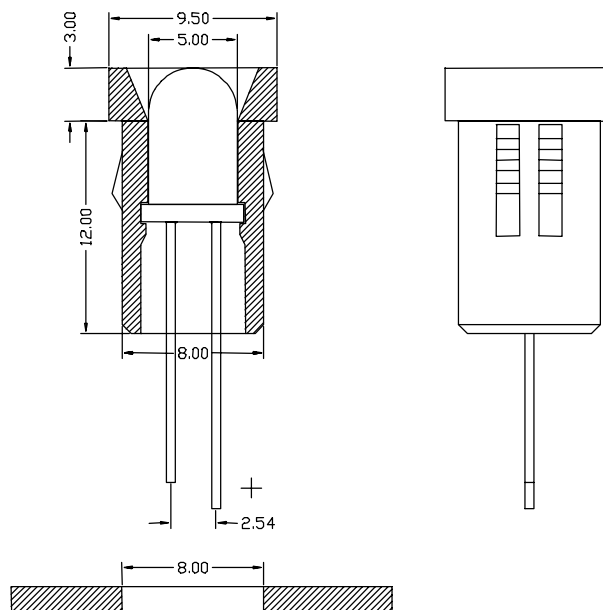
für Frontblende

for frontpanel

Innenreflektor Kunststoff

Inner reflector plastic

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R-5ks	21925	
WU-I-G-5ks	21930	
WU-I-Y-5ks	21935	
WU-I-O-5ks	21940	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-A... 5ks

Montage-Clips für LED 5mm

Mounting-Clips for LED 5mm

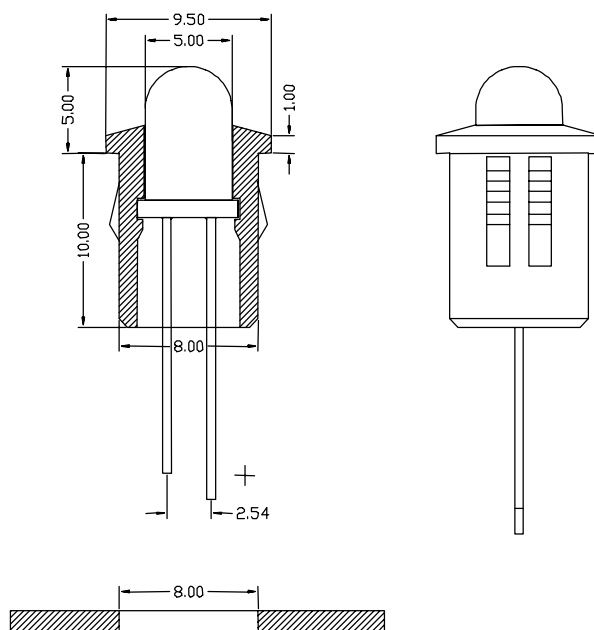
für Frontblende

for frontpanel

Außenreflektor Kunststoff

Outer reflector plastic

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R-5ks	21945	
WU-A-G-5ks	21950	
WU-A-Y-5ks	21955	
WU-A-O-5ks	21960	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-I/A... 8ks

Montage-Clips für LED 8mm

Mounting-Clips for LED 8mm

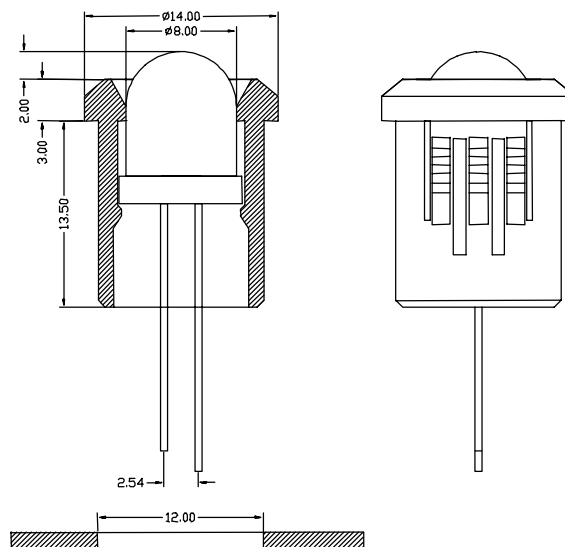
für Frontblende

for frontpanel

Innen-Außen-Reflektor Kunststoff

Inner-Outer-Reflector plastic

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R-8ks	21965	
WU-I/A-G-8ks	21970	
WU-I/A-Y-8ks	21975	
WU-I/A-O-8ks	21980	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-I/A... 10ks-2

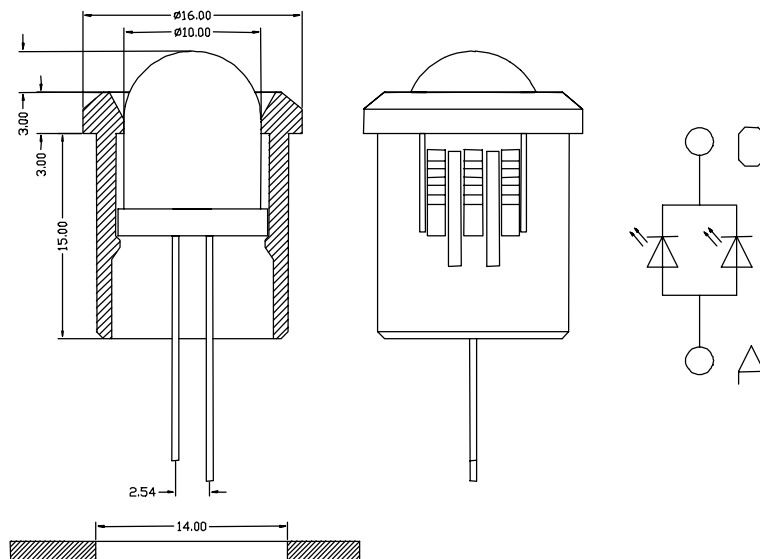
Montage-Clips für LED 10mm
Mounting-Clips for LED 10mm

für Frontblende
for frontpanel

Innen-Außen-Reflektor Kunststoff
Inner-Outer-Reflector plastic

2 Anschlußdrähte
2 Legs

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R-10ks-2	21985	
WU-I/A-G-10ks-2	21990	
WU-I/A-Y-10ks-2	21995	
WU-I/A-O-10ks-2	22000	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-I/A... 10ks-3

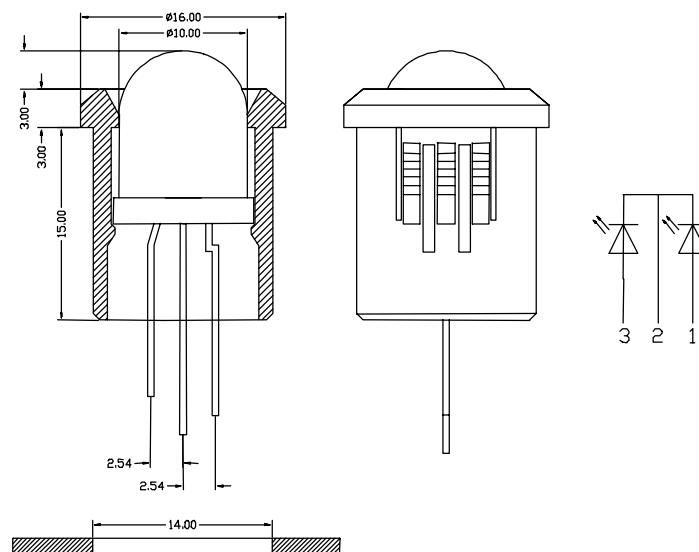
Montage-Clips für LED 10mm
Mounting-Clips for LED 10mm

für Frontblende
for frontpanel

Innen-Außen-Reflektor Kunststoff
Inner-Outer-Reflector plastic

3 Anschlußdrähte
3 Legs

Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R-10ks-3	22005	
WU-I/A-G-10ks-3	22010	
WU-I/A-Y-10ks-3	22015	
WU-I/A-O-10ks-3	22020	



Unit: [mm] Tolerance: ± 0.25

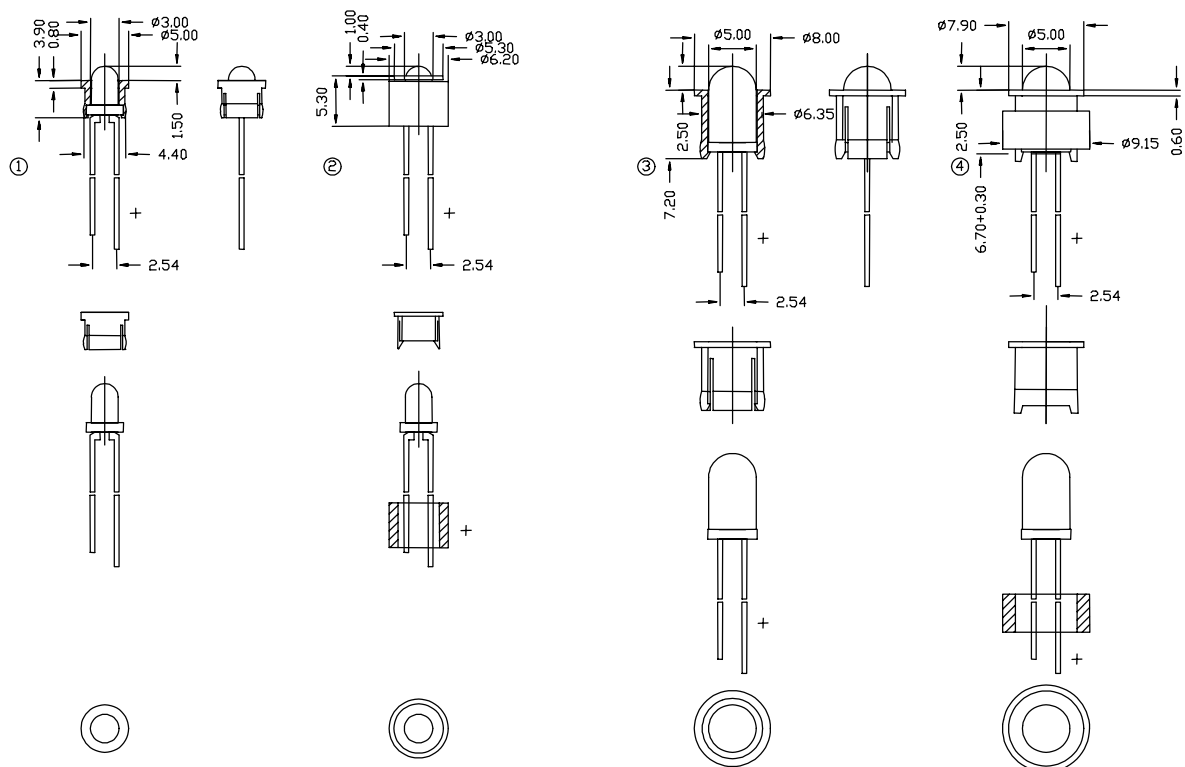
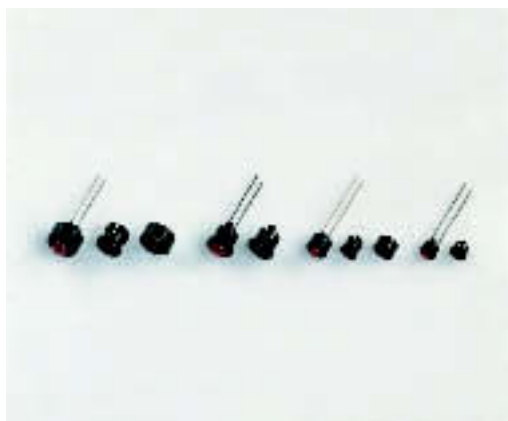


Optoelektronik

WU-MCD 30
WU-MCD 30-2
WU-MCD 50
WU-MCD 50-2
 Montage-Clips für LED 3mm und 5mm
 Mounting-Clips for LED 3mm and 5mm

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.
WU-MCD 30 ①	e011030
WU-MCD 30-2 ②	e011032
WU-MCD 50 ③	e011031
WU-MCD 50-2 ④	e011033



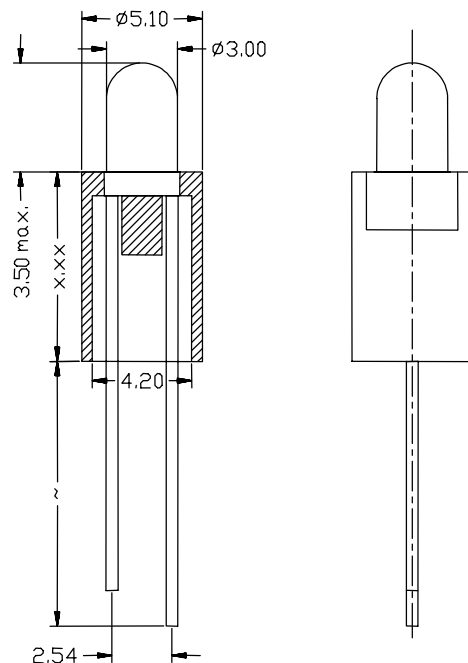
Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-AH-3...
Abstandhalter für LED 3mm
Spacer for LED 3mm

Typenbez. Type Designation	Artikel-Nr. Part No.		Typenbez. Type Designation	Artikel-Nr. Part No.		Typenbez. Type Designation	Artikel-Nr. Part No.	
WU-AH-3-7,6-R	40408		WU-AH-3-11,3-R	40428		WU-AH-3-16,1-R	40448	
WU-AH-3-7,6-G	40409		WU-AH-3-11,3-G	40429		WU-AH-3-16,1-G	40449	
WU-AH-3-7,6-Y	40410		WU-AH-3-11,3-Y	40430		WU-AH-3-16,1-Y	40450	
WU-AH-3-7,6-O	40411		WU-AH-3-11,3-O	40431		WU-AH-3-16,1-O	40451	
WU-AH-3-8,1-R	40412		WU-AH-3-12,1-R	40432		WU-AH-3-17,1-R	40452	
WU-AH-3-8,1-G	40413		WU-AH-3-12,1-G	40433		WU-AH-3-17,1-G	40453	
WU-AH-3-8,1-Y	40414		WU-AH-3-12,1-Y	40434		WU-AH-3-17,1-Y	40454	
WU-AH-3-8,1-O	40415		WU-AH-3-12,1-O	40435		WU-AH-3-17,1-O	40455	
WU-AH-3-8,7-R	40416		WU-AH-3-13,1-R	40436		WU-AH-3-18,1-R	40456	
WU-AH-3-8,7-G	40417		WU-AH-3-13,1-G	40437		WU-AH-3-18,1-G	40457	
WU-AH-3-8,7-Y	40418		WU-AH-3-13,1-Y	40438		WU-AH-3-18,1-Y	40458	
WU-AH-3-8,7-O	40419		WU-AH-3-13,1-O	40439		WU-AH-3-18,1-O	40459	
WU-AH-3-9,6-R	40420		WU-AH-3-14,1-R	40440				
WU-AH-3-9,6-G	40421		WU-AH-3-14,1-G	40441				
WU-AH-3-9,6-Y	40422		WU-AH-3-14,1-Y	40442				
WU-AH-3-9,6-O	40423		WU-AH-3-14,1-O	40443				
WU-AH-3-10,1-R	40424		WU-AH-3-15,1-R	40444				
WU-AH-3-10,1-G	40425		WU-AH-3-15,1-G	40445				
WU-AH-3-10,1-Y	40426		WU-AH-3-15,1-Y	40446				
WU-AH-3-10,1-O	40427		WU-AH-3-15,1-O	40447				



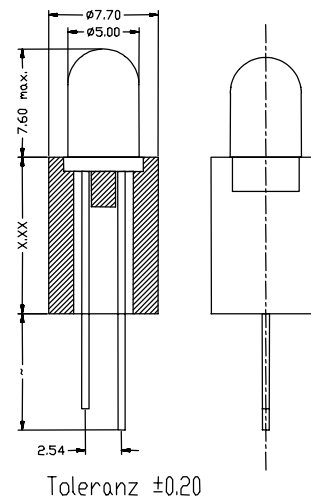
Toleranz ± 0.20



Optoelektronik

WU-AH-5...
Abstandhalter für LED 5mm
Spacer for LED 5mm

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-AH-5-7,9-R	40464		WU-AH-5-13,9-R	40484		WU-AH-5-18,9-R	40505	
WU-AH-5-7,9-G	40465		WU-AH-5-13,9-G	40485		WU-AH-5-18,9-G	40506	
WU-AH-5-7,9-Y	40466		WU-AH-5-13,9-Y	40486		WU-AH-5-18,9-Y	40507	
WU-AH-5-7,9-O	40467		WU-AH-5-13,9-O	40487		WU-AH-5-18,9-O	40508	
WU-AH-5-7,9-UG	41013		WU-AH-5-13,9-UG	41028		WU-AH-5-18,9-UG	41043	
WU-AH-5-7,9-B	41014		WU-AH-5-13,9-B	41029		WU-AH-5-18,9-B	41044	
WU-AH-5-7,9-W	41015		WU-AH-5-13,9-W	41030		WU-AH-5-18,9-W	41045	
WU-AH-5-8,9-R	40468		WU-AH-5-14,6-R	40488		WU-AH-5-19,9-R	40509	
WU-AH-5-8,9-G	40469		WU-AH-5-14,6-G	40489		WU-AH-5-19,9-G	40510	
WU-AH-5-8,9-Y	40470		WU-AH-5-14,6-Y	40490		WU-AH-5-19,9-Y	40511	
WU-AH-5-8,9-O	40471		WU-AH-5-14,6-O	40491		WU-AH-5-19,9-O	40512	
WU-AH-5-8,9-UG	41016		WU-AH-5-14,6-UG	41031		WU-AH-5-19,9-UG	41046	
WU-AH-5-8,9-B	41017		WU-AH-5-14,6-B	41032		WU-AH-5-19,9-B	41047	
WU-AH-5-8,9-W	41018		WU-AH-5-14,6-W	41033		WU-AH-5-19,9-W	41048	
WU-AH-5-9,5-R	40472		WU-AH-5-15,9-R	40492		WU-AH-5-20,9-R	40513	
WU-AH-5-9,5-G	40473		WU-AH-5-15,9-G	40493		WU-AH-5-20,9-G	40514	
WU-AH-5-9,5-Y	40474		WU-AH-5-15,9-Y	40494		WU-AH-5-20,9-Y	40515	
WU-AH-5-9,5-O	40475		WU-AH-5-15,9-O	40495		WU-AH-5-20,9-O	40516	
WU-AH-5-9,5-UG	41019		WU-AH-5-15,9-UG	41034		WU-AH-5-20,9-UG	41049	
WU-AH-5-9,5-B	41020		WU-AH-5-15,9-B	41035		WU-AH-5-20,9-B	41050	
WU-AH-5-9,5-W	41021		WU-AH-5-15,9-W	41036		WU-AH-5-20,9-W	41051	
WU-AH-5-10,9-R	40476		WU-AH-5-17,1-R	40496		WU-AH-5-21,9-R	40517	
WU-AH-5-10,9-G	40477		WU-AH-5-17,1-G	40497		WU-AH-5-21,9-G	40518	
WU-AH-5-10,9-Y	40478		WU-AH-5-17,1-Y	40498		WU-AH-5-21,9-Y	40519	
WU-AH-5-10,9-O	40479		WU-AH-5-17,1-O	40500		WU-AH-5-21,9-O	40520	
WU-AH-5-10,9-UG	41022		WU-AH-5-17,1-UG	41037		WU-AH-5-21,9-UG	41052	
WU-AH-5-10,9-B	41023		WU-AH-5-17,1-B	41038		WU-AH-5-21,9-B	41053	
WU-AH-5-10,9-W	41024		WU-AH-5-17,1-W	41039		WU-AH-5-21,9-W	41054	
WU-AH-5-11,9-R	40480		WU-AH-5-17,9-R	40501				
WU-AH-5-11,9-G	40481		WU-AH-5-17,9-G	40502				
WU-AH-5-11,9-Y	40482		WU-AH-5-17,9-Y	40503				
WU-AH-5-11,9-O	40483		WU-AH-5-17,9-O	40504				
WU-AH-5-11,9-UG	41025		WU-AH-5-17,9-UG	41040				
WU-AH-5-11,9-B	41026		WU-AH-5-17,9-B	41041				
WU-AH-5-11,9-W	41027		WU-AH-5-17,9-W	41042				





®

Optoelektronik

WU-... Serie konfektioniert
WU-... series assembled

BEISPIELE
 EXAMPLES



3mm, 90° Biegung



3mm, Stufenschnitt



3mm, 90° Biegung + Sicke



3mm, Glattschnitt



3mm, Sicke + Glattschnitt



3mm, Sicke



3mm, Sicke + Stufenschnitt



5mm, 90° Biegung



5mm, Stufenschnitt



5mm, 90° Biegung + Sicke



5mm, Sicke + Glattschnitt



5mm, Glattschnitt



5mm, 90° Biegung



5mm, Sicke + Stufenschnitt



5mm, Sicke

Spezifikationen und Datenblätter auf Anfrage

Specifications and data-sheets on request

Farben: standard, ultra-high-bright-weiß, ultra-high-bright-blau und ultra-high-bright-grün

Colours: standard, ultra-high-bright-white, ultra-high-bright-blue and ultra-high-bright-green

Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-... Serie konfektioniert
WU-... series assembled

Daten zur Seite III-68 konfektionierte UHB-LEDs-:
Data to page III-68 assembled UHB-LEDs:

Elektrische und Optische Charakteristik (gemessen bei $T_a=25^\circ\text{C}$ und $I_F=20\text{mA}$)

Electro-Optical Characteristics ($T_a=25^\circ\text{C}$ and $I_F=20\text{mA}$)

Type	Gehäuseform/farbe housing form/ colour	Farbe/CIE-Werte Colour/CIE-data	Durchlaßspg. Forward Voltage U_F in [V] typ. - max	Lichtstärke Luminous Intensity typ. I_v in [cd]	Abstrahlwinkel viewing-angle ϕ_v in [°]
3mm	rund/wasserklar round/water-clear	red	1.8 - 2.4	2.0	30
		green	3.5 - 4.0	1.0	50
				3.4	15
		blue	3.6 - 4.0	1.7	30
				1.0	45
		white	3.6 - 4.0	0.5	15
				0.3	30
				0.9	45
5mm	rund/wasserklar round/water-clear	red	1.8 - 2.4	3.0	20
		green	3.5 - 4.0	2.0	30
				5.0	15
		blue	3.6 - 4.0	2.2	30
				1.2	45
		white	3.6 - 4.0	2.0	15
				0.7	30
				0.4	45

Maximale Grenzparameter: bei $T_a=25^\circ\text{C}$

Absolute Maximum Ratings: at $T_a=25^\circ\text{C}$

	DC Durchlaßstrom Forward Current I_F in [mA]	Pulsstrom Pulse forw. Current I_{Fpeak} [mA]	Sperrspannung Reverse Voltage U_R in [V]	Aufnahmeleistung Power Dissipation P_D in [mW]	Betriebs- Temperatur Operating Temperature $T_{oper.}$ in [°C]	Lager- Temperatur Storage Temperature $T_{Storg.}$ in [°C]
red	30	150	5	150	-40 - +85	-40 - +85
green	30	150	5	150	-30 - +85	-30 - +85
blue	30	150	5	150	-30 - +85	-30 - +85
white	25	100	5	120	-30 - +85	-30 - +85

Achtung! ESD-Schutzmaßnahmen beachten, da sonst Folgeschäden an den UHB-LEDs auftreten können.
Attention! Please take care of ESD protection to avoid technical defects.

Ihre speziellen Applikationsanforderungen richten sie bitte an unseren Vertrieb.
For requests of special applications, please contact our technical sales department.

Spezifikationen und Datenblätter auf Anfrage
Specifications and data-sheets on request

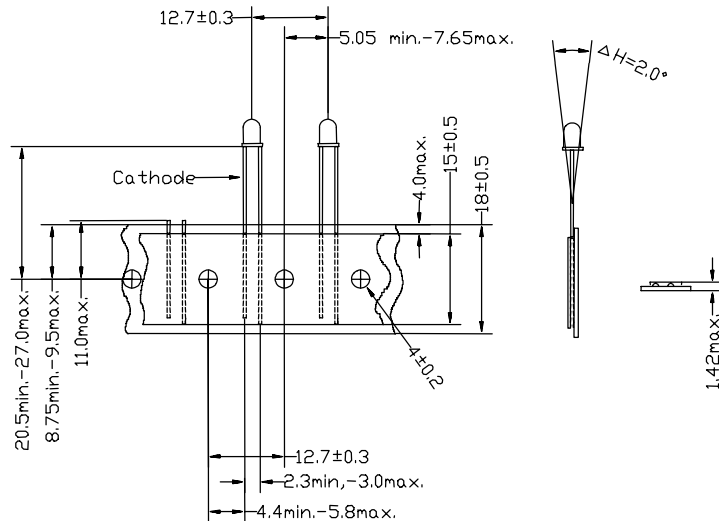
UHB-Farben: standard, weiß, blau, grün und rot
UHB-Colours: standard, white, blue, green and red



Optoelektronik

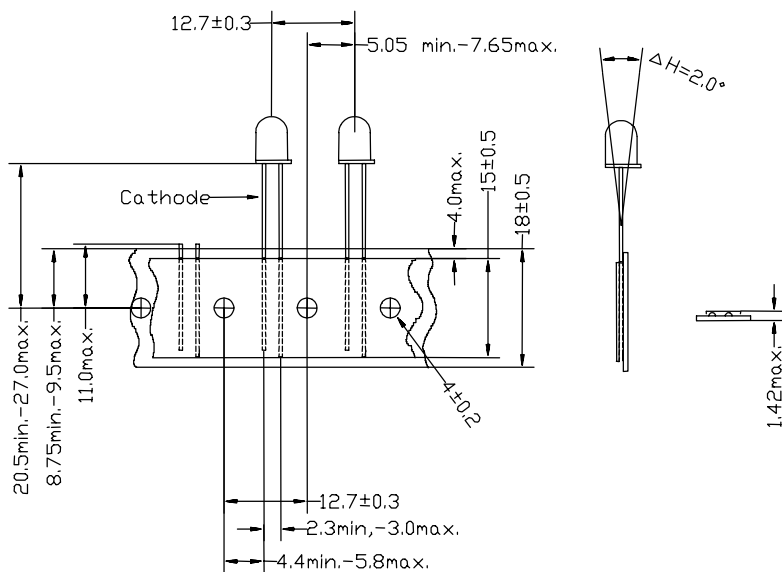
Taped and Boxed LEDs for 3mm and 5mm Types

3mm LED-Type



WU-X₁-TNB 2.54-X₂

5mm LED-Type



WU-X₁-TNB 2.54-X₂

Packing
TNB = Tape and Box

Weitere Konfektionierungsmöglichkeiten:

Biegen, Aufbiegen, Abwinkeln und Sicken nach Kundenspezifikation.
VPE: 2.000 Stück in Box.

Further Options:

Bending and crimping according customers specifications.

X₁= LED-Bezeichnung
LED-Type

X₂= Gurtungsmaß Unterkante
LED - Mitte Lochstreifen.
Taping dimensions between
hole and LED-bottom-plate.

Unit: [mm] Tolerance: ± 0.25

 Optoelektronik	Lose LED Reflektoren für 3-20mm LEDs LED Housings for 3-20mm LEDs Glanzchrom - Bright chrome Für Signal-, Sicherheits- und Designbeleuchtung For Signal-, Safety- and Design lighting
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Typenbezeichnung Type Designation	Artikel-Nr. Part No.
WU-I-3	15600
WU-A-3	15620
WU-I-5	15605
WU-A-5	15625
WU-I-5 Linse	16050
WU-I-8	15610
WU-A-8	15630
WU-I/A-8	15615
WU-I/A-10	23143
WU-I/A-20	16060
WU-MK-20-M8	16100
WU-MK-20-M12	16105
<i>*NEU!</i> Alle Reflektoren können mit Standard-, Super- und Ultra-bright-LEDs bestückt werden. <i>NEW!</i> All reflectors can be assembled with Standard-, Super- and Ultra-bright-LEDs.	





Optoelektronik

Lose LED Reflektoren für 3-20mm LEDs

LED Housings only for 3-20mm LEDs

Schwarzchrom - Black chrome

Für Signal-, Sicherheits- und Designbeleuchtung

For Signal-, Safety- and Design lighting

Typenbezeichnung Type Designation	Artikel-Nr. Part No.
WU-I-3S	15635
WU-A-3S	15655
WU-I-5S	15640
WU-A-5S	15660
WU-I-5S Linse	16029
WU-I-8S	15645
WU-A-8S	15665
WU-I/A-8S	15650
WU-I/A-10S	23144
WU-I/A-20S	16065
WU-MK-20S-M8	16120
WU-MK-20S-M12	16125
<i>*NEU!</i> Alle Reflektoren können mit Standard-, Super- und Ultra-bright-LEDs bestückt werden. <i>NEW!</i> All reflectors can be assembled with Standard-, Super- and Ultra-bright-LEDs.	





Optoelektronik

WU-I-...3

WU-I-...3S

Innenreflektor für LED 3mm

Innerreflector for LED 3mm

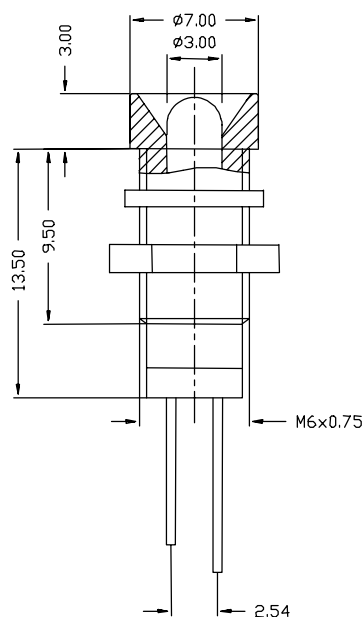
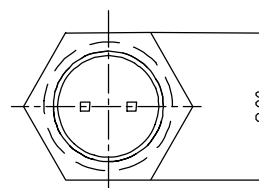
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R3	15670		WU-I-R3S	15750	
WU-I-G3	15675		WU-I-G3S	15755	
WU-I-Y3	15680		WU-I-Y3S	15760	
WU-I-O3	15685		WU-I-O3S	15765	
WU-I-UG3	42000		WU-I-UG3S	42003	
WU-I-B3	42001		WU-I-B3S	42004	
WU-I-W3	42002		WU-I-W3S	42005	
<i>NEU!</i> Die Farben blau, grün und weiß sind in ultrahellen Ausführungen erhältlich. <i>NEW!</i> The colours blue, green and white are available in ultrabright types.					



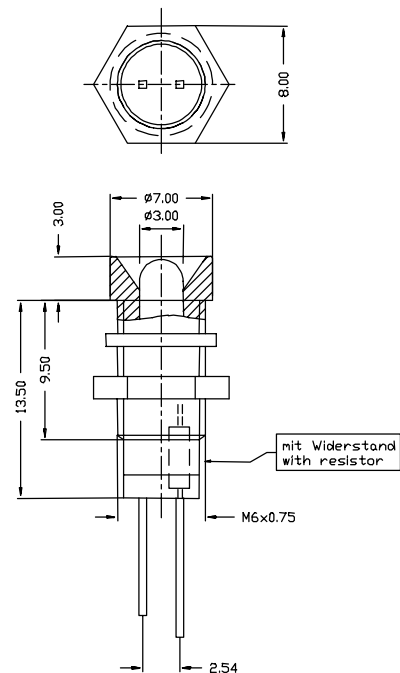


Optoelektronik

WU-I-...3 5V-12V-24V
WU-I-...3S 5V-12V-24V
 Innenreflektor für LED 3mm
 Innerreflector for LED 3mm
 Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R3-5V	22025		WU-I-R3S-5V	22030	
WU-I-G3-5V	22055		WU-I-G3S-5V	22060	
WU-I-Y3-5V	22085		WU-I-Y3S-5V	22090	
WU-I-O3-5V	22115		WU-I-O3S-5V	22120	
WU-I-UG3-5V	42006		WU-I-UG3S-5V	42015	
WU-I-B3-5V	42007		WU-I-B3S-5V	42016	
WU-I-W3-5V	42008		WU-I-W3S-5V	42017	
WU-I-R3-12V	22035		WU-I-R3S-12V	22040	
WU-I-G3-12V	22065		WU-I-G3S-12V	22070	
WU-I-Y3-12V	22095		WU-I-Y3S-12V	22100	
WU-I-O3-12V	22125		WU-I-O3S-12V	22130	
WU-I-UG3-12V	42009		WU-I-UG3S-12V	42018	
WU-I-B3-12V	42010		WU-I-B3S-12V	42019	
WU-I-W3-12V	42011		WU-I-W3S-12V	42020	
WU-I-R3-24V	22045		WU-I-R3S-24V	22050	
WU-I-G3-24V	22075		WU-I-G3S-24V	22080	
WU-I-Y3-24V	22105		WU-I-Y3S-24V	22110	
WU-I-O3-24V	22135		WU-I-O3S-24V	22140	
WU-I-UG3-24V	42012		WU-I-UG3S-24V	42021	
WU-I-B3-24V	42013		WU-I-B3S-24V	42022	
WU-I-W3-24V	42014		WU-I-W3S-24V	42023	





Optoelektronik

WU-I-...3

WU-I-...3S

Innenreflektor für LED 3mm

Innerreflector for LED 3mm

mit flex. Anschlußdrähten

with flex. Legs

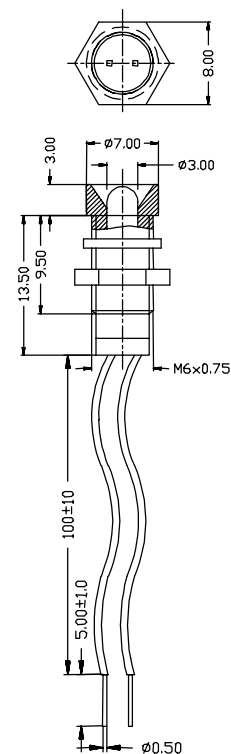
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbez. Type Design.	Art.Nr. Part No.		Typenbez. Type Design.	Art.Nr. Part No.	
WU-I-R3-flex.	22145		WU-I-R3S-flex.	22150	
WU-I-G3-flex.	22155		WU-I-G3S-flex.	22160	
WU-I-Y3-flex.	22165		WU-I-Y3S-flex.	22170	
WU-I-O3-flex.	22175		WU-I-O3S-flex.	22180	
WU-I-UG3-flex.	42024		WU-I-UG3S-flex.	42027	
WU-I-B3-flex.	42025		WU-I-B3S-flex.	42028	
WU-I-W3-flex.	42026		WU-I-W3S-flex.	42029	



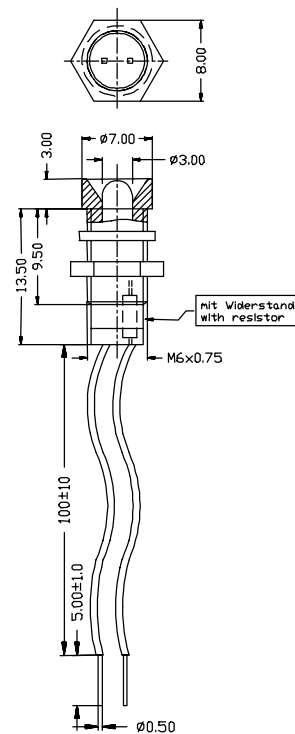


Optoelektronik

WU-I-...3 5V-12V-24V
WU-I-...3S 5V-12V-24V
 Innenreflektor für LED 3mm
 Innerreflector for LED 3mm
mit flex. Anschlußdrähten
with flex. Legs

Glanzchrom – Bright chrome
 Schwarzschrom – Black chrome

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R3-flex.-5V	22185		WU-I-R3S-flex.-5V	22190	
WU-I-G3-flex.-5V	22215		WU-I-G3S-flex.-5V	22220	
WU-I-Y3-flex.-5V	22245		WU-I-Y3S-flex.-5V	22250	
WU-I-O3-flex.-5V	22275		WU-I-O3S-flex.-5V	22280	
WU-I-UG3-flex.-5V	42030		WU-I-UG3S-flex.-5V	42039	
WU-I-B3-flex.-5V	42031		WU-I-B3S-flex.-5V	42040	
WU-I-W3-flex.-5V	42032		WU-I-W3S-flex.-5V	42041	
WU-I-R3-flex.-12V	22195		WU-I-R3S-flex.-12V	22200	
WU-I-G3-flex.-12V	22225		WU-I-G3S-flex.-12V	22230	
WU-I-Y3-flex.-12V	22255		WU-I-Y3S-flex.-12V	22260	
WU-I-O3-flex.-12V	22285		WU-I-O3S-flex.-12V	22290	
WU-I-UG3-flex.-12V	42033		WU-I-UG3S-flex.-12V	42042	
WU-I-B3-flex.-12V	42034		WU-I-B3S-flex.-12V	42043	
WU-I-W3-flex.-12V	42035		WU-I-W3S-flex.-12V	42044	
WU-I-R3-flex.-24V	22205		WU-I-R3S-flex.-24V	22210	
WU-I-G3-flex.-24V	22235		WU-I-G3S-flex.-24V	22240	
WU-I-Y3-flex.-24V	22265		WU-I-Y3S-flex.-24V	22270	
WU-I-O3-flex.-24V	22295		WU-I-O3S-flex.-24V	22300	
WU-I-UG3-flex.-24V	42036		WU-I-UG3S-flex.-24V	42045	
WU-I-B3-flex.-24V	42037		WU-I-B3S-flex.-24V	42046	
WU-I-W3-flex.-24V	42038		WU-I-W3S-flex.-24V	42047	





Optoelektronik

WU-A-...3

WU-A-...3S

Außenreflektor für LED 3mm

Outerreflector for LED 3mm

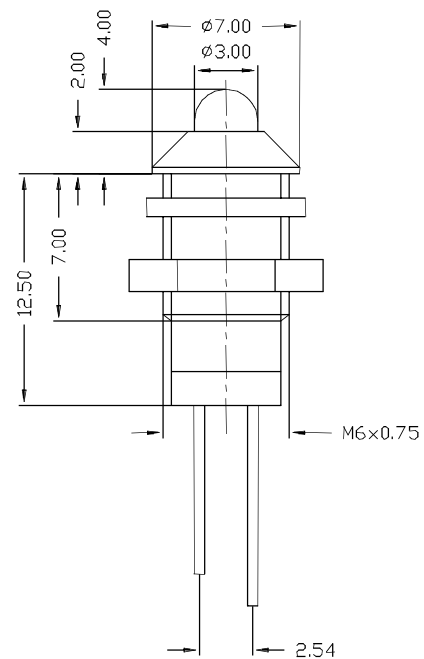
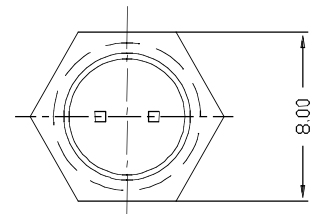
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R3	15710		WU-A-R3S	15790	
WU-A-G3	15715		WU-A-G3S	15795	
WU-A-Y3	15720		WU-A-Y3S	15800	
WU-A-O3	15725		WU-A-O3S	15805	
WU-A-UG3	42500		WU-A-UG3S	42503	
WU-A-B3	42501		WU-A-B3S	42504	
WU-A-W3	42502		WU-A-W3S	42505	





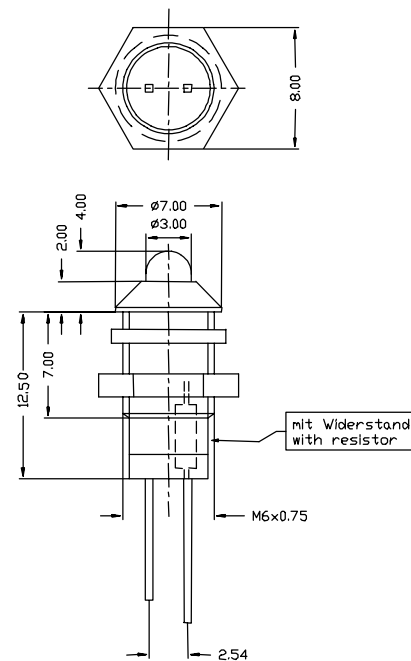
Optoelektronik

WU-A-...3 5V-12V-24V
WU-A-...3S 5V-12V-24V
 Außenreflektor für LED 3mm
 Outerreflector for LED 3mm

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R3-5V	22305		WU-A-R3S-5V	22310	
WU-A-G3-5V	22335		WU-A-G3S-5V	22340	
WU-A-Y3-5V	22365		WU-A-Y3S-5V	22370	
WU-A-O3-5V	22395		WU-A-O3S-5V	22400	
WU-A-UG3-5V	42506		WU-A-UG3S-5V	42515	
WU-A-B3-5V	42507		WU-A-B3S-5V	42516	
WU-A-W3-5V	42508		WU-A-W3S-5V	42517	
WU-A-R3-12V	22315		WU-A-R3S-12V	22320	
WU-A-G3-12V	22345		WU-A-G3S-12V	22350	
WU-A-Y3-12V	22375		WU-A-Y3S-12V	22380	
WU-A-O3-12V	22405		WU-A-O3S-12V	22410	
WU-A-UG3-12V	42509		WU-A-UG3S-12V	42518	
WU-A-B3-12V	42510		WU-A-B3S-12V	42519	
WU-A-W3-12V	42511		WU-A-W3S-12V	42520	
WU-A-R3-24V	22325		WU-A-R3S-24V	22330	
WU-A-G3-24V	22355		WU-A-G3S-24V	22360	
WU-A-Y3-24V	22385		WU-A-Y3S-24V	22390	
WU-A-O3-24V	22415		WU-A-O3S-24V	22420	
WU-A-UG3-24V	42512		WU-A-UG3S-24V	42521	
WU-A-B3-24V	42513		WU-A-B3S-24V	42522	
WU-A-W3-24V	42514		WU-A-W3S-24V	42523	





Optoelektronik

WU-A-...3

WU-A-...3S

Außenreflektor für LED 3mm

Outerreflector for LED 3mm

mit flex. Anschlußdrähten
with flex. Legs

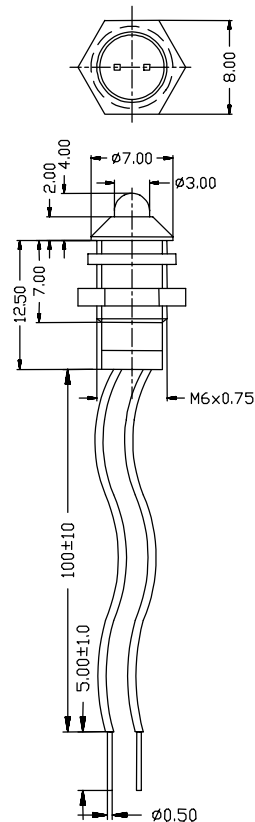
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R3-flex.	22425		WU-A-R3S-flex.	22430	
WU-A-G3-flex.	22435		WU-A-G3S-flex.	22440	
WU-A-Y3-flex.	22445		WU-A-Y3S-flex.	22450	
WU-A-O3-flex.	22455		WU-A-O3S-flex.	22460	
WU-A-UG3-flex.	42524		WU-A-UG3S-flex.	42527	
WU-A-B3-flex.	42525		WU-A-B3S-flex.	42528	
WU-A-W3-flex.	42526		WU-A-W3S-flex.	42529	





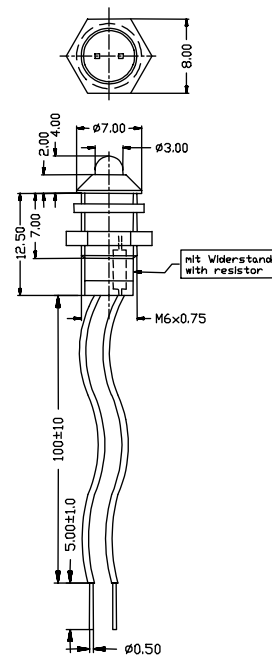
Optoelektronik

WU-A-...3 5V-12V-24V
WU-A-...3S 5V-12V-24V
 Außenreflektor für LED 3mm
 Outerreflector for LED 3mm

mit flex. Anschlußdrähten
with flex. Legs

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome
 für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R3-flex.-5V	22465		WU-A-R3S-flex.-5V	22470	
WU-A-G3-flex.-5V	22495		WU-A-G3S-flex.-5V	22500	
WU-A-Y3-flex.-5V	22525		WU-A-Y3S-flex.-5V	22530	
WU-A-O3-flex.-5V	22555		WU-A-O3S-flex.-5V	22560	
WU-A-UG3-flex.-5V	42530		WU-A-UG3S-flex.-5V	42539	
WU-A-B3-flex.-5V	42531		WU-A-B3S-flex.-5V	42540	
WU-A-W3-flex.-5V	42532		WU-A-W3S-flex.-5V	42541	
WU-A-R3-flex.-12V	22475		WU-A-R3S-flex.-12V	22480	
WU-A-G3-flex.-12V	22505		WU-A-G3S-flex.-12V	22510	
WU-A-Y3-flex.-12V	22535		WU-A-Y3S-flex.-12V	22540	
WU-A-O3-flex.-12V	22565		WU-A-O3S-flex.-12V	22570	
WU-A-UG3-flex.-12V	42533		WU-A-UG3S-flex.-12V	42542	
WU-A-B3-flex.-12V	42534		WU-A-B3S-flex.-12V	42543	
WU-A-W3-flex.-12V	42535		WU-A-W3S-flex.-12V	42544	
WU-A-R3-flex.-24V	22485		WU-A-R3S-flex.-24V	22490	
WU-A-G3-flex.-24V	22515		WU-A-G3S-flex.-24V	22520	
WU-A-Y3-flex.-24V	22545		WU-A-Y3S-flex.-24V	22550	
WU-A-O3-flex.-24V	22575		WU-A-O3S-flex.-24V	22580	
WU-A-UG3-flex.-24V	42536		WU-A-UG3S-flex.-24V	42545	
WU-A-B3-flex.-24V	42537		WU-A-B3S-flex.-24V	42546	
WU-A-W3-flex.-24V	42538		WU-A-W3S-flex.-24V	42547	





Optoelektronik

WU-I-...5

WU-I-...5S

Innenreflektor für LED 5mm

Innerreflector for LED 5mm

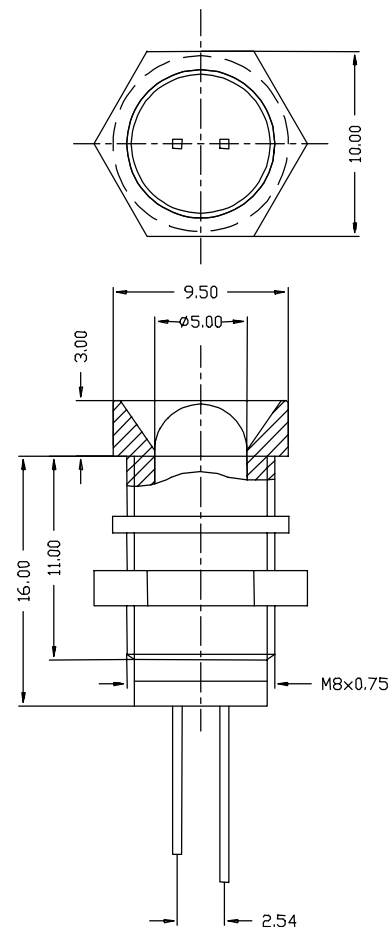
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5	15690		WU-I-R5S	15770	
WU-I-G5	15695		WU-I-G5S	15775	
WU-I-Y5	15700		WU-I-Y5S	15780	
WU-I-O5	15705		WU-I-O5S	15785	
WU-I-UG5	42048		WU-I-UG5S	42051	
WU-I-B5	42049		WU-I-B5S	42052	
WU-I-W5	42050		WU-I-W5S	42053	





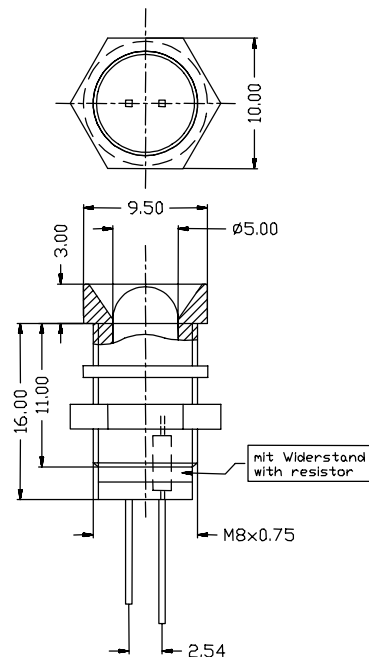
Optoelektronik

WU-I-...5 5V-12V-24V
WU-I-...5S 5V-12V-24V
 Innenreflektor für LED 5mm
 Innerreflector for LED 5mm

Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-5V	22585		WU-I-R5S-5V	22590	
WU-I-G5-5V	22615		WU-I-G5S-5V	22620	
WU-I-Y5-5V	22645		WU-I-Y5S-5V	22650	
WU-I-O5-5V	22675		WU-I-O5S-5V	22680	
WU-I-UG5-5V	42054		WU-I-UG5S-5V	42063	
WU-I-B5-5V	42055		WU-I-B5S-5V	42064	
WU-I-W5-5V	42056		WU-I-W5S-5V	42065	
WU-I-R5-12V	22595		WU-I-R5S-12V	22600	
WU-I-G5-12V	22625		WU-I-G5S-12V	22630	
WU-I-Y5-12V	22655		WU-I-Y5S-12V	22660	
WU-I-O5-12V	22685		WU-I-O5S-12V	22690	
WU-I-UG5-12V	42057		WU-I-UG5S-12V	42066	
WU-I-B5-12V	42058		WU-I-B5S-12V	42067	
WU-I-W5-12V	42059		WU-I-W5S-12V	42068	
WU-I-R5-24V	22605		WU-I-R5S-24V	22610	
WU-I-G5-24V	22635		WU-I-G5S-24V	22640	
WU-I-Y5-24V	22665		WU-I-Y5S-24V	22670	
WU-I-O5-24V	22695		WU-I-O5S-24V	22700	
WU-I-UG5-24V	42060		WU-I-UG5S-24V	42069	
WU-I-B5-24V	42061		WU-I-B5S-24V	42070	
WU-I-W5-24V	42062		WU-I-W5S-24V	42071	





Optoelektronik

WU-I-...5

WU-I-...5S

Innenreflektor für LED 5mm

Innerreflector for LED 5mm

mit flex. Anschlußdrähten

with flex. Legs

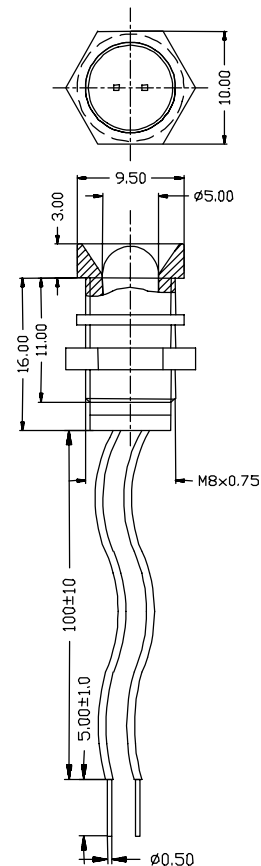
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-flex.	22705		WU-I-R5S-flex.	22710	
WU-I-G5-flex.	22715		WU-I-G5S-flex.	22720	
WU-I-Y5-flex.	22725		WU-I-Y5S-flex.	22730	
WU-I-O5-flex.	22735		WU-I-O5S-flex.	22740	
WU-I-UG5-flex.	42072		WU-I-UG5S-flex.	42075	
WU-I-B5-flex.	42073		WU-I-B5S-flex.	42076	
WU-I-W5-flex.	42074		WU-I-W5S-flex.	42077	





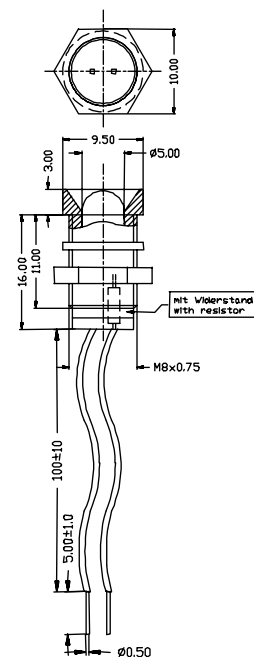
Optoelektronik

WU-I-...5 5V-12V-24V
WU-I-...5S 5V-12V-24V
 Innenreflektor für LED 5mm
 Innerreflector for LED 5mm
mit flex. Anschlußdrähten
with flex. Legs

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-flex.-5V	22745		WU-I-R5S-flex.-5V	22750	
WU-I-G5-flex.-5V	22775		WU-I-G5S-flex.-5V	22780	
WU-I-Y5-flex.-5V	22805		WU-I-Y5S-flex.-5V	22810	
WU-I-O5-flex.-5V	22835		WU-I-O5S-flex.-5V	22840	
WU-I-UG5-flex.-5V	42078		WU-I-UG5S-flex.-5V	42087	
WU-I-B5-flex.-5V	42079		WU-I-B5S-flex.-5V	42088	
WU-I-W5-flex.-5V	42080		WU-I-W5S-flex.-5V	42089	
WU-I-R5-flex.-12V	22755		WU-I-R5S-flex.-12V	22760	
WU-I-G5-flex.-12V	22785		WU-I-G5S-flex.-12V	22790	
WU-I-Y5-flex.-12V	22815		WU-I-Y5S-flex.-12V	22820	
WU-I-O5-flex.-12V	22845		WU-I-O5S-flex.-12V	22850	
WU-I-UG5-flex.-12V	42081		WU-I-UG5S-flex.-12V	42090	
WU-I-B5-flex.-12V	42082		WU-I-B5S-flex.-12V	42091	
WU-I-W5-flex.-12V	42083		WU-I-W5S-flex.-12V	42092	
WU-I-R5-flex.-24V	22765		WU-I-R5S-flex.-24V	22770	
WU-I-G5-flex.-24V	22795		WU-I-G5S-flex.-24V	22800	
WU-I-Y5-flex.-24V	22825		WU-I-Y5S-flex.-24V	22830	
WU-I-O5-flex.-24V	22855		WU-I-O5S-flex.-24V	22860	
WU-I-UG5-flex.-24V	42084		WU-I-UG5S-flex.-24V	42093	
WU-I-B5-flex.-24V	42085		WU-I-B5S-flex.-24V	42094	
WU-I-W5-flex.-24V	42086		WU-I-W5S-flex.-24V	42095	





Optoelektronik

WU-A-...5

WU-A-...5S

Außenreflektor für LED 5mm

Outerreflector for LED 5mm

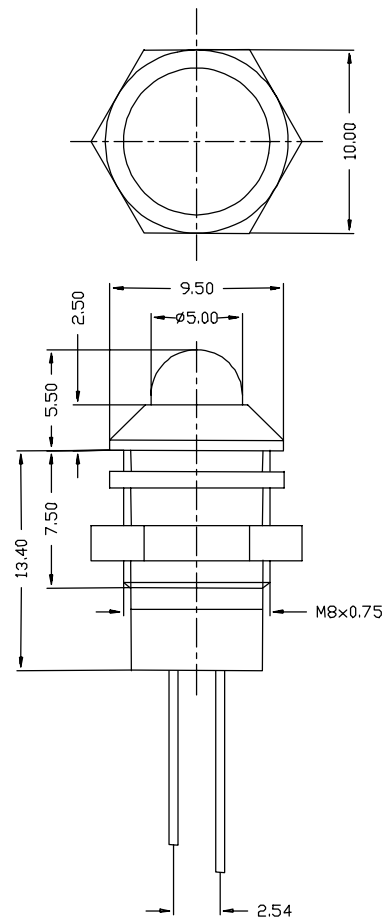
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R5	15730		WU-A-R5S	15810	
WU-A-G5	15735		WU-A-G5S	15815	
WU-A-Y5	15740		WU-A-Y5S	15820	
WU-A-O5	15745		WU-A-O5S	15825	
WU-A-UG5	42548		WU-A-UG5S	42551	
WU-A-B5	42549		WU-A-B5S	42552	
WU-A-W5	42550		WU-A-W5S	42553	



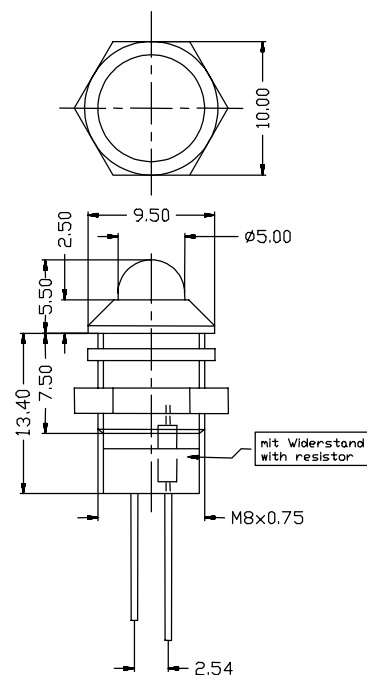


Optoelektronik

WU-A-...5 5V-12V-24V
WU-A-...5S 5V-12V-24V
 Außenreflektor für LED 5mm
 Outerreflector for LED 5mm
 Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R5-5V	22865		WU-A-R5S-5V	22870	
WU-A-G5-5V	22895		WU-A-G5S-5V	22900	
WU-A-Y5-5V	22925		WU-A-Y5S-5V	22930	
WU-A-O5-5V	22955		WU-A-O5S-5V	22960	
WU-A-UG5-5V	42554		WU-A-UG5S-5V	42563	
WU-A-B5-5V	42555		WU-A-B5S-5V	42564	
WU-A-W5-5V	42556		WU-A-W5S-5V	42565	
WU-A-R5-12V	22875		WU-A-R5S-12V	22880	
WU-A-G5-12V	22905		WU-A-G5S-12V	22910	
WU-A-Y5-12V	22935		WU-A-Y5S-12V	22940	
WU-A-O5-12V	22965		WU-A-O5S-12V	22970	
WU-A-UG5-12V	42557		WU-A-UG5S-12V	42566	
WU-A-B5-12V	42558		WU-A-B5S-12V	42567	
WU-A-W5-12V	42559		WU-A-W5S-12V	42568	
WU-A-R5-24V	22885		WU-A-R5S-24V	22890	
WU-A-G5-24V	22915		WU-A-G5S-24V	22920	
WU-A-Y5-24V	22945		WU-A-Y5S-24V	22950	
WU-A-O5-24V	22975		WU-A-O5S-24V	22980	
WU-A-UG5-24V	42560		WU-A-UG5S-24V	42569	
WU-A-B5-24V	42561		WU-A-B5S-24V	42570	
WU-A-W5-24V	42562		WU-A-W5S-24V	42571	





Optoelektronik

WU-A-...5

WU-A-...5S

Außenreflektor für LED 5mm

Outerreflector for LED 5mm

mit flex. Anschlußdrähten

with flex. Legs

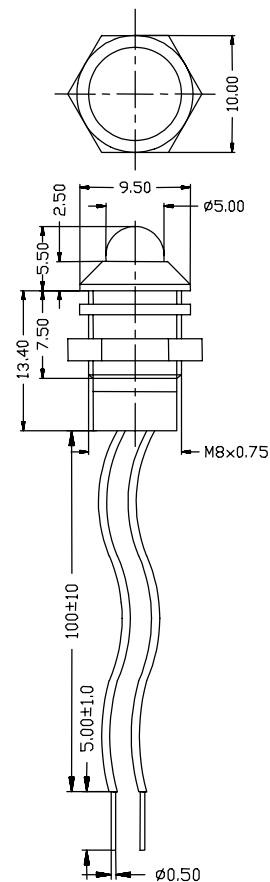
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R5-flex.	22985		WU-A-R5S-flex.	22990	
WU-A-G5-flex.	22995		WU-A-G5S-flex.	23000	
WU-A-Y5-flex.	23005		WU-A-Y5S-flex.	23010	
WU-A-O5-flex.	23015		WU-A-O5S-flex.	23020	
WU-A-UG5-flex.	42572		WU-A-UG5S-flex.	42575	
WU-A-B5-flex.	42573		WU-A-B5S-flex.	42576	
WU-A-W5-flex.	42574		WU-A-W5S-flex.	42577	





Optoelektronik

WU-A-...5 5V-12V-24V
WU-A-...5S 5V-12V-24V

Außenreflektor für LED 5mm

Outerreflector for LED 5mm

mit flex. Anschlußdrähten

with flex. Legs

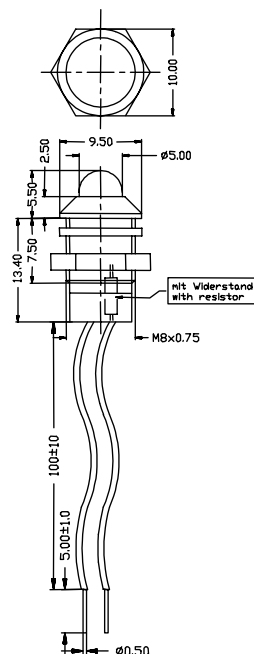
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Signal-, Sicherheits- und Designbeleuchtung

for Signal-, Safety and Design lighting

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R5-flex.-5V	23025		WU-A-R5S-flex.-5V	23030	
WU-A-G5-flex.-5V	23055		WU-A-G5S-flex.-5V	23060	
WU-A-Y5-flex.-5V	23085		WU-A-Y5S-flex.-5V	23090	
WU-A-O5-flex.-5V	23115		WU-A-O5S-flex.-5V	23120	
WU-A-UG5-flex.-5V	42578		WU-A-UG5S-flex.-5V	42587	
WU-A-B5-flex.-5V	42579		WU-A-B5S-flex.-5V	42588	
WU-A-W5-flex.-5V	42580		WU-A-W5S-flex.-5V	42589	
WU-A-R5-flex.-12V	23035		WU-A-R5S-flex.-12V	23040	
WU-A-G5-flex.-12V	23065		WU-A-G5S-flex.-12V	23070	
WU-A-Y5-flex.-12V	23095		WU-A-Y5S-flex.-12V	23100	
WU-A-O5-flex.-12V	23125		WU-A-O5S-flex.-12V	23130	
WU-A-UG5-flex.-12V	42581		WU-A-UG5S-flex.-12V	42590	
WU-A-B5-flex.-12V	42582		WU-A-B5S-flex.-12V	42591	
WU-A-W5-flex.-12V	42583		WU-A-W5S-flex.-12V	42592	
WU-A-R5-flex.-24V	23045		WU-A-R5S-flex.-24V	23050	
WU-A-G5-flex.-24V	23075		WU-A-G5S-flex.-24V	23080	
WU-A-Y5-flex.-24V	23105		WU-A-Y5S-flex.-24V	23110	
WU-A-O5-flex.-24V	23135		WU-A-O5S-flex.-24V	23140	
WU-A-UG5-flex.-24V	42584		WU-A-UG5S-flex.-24V	42593	
WU-A-B5-flex.-24V	42585		WU-A-B5S-flex.-24V	42594	
WU-A-W5-flex.-24V	42586		WU-A-W5S-flex.-24V	42595	





Optoelektronik

WU-I-...8

WU-I-...8S

Innenreflektor für LED 8mm

Innerreflector for LED 8mm

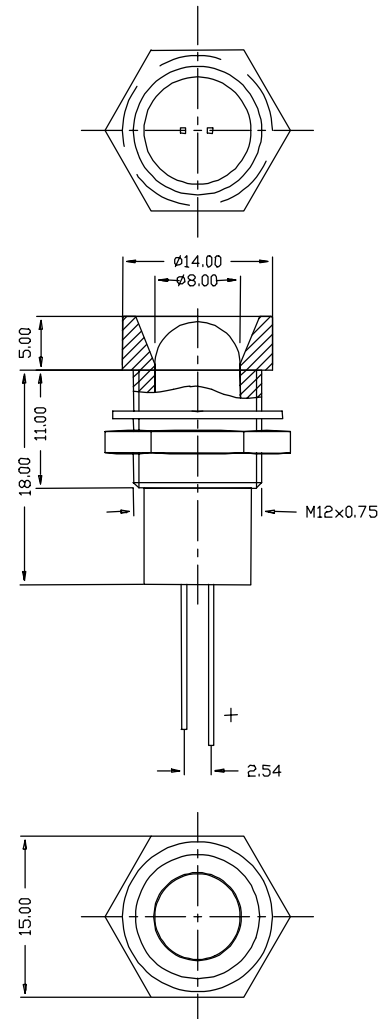
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R8	15830		WU-I-R8S	15895	
WU-I-G8	15835		WU-I-G8S	15900	
WU-I-Y8	15840		WU-I-Y8S	15905	
WU-I-O8	15845		WU-I-O8S	15910	





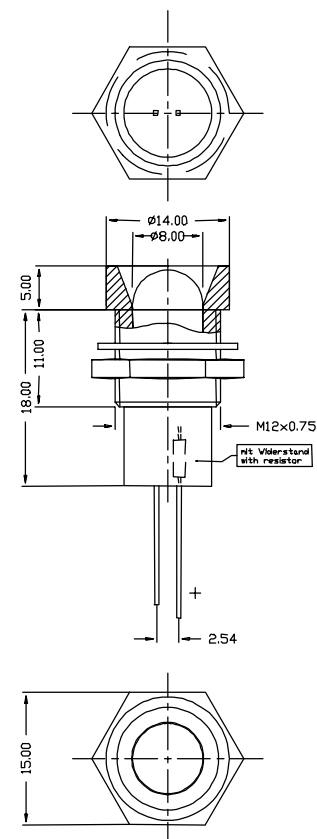
Optoelektronik

WU-I-...8 5V-12V-24V
WU-I-...8S 5V-12V-24V
 Innenreflektor für LED 8mm
 Innerreflector for LED 8mm

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R8-5V	40582		WU-I-R8S-5V	40594	
WU-I-G8-5V	40583		WU-I-G8S-5V	40595	
WU-I-Y8-5V	40584		WU-I-Y8S-5V	40596	
WU-I-O8-5V	40585		WU-I-O8S-5V	40597	
WU-I-R8-12V	40586		WU-I-R8S-12V	40598	
WU-I-G8-12V	40587		WU-I-G8S-12V	40599	
WU-I-Y8-12V	40588		WU-I-Y8S-12V	40600	
WU-I-O8-12V	40589		WU-I-O8S-12V	40601	
WU-I-R8-24V	40590		WU-I-R8S-24V	40602	
WU-I-G8-24V	40591		WU-I-G8S-24V	40603	
WU-I-Y8-24V	40592		WU-I-Y8S-24V	40604	
WU-I-O8-24V	40593		WU-I-O8S-24V	40605	





Optoelektronik

WU-I-...8

WU-I-...8S

Innenreflektor für LED 8mm

Innerreflector for LED 8mm

mit flex. Anschlußdrähten

with flex. Legs

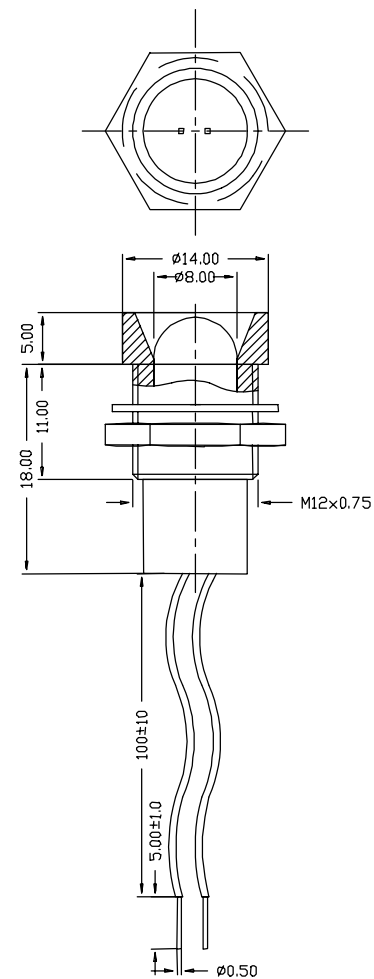
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R8-flex.	40606		WU-I-R8S-flex.	40610	
WU-I-G8-flex.	40607		WU-I-G8S-flex.	40611	
WU-I-Y8-flex.	40608		WU-I-Y8S-flex.	40612	
WU-I-O8-flex.	40609		WU-I-O8S-flex.	40613	





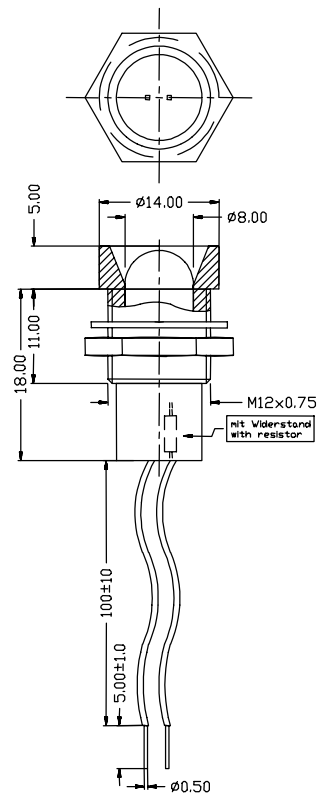
Optoelektronik

WU-I-...8 5V-12V-24V
WU-I-...8S 5V-12V-24V
 Innenreflektor für LED 8mm
 Innerreflector for LED 8mm
mit flex. Anschlußdrähten
with flex. Legs

Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R8-flex.-5V	40614		WU-I-R8S-flex.-5V	40626	
WU-I-G8-flex.-5V	40615		WU-I-G8S-flex.-5V	40627	
WU-I-Y8-flex.-5V	40616		WU-I-Y8S-flex.-5V	40628	
WU-I-O8-flex.-5V	40617		WU-I-O8S-flex.-5V	40629	
WU-I-R8-flex.-12V	40618		WU-I-R8S-flex.-12V	40630	
WU-I-G8-flex.-12V	40619		WU-I-G8S-flex.-12V	40631	
WU-I-Y8-flex.-12V	40620		WU-I-Y8S-flex.-12V	40632	
WU-I-O8-flex.-12V	40621		WU-I-O8S-flex.-12V	40633	
WU-I-R8-flex.-24V	40622		WU-I-R8S-flex.-24V	40634	
WU-I-G8-flex.-24V	40623		WU-I-G8S-flex.-24V	40635	
WU-I-Y8-flex.-24V	40624		WU-I-Y8S-flex.-24V	40636	
WU-I-O8-flex.-24V	40625		WU-I-O8S-flex.-24V	40637	





Optoelektronik

WU-A-...8

WU-A-...8S

Außenreflektor für LED 8mm

Outerreflector for LED 8mm

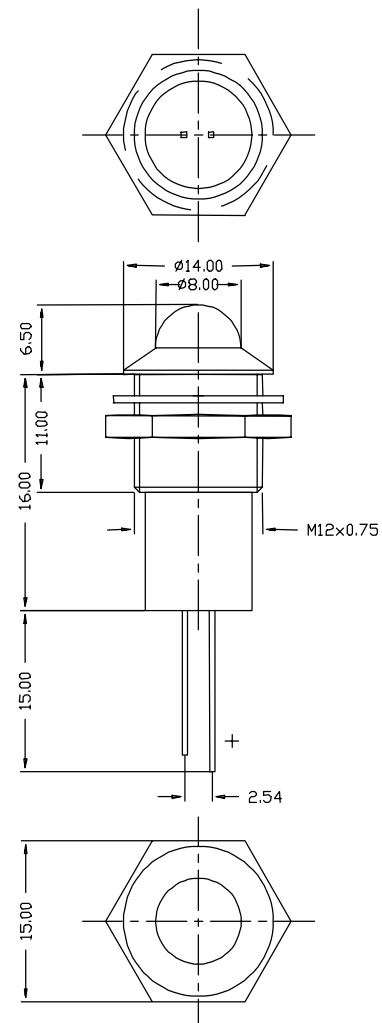
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R8	15850		WU-A-R8S	15915	
WU-A-G8	15855		WU-A-G8S	15920	
WU-A-Y8	15860		WU-A-Y8S	15925	
WU-A-O8	15865		WU-A-O8S	15935	





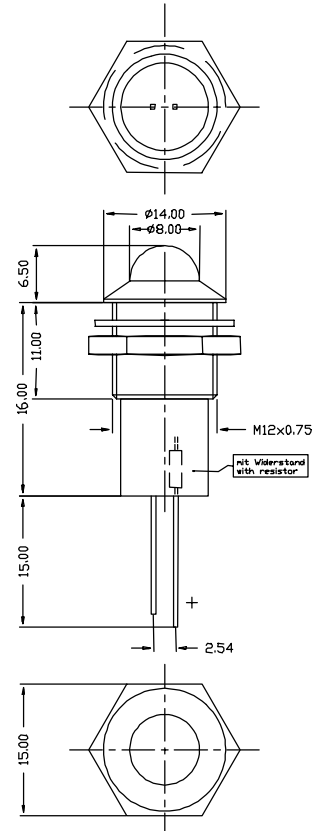
Optoelektronik

WU-A-...8 5V-12V-24V
WU-A-...8S 5V-12V-24V
 Außenreflektor für LED 8mm
 Outerreflector for LED 8mm

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R8-5V	40640		WU-A-R8S-5V	40652	
WU-A-G8-5V	40641		WU-A-G8S-5V	40653	
WU-A-Y8-5V	40642		WU-A-Y8S-5V	40654	
WU-A-O8-5V	40643		WU-A-O8S-5V	40655	
WU-A-R8-12V	40644		WU-A-R8S-12V	40656	
WU-A-G8-12V	40645		WU-A-G8S-12V	40657	
WU-A-Y8-12V	40646		WU-A-Y8S-12V	40658	
WU-A-O8-12V	40647		WU-A-O8S-12V	40659	
WU-A-R8-24V	40648		WU-A-R8S-24V	40660	
WU-A-G8-24V	40649		WU-A-G8S-24V	40661	
WU-A-Y8-24V	40650		WU-A-Y8S-24V	40662	
WU-A-O8-24V	40651		WU-A-O8S-24V	40663	





Optoelektronik

WU-A-...8

WU-A-...8S

Außenreflektor für LED 8mm

Outerreflector for LED 8mm

mit flex. Anschlußdrähten

with flex. Legs

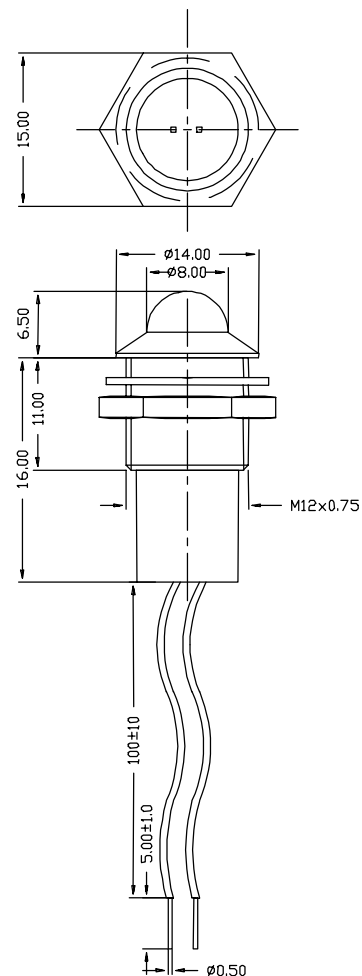
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R8-flex.	40664		WU-A-R8S-flex.	40668	
WU-A-G8-flex.	40665		WU-A-G8S-flex.	40669	
WU-A-Y8-flex.	40666		WU-A-Y8S-flex.	40670	
WU-A-O8-flex.	40667		WU-A-O8S-flex.	40671	





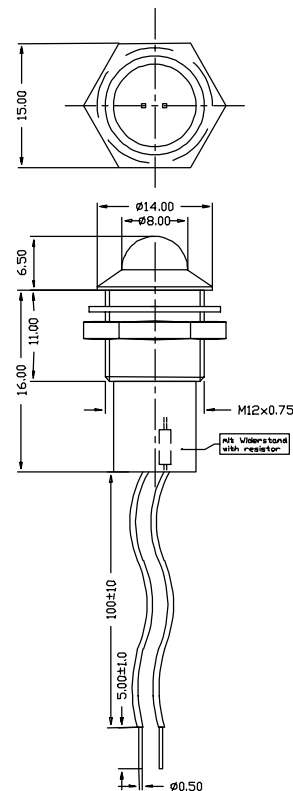
Optoelektronik

WU-A-...8 5V-12V-24V
WU-A-...8S 5V-12V-24V
 Außenreflektor für LED 8mm
 Outerreflector for LED 8mm
mit flex. Anschlußdrähten
with flex. Legs

Glanzchrom – Bright chrome
 Schwarzschrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R8-flex.-5V	40672		WU-A-R8S-flex.-5V	40684	
WU-A-G8-flex.-5V	40673		WU-A-G8S-flex.-5V	40685	
WU-A-Y8-flex.-5V	40674		WU-A-Y8S-flex.-5V	40686	
WU-A-O8-flex.-5V	40675		WU-A-O8S-flex.-5V	40687	
WU-A-R8-flex.-12V	40676		WU-A-R8S-flex.-12V	40688	
WU-A-G8-flex.-12V	40677		WU-A-G8S-flex.-12V	40689	
WU-A-Y8-flex.-12V	40678		WU-A-Y8S-flex.-12V	40690	
WU-A-O8-flex.-12V	40679		WU-A-O8S-flex.-12V	40691	
WU-A-R8-flex.-24V	40680		WU-A-R8S-flex.-24V	40692	
WU-A-G8-flex.-24V	40681		WU-A-G8S-flex.-24V	40693	
WU-A-Y8-flex.-24V	40682		WU-A-Y8S-flex.-24V	40694	
WU-A-O8-flex.-24V	40683		WU-A-O8S-flex.-24V	40695	





Optoelektronik

WU-I/A-...8

WU-I/A-...8S

Innen/Außenreflektor für LED 8mm

Inner/Outerreflector for LED 8mm

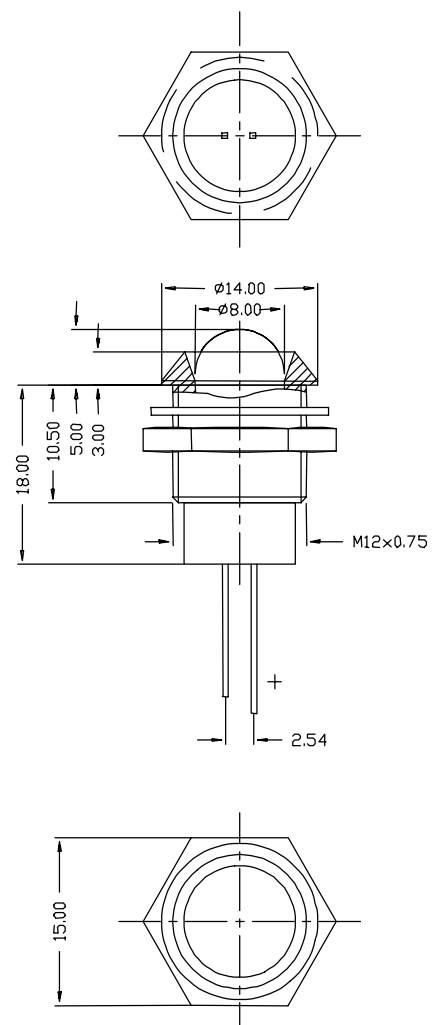
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R8	15870		WU-I/A-R8S	15940	
WU-I/A-G8	15875		WU-I/A-G8S	15945	
WU-I/A-Y8	15880		WU-I/A-Y8S	15950	
WU-I/A-O8	15885		WU-I/A-O8S	15955	





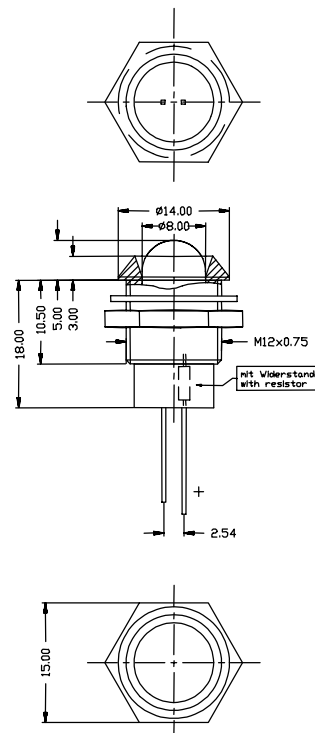
Optoelektronik

WU-I/A-...8 5V-12V-24V
WU-I/A-...8S 5V-12V-24V
 Innen/Außenreflektor für LED 8mm
 Inner/Outerreflector for LED 8mm

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R8-5V	40705		WU-I/A-R8S-5V	40717	
WU-I/A-G8-5V	40706		WU-I/A-G8S-5V	40718	
WU-I/A-Y8-5V	40707		WU-I/A-Y8S-5V	40719	
WU-I/A-O8-5V	40708		WU-I/A-O8S-5V	40720	
WU-I/A-R8-12V	40709		WU-I/A-R8S-12V	40721	
WU-I/A-G8-12V	40710		WU-I/A-G8S-12V	40722	
WU-I/A-Y8-12V	40711		WU-I/A-Y8S-12V	40723	
WU-I/A-O8-12V	40712		WU-I/A-O8S-12V	40724	
WU-I/A-R8-24V	40713		WU-I/A-R8S-24V	40725	
WU-I/A-G8-24V	40714		WU-I/A-G8S-24V	40726	
WU-I/A-Y8-24V	40715		WU-I/A-Y8S-24V	40727	
WU-I/A-O8-24V	40716		WU-I/A-O8S-24V	40728	





Optoelektronik

WU-I/A-...8

WU-I/A-...8S

Innen/Außenreflektor für LED 8mm

Inner/Outerreflector for LED 8mm

mit flex. Anschlußdrähten

with flex. Legs

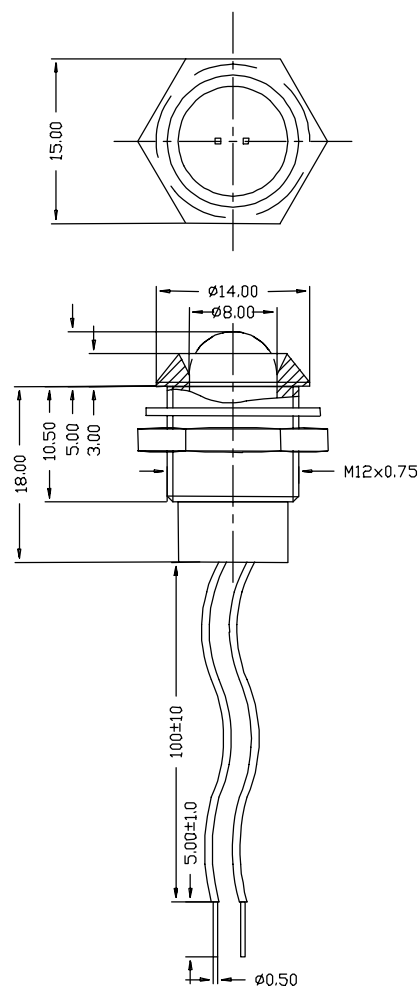
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R8-flex.	40729		WU-I/A-R8S-flex.	40733	
WU-I/A-G8-flex.	40730		WU-I/A-G8S-flex.	40734	
WU-I/A-Y8-flex.	40731		WU-I/A-Y8S-flex.	40735	
WU-I/A-O8-flex.	40732		WU-I/A-O8S-flex.	40736	





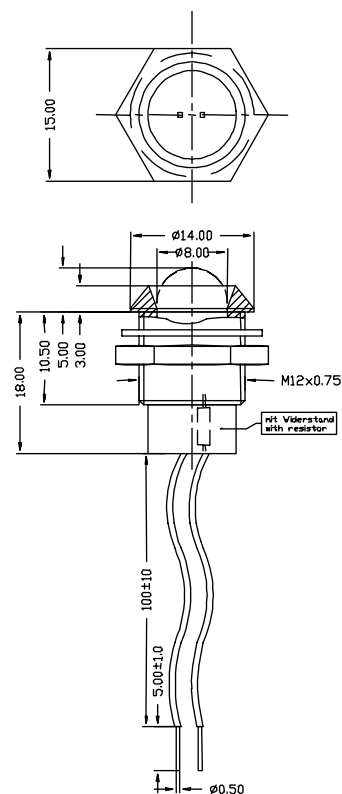
Optoelektronik

WU-I/A-...8 5V-12V-24V
WU-I/A-...8S 5V-12V-24V
 Innen/Außenreflektor für LED 8mm
 Inner/Outerreflector for LED 8mm
mit flex. Anschlußdrähten
with flex. Legs

Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R8-flex.-5V	40737		WU-I/A-R8S-flex.-5V	40749	
WU-I/A-G8-flex.-5V	40738		WU-I/A-G8S-flex.-5V	40750	
WU-I/A-Y8-flex.-5V	40739		WU-I/A-Y8S-flex.-5V	40751	
WU-I/A-O8-flex.-5V	40740		WU-I/A-O8S-flex.-5V	40752	
WU-I/A-R8-flex.-12V	40741		WU-I/A-R8S-flex.-12V	40753	
WU-I/A-G8-flex.-12V	40742		WU-I/A-G8S-flex.-12V	40754	
WU-I/A-Y8-flex.-12V	40743		WU-I/A-Y8S-flex.-12V	40755	
WU-I/A-O8-flex.-12V	40744		WU-I/A-O8S-flex.-12V	40756	
WU-I/A-R8-flex.-24V	40745		WU-I/A-R8S-flex.-24V	40757	
WU-I/A-G8-flex.-24V	40746		WU-I/A-G8S-flex.-24V	40758	
WU-I/A-Y8-flex.-24V	40747		WU-I/A-Y8S-flex.-24V	40759	
WU-I/A-O8-flex.-24V	40748		WU-I/A-O8S-flex.-24V	40760	

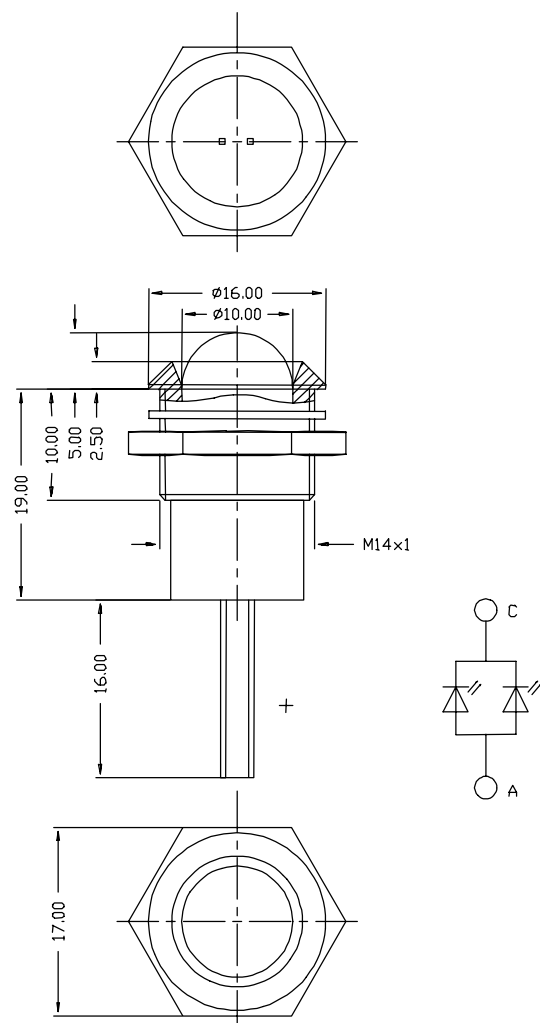




Optoelektronik

WU-I/A-...10-2
WU-I/A-...10S-2
 Innen/Außenreflektor für LED 10mm
 Inner/Outerreflector for LED 10mm
LED mit 2 Anschlußdrähten
LED with 2 legs
 Glanzchrom – Bright chrome
 Schwarzschrö – Black chrome
 für Frontblende
 for frontpanel

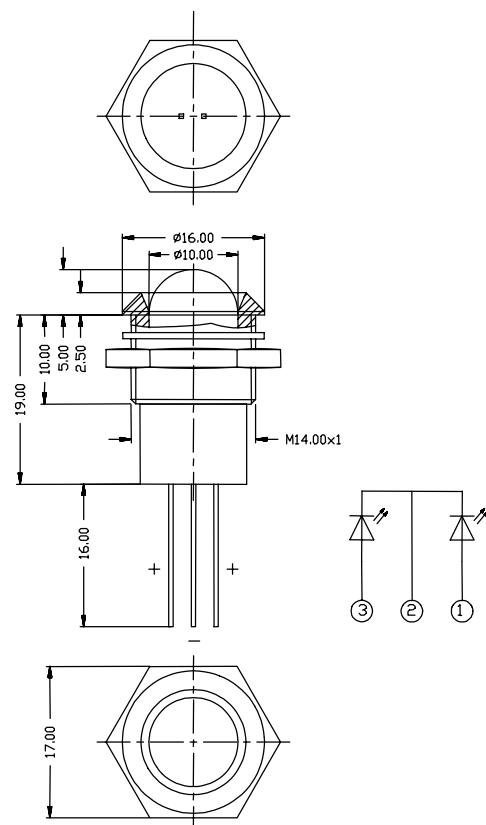
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WU-I/A-R10-2	23145		WU-I/A-R10S-2	23150	
WU-I/A-G10-2	23155		WU-I/A-G10S-2	23160	
WU-I/A-Y10-2	23165		WU-I/A-Y10S-2	23170	
WU-I/A-O10-2	23175		WU-I/A-O10S-2	23180	





WU-I/A-...10-3
WU-I/A-...10S-3
 Innen/Außenreflektor für LED 10mm
 Inner/Outerreflector for LED 10mm
LED mit 3 Anschlußdrähten
LED with 3 legs
 Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome
 für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R10-3	23185		WU-I/A-R10S-3	23190	
WU-I/A-G10-3	23195		WU-I/A-G10S-3	23200	
WU-I/A-Y10-3	23205		WU-I/A-Y10S-3	23210	
WU-I/A-O10-3	23215		WU-I/A-O10S-3	23220	

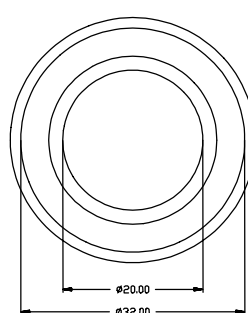
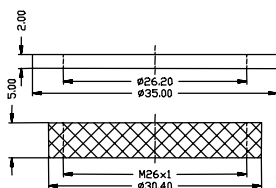
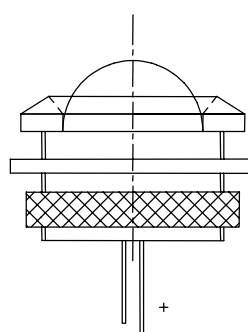
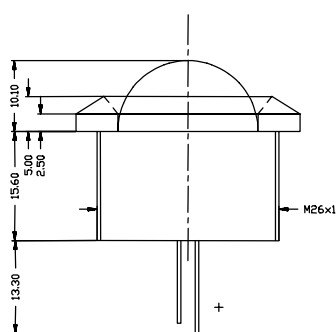




Optoelektronik

WU-I/A-...20-2
WU-I/A-...20S-2
 Innen-/Außenreflektor für LED 20mm
 Inner/Outerreflector for LED 20mm
LED mit 2 Anschlußdrähten
LED with 2 legs
 Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome
 für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-R20-2	16070		WU-I/A-R20S-2	16085	
WU-I/A-G20-2	16075		WU-I/A-G20S-2	16090	
WU-I/A-Y20-2	16080		WU-I/A-Y20S-2	16095	
WU-I/A-O20-2	16081		WU-I/A-O20S-2	16096	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-MKL-...20-2

WU-MKL-...20S-2

Außenreflektor für LED 20mm

Outer reflector for LED 20mm

LED mit 2 Anschlußdrähten

LED with 2 legs

Gewinde M8- M12

Thread M8- M12

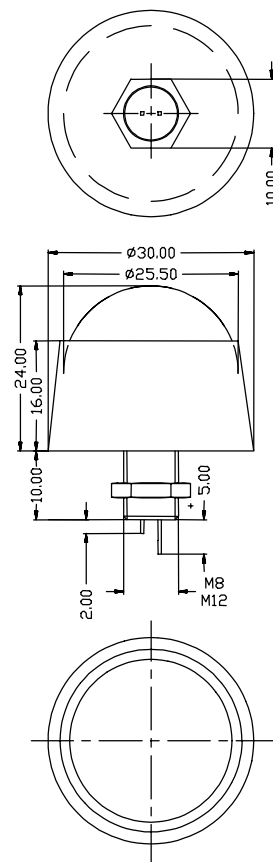
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

Für Frontblende

For frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-MKL-R20-2-M8	16140		WU-MKL-R20S-2-M8	16200	
WU-MKL-G20-2-M8	16160		WU-MKL-G20S-2-M8	16220	
WU-MKL-Y20-2-M8	16180		WU-MKL-Y20S-2-M8	16240	
WU-MKL-O20-2-M8	16181		WU-MKL-O20S-2-M8	16241	
WU-MKL-R20-2-M12	16145		WU-MKL-R20S-2-M12	16205	
WU-MKL-G20-2-M12	16165		WU-MKL-G20S-2-M12	16225	
WU-MKL-Y20-2-M12	16185		WU-MKL-Y20S-2-M12	16245	
WU-MKL-O20-2-M12	16186		WU-MKL-O20S-2-M12	16246	





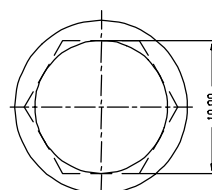
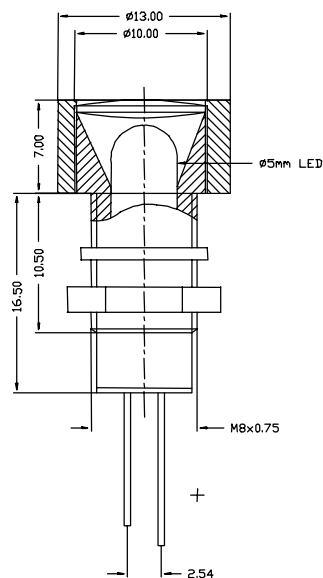
Optoelektronik

WU-I-...5-L (Linse)
WU-I-...5S-L (Linse)
 Innenreflektor für LED 5mm
 Innerreflector for LED 5mm
Mit spezieller Linsen-Optik
with special lens optic

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome
Wasserdicht – waterproof

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-L	16010		WU-I-R5S-L	16030	
WU-I-G5-L	16015		WU-I-G5S-L	16035	
WU-I-Y5-L	16020		WU-I-Y5S-L	16040	
WU-I-O5-L	16025		WU-I-O5S-L	16045	
WU-I-UG5-L	42096		WU-I-UG5S-L	42099	
WU-I-B5-L	42097		WU-I-B5S-L	42100	
WU-I-W5-L	42098		WU-I-W5S-L	42101	



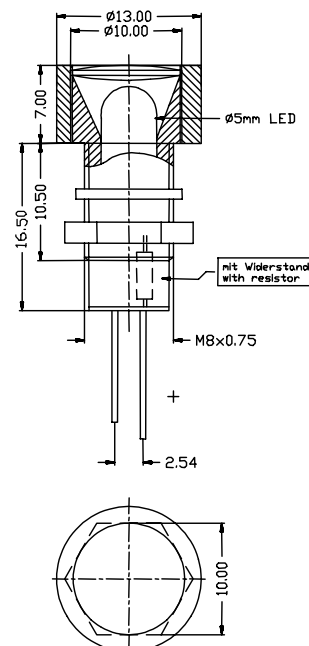


Optoelektronik

WU-I-...5L (Linse-Lens) 5V-12V-24V
WU-I-...5SL (Linse-Lens) 5V-12V-24V
 Innenreflektor für LED 5mm
 Innerreflector for LED 5mm
 Mit spezieller Linsen-Optik
 With special lens optic

Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome
Wasserdicht – waterproof
 für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-L-5V	40530		WU-I-R5S-L-5V	40542	
WU-I-G5-L-5V	40531		WU-I-G5S-L-5V	40543	
WU-I-Y5-L-5V	40532		WU-I-Y5S-L-5V	40544	
WU-I-O5-L-5V	40533		WU-I-O5S-L-5V	40545	
WU-I-UG5-L-5V	42102		WU-I-UG5S-L-5V	42111	
WU-I-B5-L-5V	42103		WU-I-B5S-L-5V	42112	
WU-I-W5-L-5V	42104		WU-I-W5S-L-5V	42113	
WU-I-R5-L-12V	40534		WU-I-R5S-L-12V	40546	
WU-I-G5-L-12V	40535		WU-I-G5S-L-12V	40547	
WU-I-Y5-L-12V	40536		WU-I-Y5S-L-12V	40548	
WU-I-O5-L-12V	40537		WU-I-O5S-L-12V	40549	
WU-I-UG5-L-12V	42105		WU-I-UG5S-L-12V	42114	
WU-I-B5-L-12V	42106		WU-I-B5S-L-12V	42115	
WU-I-W5-L-12V	42107		WU-I-W5S-L-12V	42116	
WU-I-R5-L-24V	40538		WU-I-R5S-L-24V	40550	
WU-I-G5-L-24V	40539		WU-I-G5S-L-24V	40551	
WU-I-Y5-L-24V	40540		WU-I-Y5S-L-24V	40552	
WU-I-O5-L-24V	40541		WU-I-O5S-L-24V	40553	
WU-I-UG5-L-24V	42108		WU-I-UG5S-L-24V	42117	
WU-I-B5-L-24V	42109		WU-I-B5S-L-24V	42118	
WU-I-W5-L-24V	42110		WU-I-W5S-L-24V	42119	





Optoelektronik

WU-I-...5 (Linse-Lens)

WU-I-...5S (Linse-Lens)

Innenreflektor für LED 5mm

Innerreflector for LED 5mm

Mit spezieller Linsen-Optik

with special lens optic

mit flex. Anschlußdrähten

with flex. Legs

Glanzchrom – Bright chrome

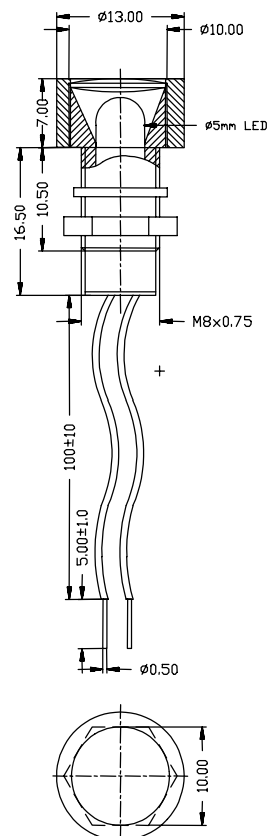
Schwarzchrom – Black chrome

Wasserdicht – waterproof

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-L-flex.	40554		WU-I-R5S-L-flex.	40700	
WU-I-G5-L-flex.	40555		WU-I-G5S-L-flex.	40701	
WU-I-Y5-L-flex.	40556		WU-I-Y5S-L-flex.	40702	
WU-I-O5-L-flex.	40557		WU-I-O5S-L-flex.	40703	
WU-I-UG5-L-flex.	42120		WU-I-UG5S-L-flex.	42123	
WU-I-B5-L-flex.	42121		WU-I-B5S-L-flex.	42124	
WU-I-W5-L-flex.	42122		WU-I-W5S-L-flex.	42125	

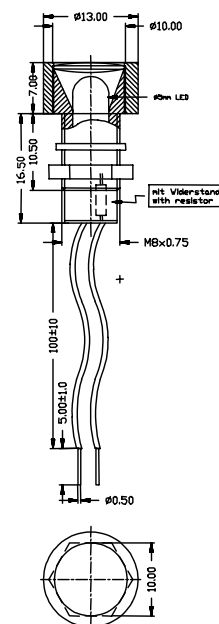




Optoelektronik

WU-I-...5L (Linse-Lens) **5V-12V-24V**
WU-I-...5SL (Linse-Lens) **5V-12V-24V**
 Innenreflektor für LED 5mm
 Innerreflector for LED 5mm
 Mit spezieller Linsen-Optik
 with special lens optic
mit flex. Anschlußdrähten
with flex. Legs
 Glanzchrom – Bright chrome
 Schwarzchrom – Black chrome
 Wasserdicht – waterproof
 für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-L-flex.-5V	40558		WU-I-R5S-L-flex.-5V	40570	
WU-I-G5-L-flex.-5V	40559		WU-I-G5S-L-flex.-5V	40571	
WU-I-Y5-L-flex.-5V	40560		WU-I-Y5S-L-flex.-5V	40572	
WU-I-O5-L-flex.-5V	40561		WU-I-O5S-L-flex.-5V	40573	
WU-I-UG5-L-flex.-5V	42126		WU-I-UG5S-L-flex.-5V	42135	
WU-I-B5-L-flex.-5V	42127		WU-I-B5S-L-flex.-5V	42136	
WU-I-W5-L-flex.-5V	42128		WU-I-W5S-L-flex.-5V	42137	
WU-I-R5-L-flex.-12V	40562		WU-I-R5S-L-flex.-12V	40574	
WU-I-G5-L-flex.-12V	40563		WU-I-G5S-L-flex.-12V	40575	
WU-I-Y5-L-flex.-12V	40564		WU-I-Y5S-L-flex.-12V	40576	
WU-I-O5-L-flex.-12V	40565		WU-I-O5S-L-flex.-12V	40577	
WU-I-UG5-L-flex.-12V	42129		WU-I-UG5S-L-flex.-12V	42138	
WU-I-B5-L-flex.-12V	42130		WU-I-B5S-L-flex.-12V	42139	
WU-I-W5-L-flex.-12V	42131		WU-I-W5S-L-flex.-12V	42140	
WU-I-R5-L-flex.-24V	40566		WU-I-R5S-L-flex.-24V	40578	
WU-I-G5-L-flex.-24V	40567		WU-I-G5S-L-flex.-24V	40579	
WU-I-Y5-L-flex.-24V	40568		WU-I-Y5S-L-flex.-24V	40580	
WU-I-O5-L-flex.-24V	40569		WU-I-O5S-L-flex.-24V	40581	
WU-I-UG5-L-flex.-24V	42132		WU-I-UG5S-L-flex.-24V	42141	
WU-I-B5-L-flex.-24V	42133		WU-I-B5S-L-flex.-24V	42142	
WU-I-W5-L-flex.-24V	42134		WU-I-W5S-L-flex.-24V	42143	





Optoelektronik

WU-I-...5CO

WU-I-...5CO-S

Innenreflektor für LED 5mm **Kristall-Optik**

Innerreflector for LED 5mm **crystal-optic**

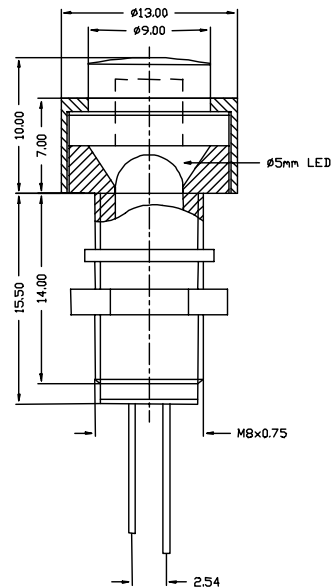
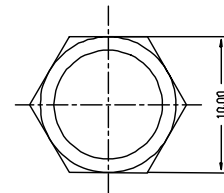
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-R5-COT	40840		WU-I-R5-COT-S	40844	
WU-I-G5-COT	40841		WU-I-G5-COT-S	40845	
WU-I-Y5-COT	40842		WU-I-Y5-COT-S	40846	
WU-I-O5-COT	40843		WU-I-O5-COT-S	40847	
WU-I-UG5-COT	42144		WU-I-UG5-COT-S	42150	
WU-I-B5-COT	42145		WU-I-B5-COT-S	42151	
WU-I-W5-COT	42146		WU-I-W5-COT-S	42152	
WU-I-R5-COR	40848		WU-I-R5-COR-S	40851	
WU-I-G5-COG	40849		WU-I-G5-COG-S	40852	
WU-I-Y5-COY	40850		WU-I-Y5-COY-S	40853	
WU-I-O5-COW	40854		WU-I-O5-COW-S	40855	





Optoelektronik

WU-I-...3 2-farbig – 2-colors
WU-A-...3 2-farbig – 2-colors
WU-I-...3S 2-farbig – 2-colors
WU-A-...3S 2-farbig – 2-colors

Innen- oder Außenreflektor für

LED 3mm bipolar

Inner- or Outer reflector for

LED 3mm bipolar

2 Anschlußdrähte

2 legs

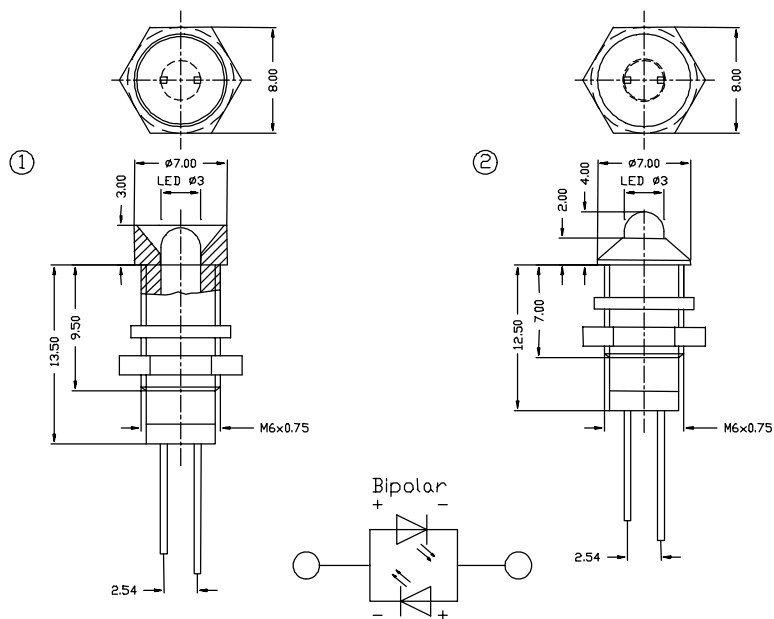
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-RG-3-2 ①	16500		WU-I-RG-3-2S ①	16590	
WU-A-RG-3-2 ②	16545		WU-A-RG-3-2S ②	16635	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-I-...5 2-farbig – 2-colors
WU-A-...5 2-farbig – 2-colors
WU-I-...5S 2-farbig – 2-colors
WU-A-...5S 2-farbig – 2-colors

Innen- oder Außenreflektor für

LED 5mm bipolar

Inner- or Outer reflector for

LED 5mm bipolar

2 Anschlußdrähte

2 legs

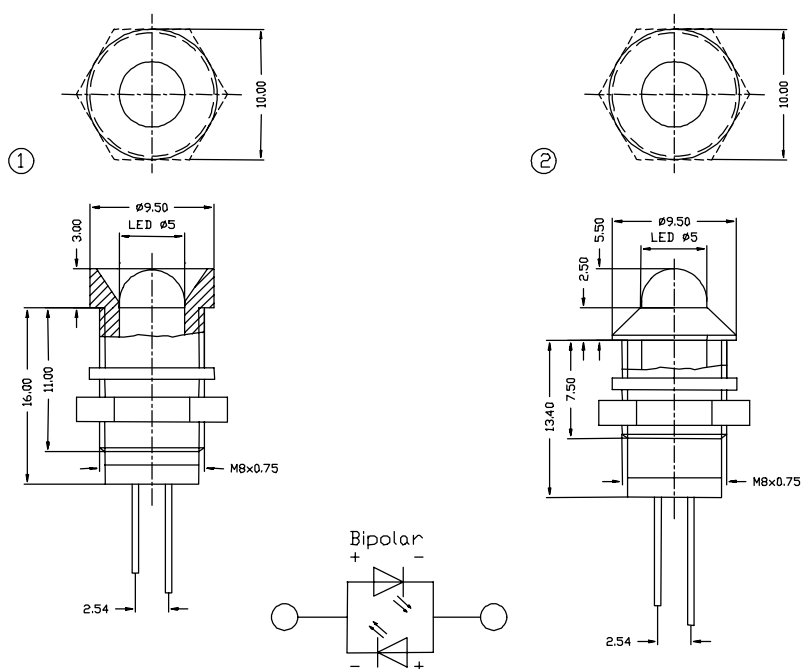
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-RG-5-2	16680		WU-I-RG-5-2S	16770	
WU-A-RG-5-2	16725		WU-A-RG-5-2S	16726	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-I-...5 2-farbig – 2-colors
WU-A-...5 2-farbig – 2-colors
WU-I-...5S 2-farbig – 2-colors
WU-A-...5S 2-farbig – 2-colors

Innen- oder Außenreflektor für

LED 5mm bipolar

Inner- or Outer reflector for

LED 5mm bipolar

3 Anschlußdrähte

3 legs

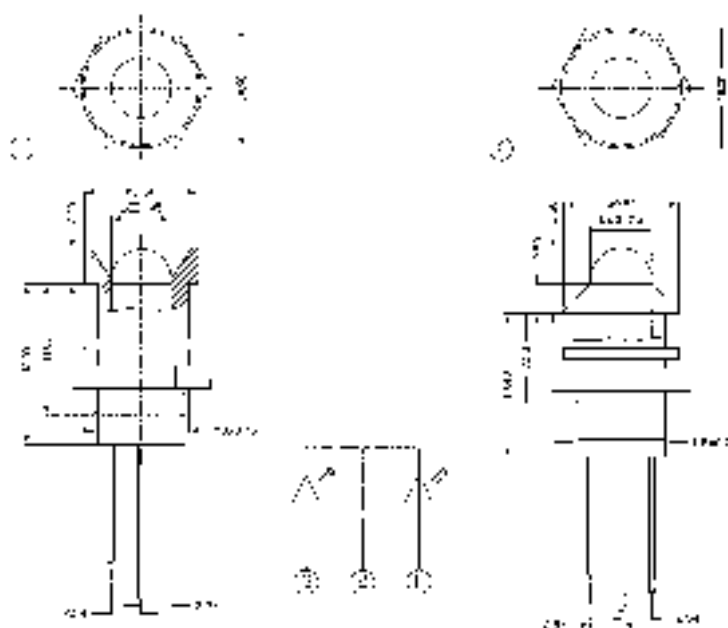
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I-RG-5-3	17130		WU-I-RG-5-3S	17220	
WU-A-RG-5-3	17175		WU-A-RG-5-3S	17265	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-I/A-...3P

WU-I/A-...3P-S

Innen/Außenreflektor für LED 3mm **plan**

Inner/Outerreflector for LED 3mm **plane**

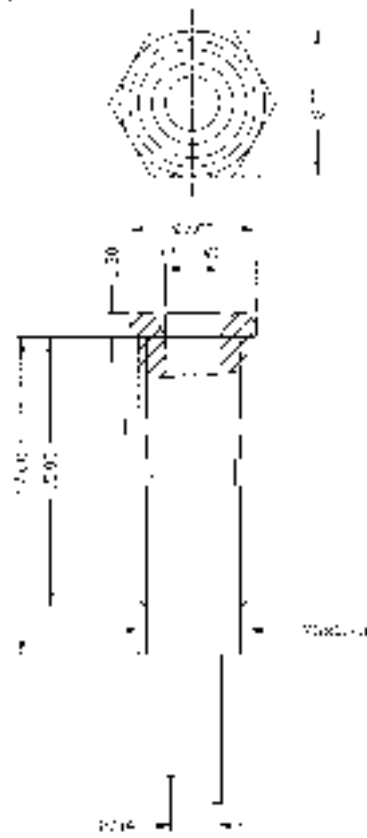
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-3P	40800		WU-I/A-3PS	40804	
WU-I/A-R3P	40801		WU-I/A-R3PS	40805	
WU-I/A-G3P	40802		WU-I/A-G3PS	40806	
WU-I/A-Y3P	40803		WU-I/A-Y3PS	40807	
WU-I/A-O3P	40832		WU-I/A-O3PS	40833	
WU-I/A-B3P	42156		WU-I/A-B3PS	42157	





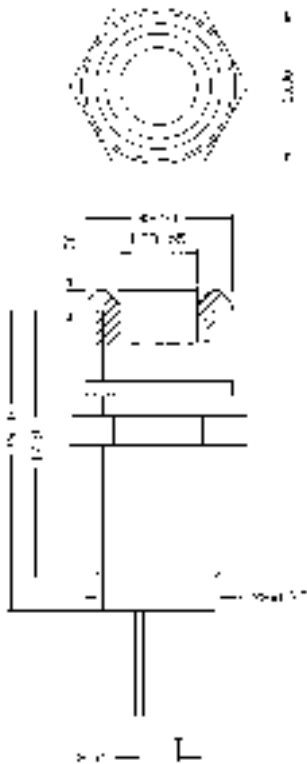
Optoelektronik

WU-I/A-...5P
WU-I/A-...5PS
 Innen/Außenreflektor für LED 5mm **plan**
 Inner/Outerreflector for LED 5mm **plane**

Glanzchrom – Bright chrome
 Schwarzschrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-I/A-5P	40808		WU-I/A-5PS	40812	
WU-I/A-R5P	40809		WU-I/A-R5PS	40813	
WU-I/A-G5P	40810		WU-I/A-G5PS	40814	
WU-I/A-Y5P	40811		WU-I/A-Y5PS	40815	
WU-I/A-O5P	40834		WU-I/A-O5PS	40835	
WU-I/A-B5P	42158		WU-I/A-B5PS	42159	





Optoelektronik

WU-PG-...5

WU-PG-...5S

Reflektor für LED 5mm **plan Glas**

Reflector for LED 5mm **plane glas**

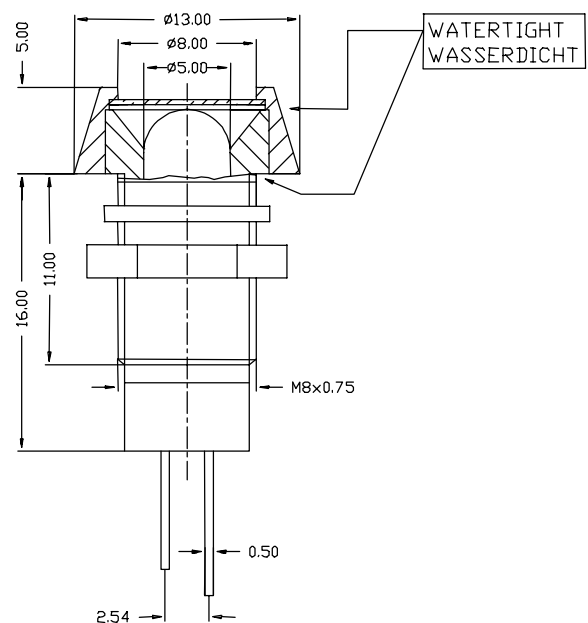
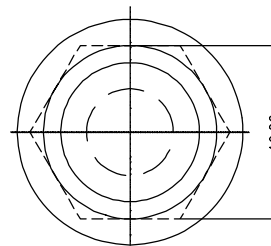
Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-PG-5	40816		WU-PG-5S	40820	
WU-PG-R5	40817		WU-PG-R5S	40821	
WU-PG-G5	40818		WU-PG-G5S	40822	
WU-PG-Y5	40819		WU-PG-Y5S	40823	
WU-PG-UG5	42160		WU-PG-UG5S	42163	
WU-PG-B5	42161		WU-PG-B5S	42164	
WU-PG-W5	42162		WU-PG-W5S	42165	





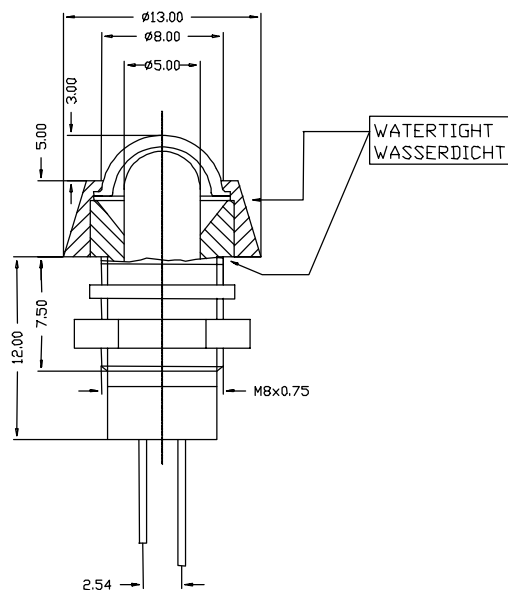
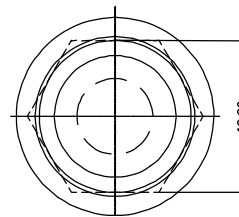
Optoelektronik

WU-BG-...5
WU-BG-...5S
 Reflektor für LED 5mm **bubble Glas**
 Reflector for LED 5mm **bubble glas**

Glanzchrom – Bright chrome
 Schwarzhrom – Black chrome

für Frontblende
 for frontpanel

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-BG-5	40824		WU-BG-5S	40828	
WU-BG-R5	40825		WU-BG-R5S	40829	
WU-BG-G5	40826		WU-BG-G5S	40830	
WU-BG-Y5	40827		WU-BG-Y5S	40831	
WU-BG-UG5	42166		WU-BG-UG5S	42169	
WU-BG-B5	42167		WU-BG-B5S	42170	
WU-BG-W5	42168		WU-BG-W5S	42171	





Optoelektronik

WU-I-...5-F 5V-12V-24V

WU-I-...5S-F 5V-12V-24V

Innenreflektor für LED 5mm mit Flachsteckanschluß

Innerreflector for LED 5mm with flat cable plug connection

Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

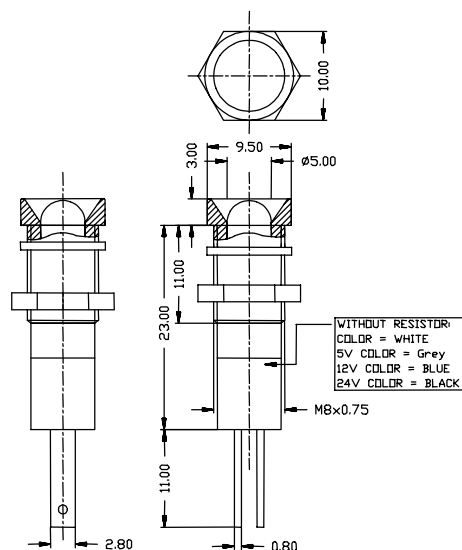
ohne Vorwiderstand

without resistor

mit Vorwiderstand

with resistor

Typenbez. Type Design.	Art.Nr. Part No.		Typenbez. Type Design.	Art.Nr. Part No.	
WU-I-R5-F	40950		WU-I-R5S-F	40865	
WU-I-R5-F-5V	40951		WU-I-R5S-F-5V	40866	
WU-I-R5-F-12V	40952		WU-I-R5S-F-12V	40867	
WU-I-R5-F-24V	40953		WU-I-R5S-F-24V	40868	
WU-I-G5-F	40954		WU-I-G5S-F	40869	
WU-I-G5-F-5V	40955		WU-I-G5S-F-5V	40870	
WU-I-G5-F-12V	40956		WU-I-G5S-F-12V	40871	
WU-I-G5-F-24V	40957		WU-I-G5S-F-24V	40872	
WU-I-Y5-F	40958		WU-I-Y5S-F	40873	
WU-I-Y5-F-5V	40959		WU-I-Y5S-F-5V	40874	
WU-I-Y5-F-12V	40960		WU-I-Y5S-F-12V	40875	
WU-I-Y5-F-24V	40961		WU-I-Y5S-F-24V	40876	
WU-I-O5-F	40962		WU-I-O5S-F	40877	
WU-I-O5-F-5V	40963		WU-I-O5S-F-5V	40878	
WU-I-O5-F-12V	40964		WU-I-O5S-F-12V	40879	
WU-I-O5-F-24V	40965		WU-I-O5S-F-24V	40880	
WU-I-UG5-F	42172		WU-I-UG5S-F	42184	
WU-I-UG5-F-5V	42173		WU-I-UG5S-F-5V	42185	
WU-I-UG5-F-12V	42174		WU-I-UG5S-F-12V	42186	
WU-I-UG5-F-24V	42175		WU-I-UG5S-F-24V	42187	
WU-I-B5-F	42176		WU-I-B5S-F	42188	
WU-I-B5-F-5V	42177		WU-I-B5S-F-5V	42189	
WU-I-B5-F-12V	42178		WU-I-B5S-F-12V	42190	
WU-I-B5-F-24V	42179		WU-I-B5S-F-24V	42191	
WU-I-W5-F	42180		WU-I-W5S-F	42192	
WU-I-W5-F-5V	42181		WU-I-W5S-F-5V	42193	
WU-I-W5-F-12V	42182		WU-I-W5S-F-12V	42194	
WU-I-W5-F-24V	42183		WU-I-W5S-F-24V	42195	





Optoelektronik

WU-A...5-F 5V-12V-24V

WU-A...5S-F 5V-12V-24V

Außenreflektor für LED 5mm mit Flachsteckanschluß

Outerreflector for LED 5mm with flat cable plug connection

Glanzchrom – Bright chrome

Schwarzchrom – Black chrome

für Frontblende

for frontpanel

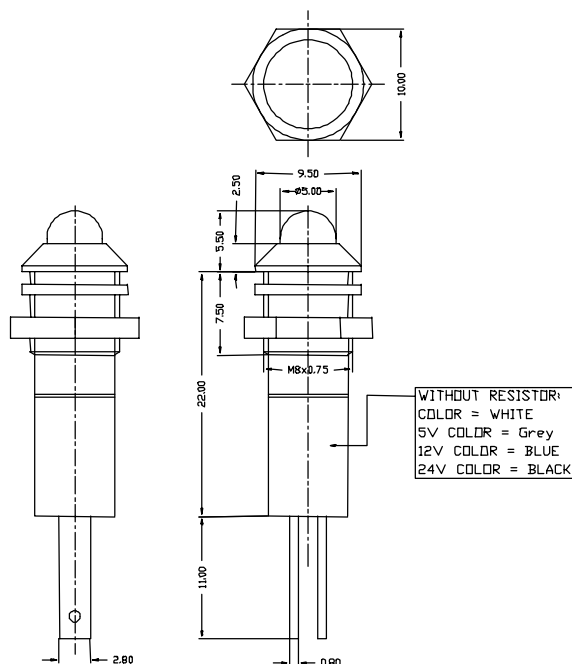
ohne Vorwiderstand

without resistor

mit Vorwiderstand

with resistor

Typenbezeichnung Type Designation	Artikel-Nr. Part No.		Typenbezeichnung Type Designation	Artikel-Nr. Part No.	
WU-A-R5-F	23465		WU-A-R5S-F	23470	
WU-A-R5-F-5V	23585		WU-A-R5S-F-5V	23590	
WU-A-R5-F-12V	23705		WU-A-R5S-F-12V	23710	
WU-A-R5-F-24V	23825		WU-A-R5S-F-24V	23830	
WU-A-G5-F	23475		WU-A-G5S-F	23480	
WU-A-G5-F-5V	23595		WU-A-G5S-F-5V	23600	
WU-A-G5-F-12V	23715		WU-A-G5S-F-12V	23720	
WU-A-G5-F-24V	23835		WU-A-G5S-F-24V	23840	
WU-A-Y5-F	23485		WU-A-Y5S-F	23490	
WU-A-Y5-F-5V	23605		WU-A-Y5S-F-5V	23610	
WU-A-Y5-F-12V	23725		WU-A-Y5S-F-12V	23730	
WU-A-Y5-F-24V	23845		WU-A-Y5S-F-24V	23850	
WU-A-O5-F	23495		WU-A-O5S-F	23500	
WU-A-O5-F-5V	23615		WU-A-O5S-F-5V	23620	
WU-A-O5-F-12V	23735		WU-A-O5S-F-12V	23740	
WU-A-O5-F-24V	23855		WU-A-O5S-F-24V	23860	
WU-A-UG5-F	42596		WU-A-UG5S-F	42608	
WU-A-UG5-F-5V	42597		WU-A-UG5S-F-5V	42609	
WU-A-UG5-F-12V	42598		WU-A-UG5S-F-12V	42610	
WU-A-UG5-F-24V	42599		WU-A-UG5S-F-24V	42611	
WU-A-B5-F	42600		WU-A-B5S-F	42612	
WU-A-B5-F-5V	42601		WU-A-B5S-F-5V	42613	
WU-A-B5-F-12V	42602		WU-A-B5S-F-12V	42614	
WU-A-B5-F-24V	42603		WU-A-B5S-F-24V	42615	
WU-A-W5-F	42604		WU-A-W5S-F	42616	
WU-A-W5-F-5V	42605		WU-A-W5S-F-5V	42617	
WU-A-W5-F-12V	42606		WU-A-W5S-F-12V	42618	
WU-A-W5-F-24V	42607		WU-A-W5S-F-24V	42619	



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-10.102(H)/112

Sicherungshalter für Leiterplatten-Montage

Fuse holder for PCB

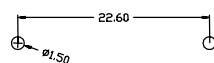
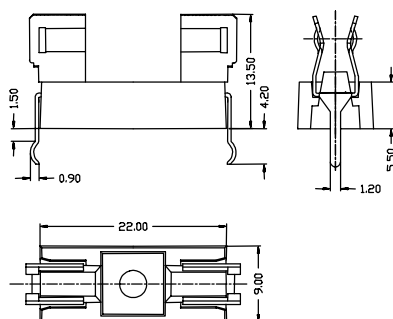
für Sicherungen 5 x 20mm

for fuse 5 x 20mm

Typenbezeichnung Type Designation	Artikel-Nr. Part No.
WU-10.102	e028000
WU-10.102H	e010150
WU-10.112	e028020

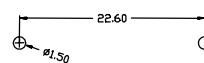
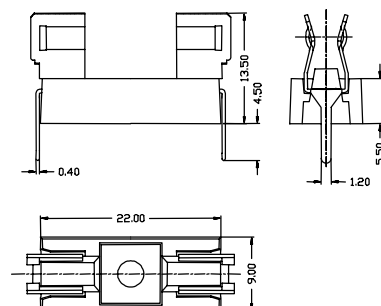


WU-10.102



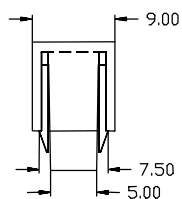
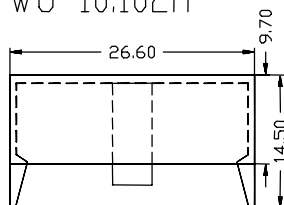
Mounting holes

WU-10.112



Mounting holes

WU-10.102H



Unit: [mm] Tolerance: ± 0.25



Optoelektronik

WU-10.103(P)

Sicherungshalter für Leiterplatten-Montage
Fuse holder for PCB

für Sicherungen 5 x 20mm
for fuse 5 x 20mm

Typenbezeichnung Type Designation	Artikel-Nr. Part No.
WU-10.103	e028025
WU-10.103P	e028030

