



LEDTECH ELECTRONICS CORP.

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SPECIFICATION

PART NO. : LT5H31-81-UB91-P20

5.0MM ROUND LED LAMP

Approved by	Checked by	Prepared by
<i>Jack</i>	<i>Jang</i>	<i>Duan</i>



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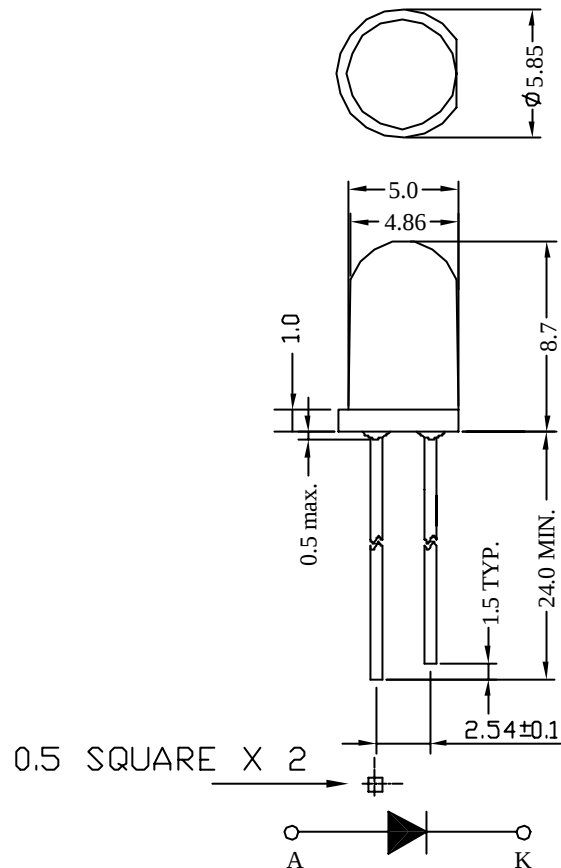
Features

- * High intensity
- * Reliable and rugged
- * Low current requirement
- * IC compatible

Description

The Yellow lamp are made with AlGaInP/GaAs chip and yellow diffused epoxy resin.

Package Dimensions



Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is ± 0.25 mm unless otherwise noted.

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LT5H31-81-UB91-P20	AlGaInP/GaAs	Yellow	Yellow Diffused



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Absolute Maximum Ratings at Ta=25 :

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	72	mW
Reverse Voltage	Vr	4	V
D.C. Forward Current	If	30	mA
Peak Current (1/10 Duty Cycle , 0.1 ms Pulse Width)	If(Peak)	100	mA
Operating Temperature Range	Topr	-25 to +85	
Storage Temperature Range	Tstg	-40 to +100	
Lead Soldering Temp.(1.6mm from body) for 5 seconds		260	

Electrical and Optical Characteristics :

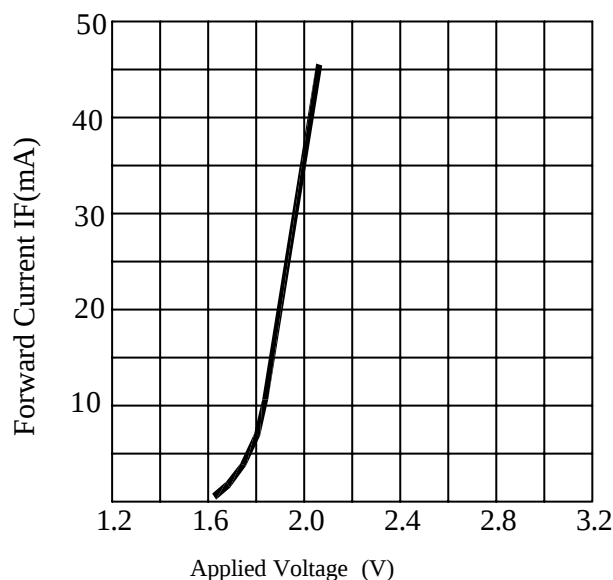
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	420	700		mcd
Forward Voltage	Vf	If=20mA		1.9	2.4	V
Peak Wavelength	λP	If=20mA		589		nm
Dominant Wavelength	λD	If=20mA		591		nm
Reverse Current	Ir	Vr=4V			100	μA
Viewing Angle	2 θ 1/2	If=20mA		60		deg
Spectrum Line Halfwidth	$\Delta \lambda$	If=20mA		15		nm



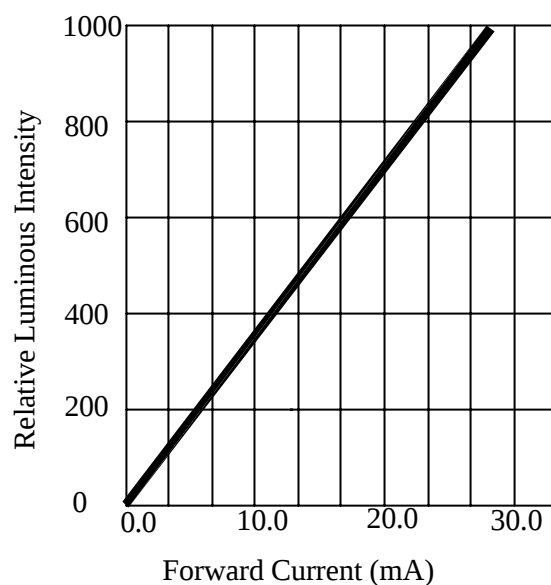
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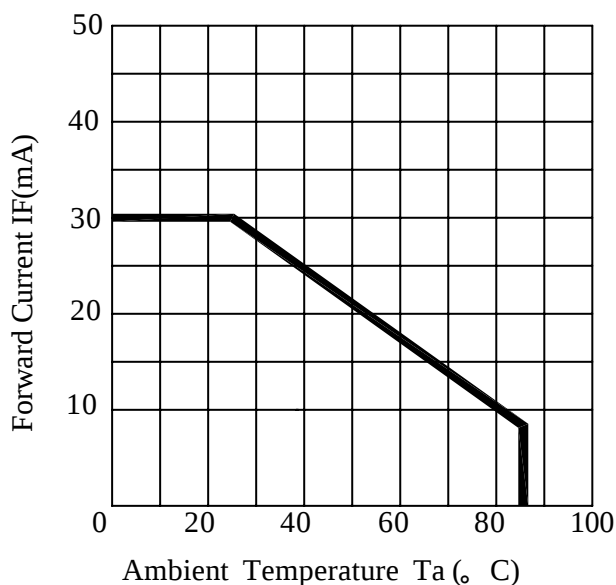
Typical Electrical / Optical Characteristics Curves :



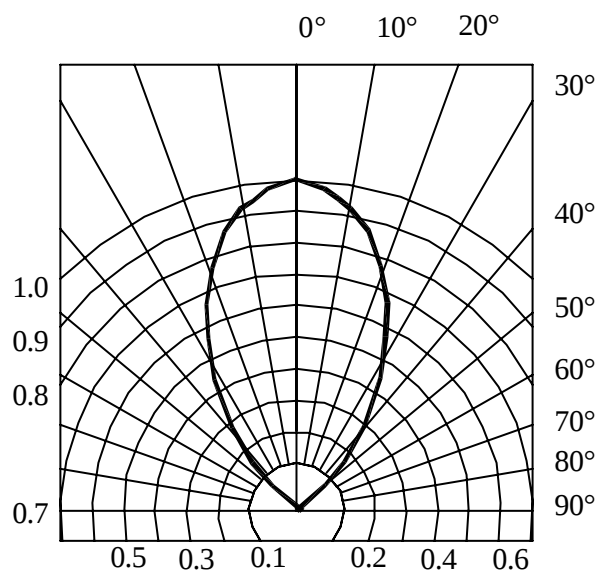
FORWARD CURRENT VS. APPLIED VOLTAGE



FORWARD CURRENT VS. LUMINOUS INTENSITY



AMBIENT TEMPERATURE VS. FORWARD CURRENT



RADIATION DIAGRAM



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Reliability Test Method :

Test Item	Test Condition	Duration Time
Operation Life	If=20mA / Ta=25	168hrs
Storage at High Temperature	Ta=100	168hrs
Storage at Low Temperature	Ta=-40	168hrs
Storage at High Temperature/High Humidity	Ta=85 /RH=85 %	168hrs
Operating at High Temperature	Ta=85 / If=20mA	168hrs
Operating at Low Temperature	Ta=-25 / If=20mA	168hrs
Thermal Shock	Ta/T=100 /30min~ -40 /30min	10 cycles
Solderability	Tsol=230	5 sec

Criteria for Judging The Damage:

Item	Symbol	Test Condition	Criteria for Judgment	
			Min.	Max.
Forward Voltage	Vf	If=20mA	-----	Initial Data x1.1
Reverse Current	Ir	Vr=4V	-----	100 μ A
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----



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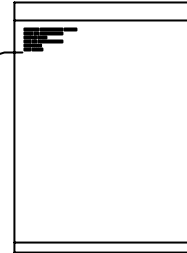
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ENCASED TYPE

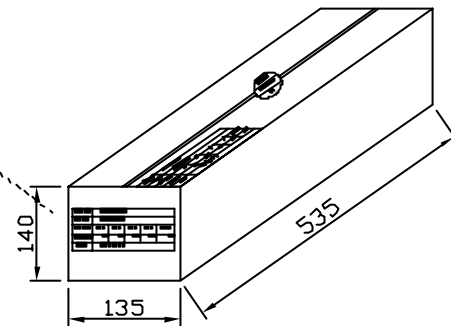
PLASTIC PACKAGE
QUANTITY: 1000 PCS

LEDTECH ELECTRONICS CORP.
PART NO :LTXXXX-XX
Q'TY : PCS
LOT NO :XXXXXXXXXX
DATE :
BIN CODE:



INNER BOX
QUANTITY: 10 PACKETS
TOTAL: 10,000 PCS

PART NO.	LXXXXX-XX-XX				
LOT NO.	XXXXXXXXXX				
BIN CODE	Xx X	Xx X	Xx X	Xx X	TOTAL
QUANTITY	PCS	PCS	PCS	PCS	PCS
DATE	XXXX, XX, XX				



OUTER CARTON
QUANTITY: 4 BOX
TOTAL: 40,000 PCS

C/T NO. 箱 號	XX
PART NO. 料 號	LXXXXX-XX-XX
QUANTITY 數 量	PCS
N.W. 淨 重	KGS
G.W. 毛 重	KGS
REMARK 備 註	

