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SPECIFICATION

PART NO. : LT6VW3-AH-UAC2

HIGH POWER AUTOMATIVE LED

Approved by	Checked by	Prepared by

REV:1 Take effect Date :



HIGH POWER AUTOMATIVE LED

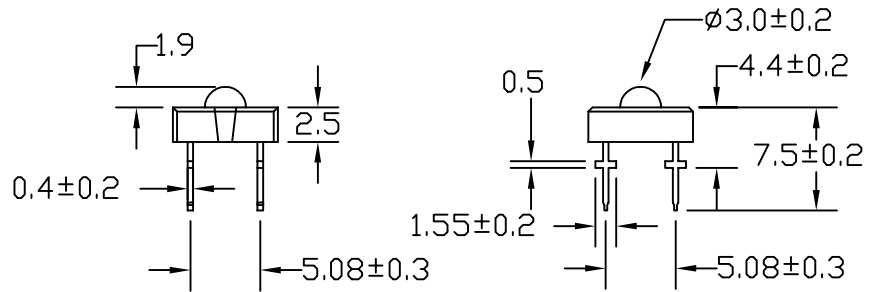
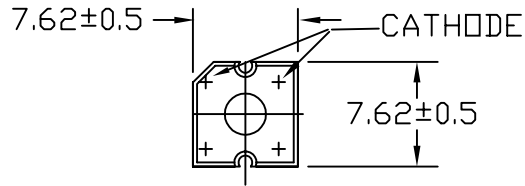
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Features

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

Package Dimensions



Description

The White lamps are made with InGaN/SiC chips and water clear epoxy resin.

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	
LT6VW3-AH-UAC2	InGaN/SiC	White	Water clear



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Absolute Maximum Ratings at Ta=25°C :

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	84	mW
Reverse Voltage	Vr	5	V
D.C. Forward Current	If	20	mA
Peak Current (1/10 Duty Cycle , 0.1 ms Pulse Width)	If(Peak)	100	mA
Operating Temperature Range	Topr	-25 to +85	°C
Storage Temperature Range	Tstg	-40 to +100	°C
Lead Soldering Temp.(1.6mm from body) for 5 seconds		260	°C
Electrostatic discharge (ESD)		1000	V

Electrical and Optical Characteristics :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	1900	3300		mcd
Forward Voltage	Vf	If=20mA		3.5	4.2	V
CIE Chronaticity coordinates: X Axis	X	If=20mA		0.29		
CIE Chronaticity coordinates: Y Axis	Y	If=20mA		0.30		
Reverse Current	Ir	Vr=5V			50	μ A
Viewing Angle	2 θ 1/2	If=20mA		50		deg



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Typical Electrical/Optical Characteristic Curves
(25°C Ambient Temperature Unless Otherwise Noted)

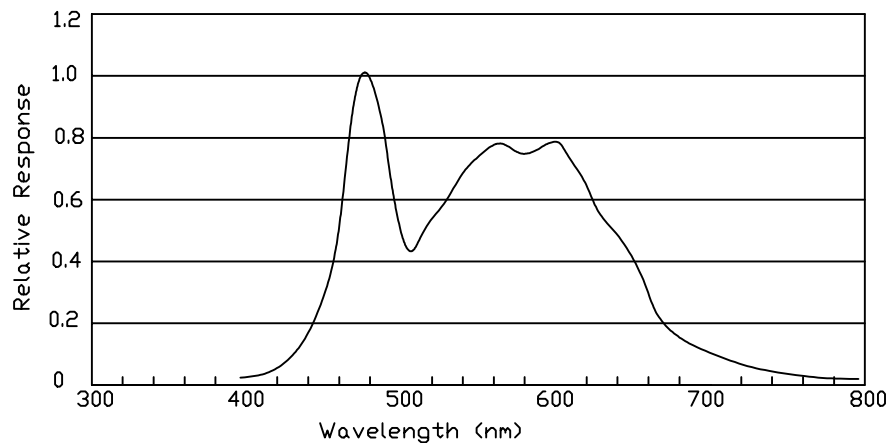
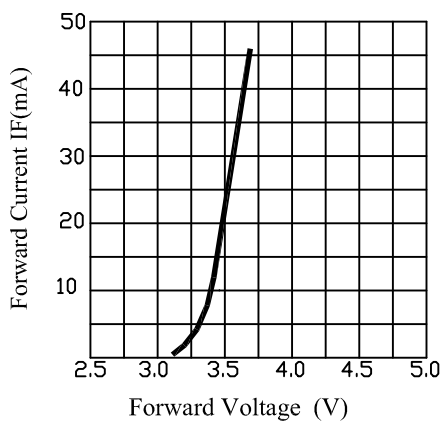
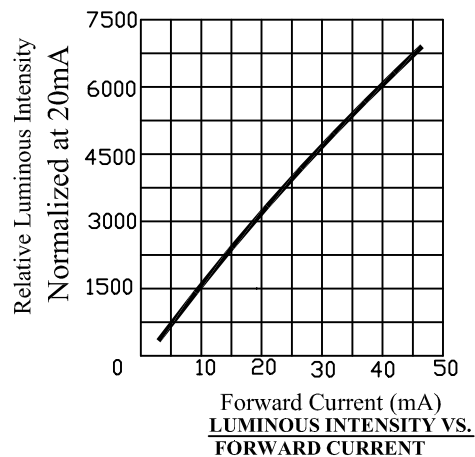


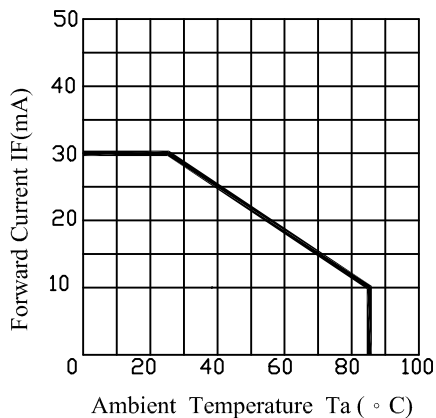
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



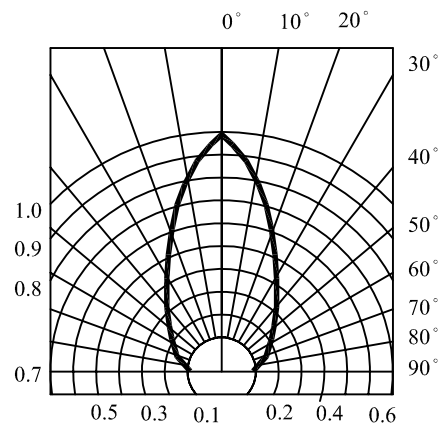
FORWARD CURRENT VS. APPLIED VOLTAGE



LUMINOUS INTENSITY VS. FORWARD CURRENT



FORWARD CURRENT VS. AMBIENT TEMPERATURE



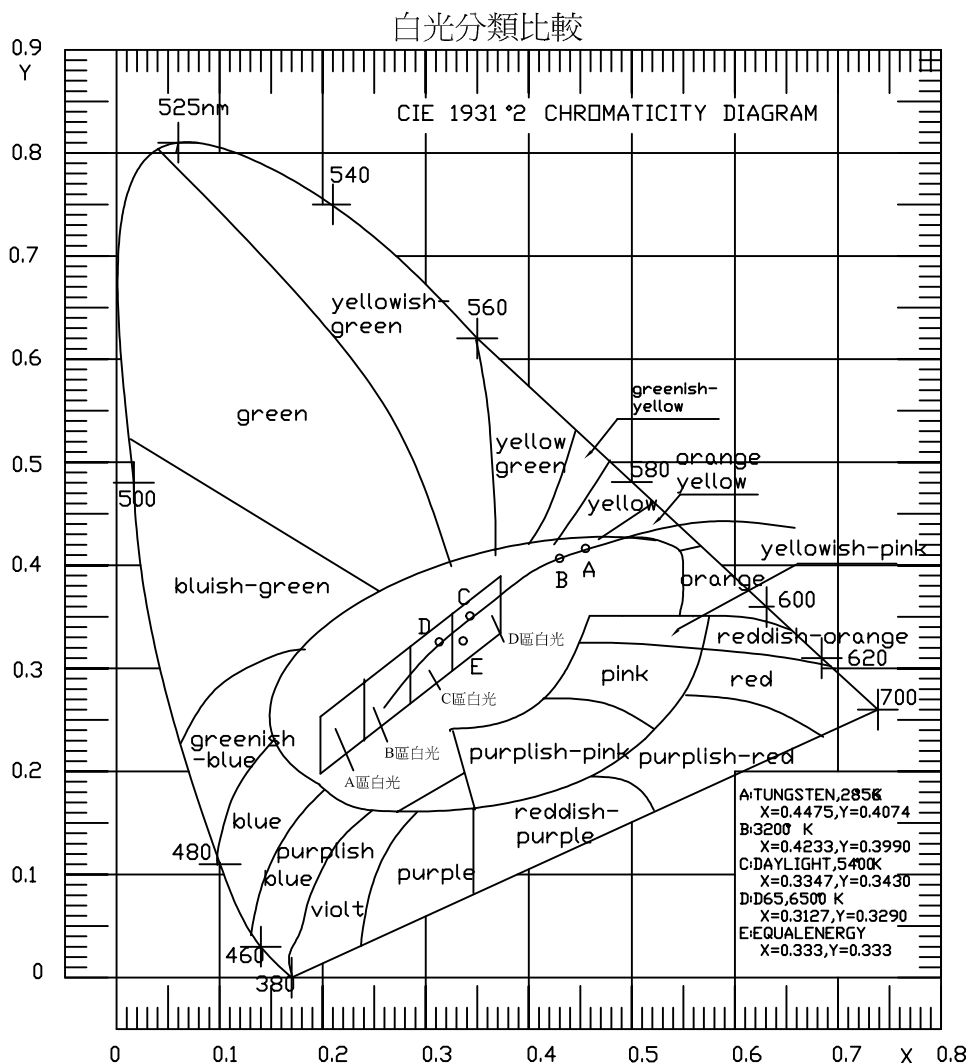
RELATIVE INTENSITY VS. WAVELENGTH



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Rank	Chromaticity Coordinates(Ledtech Preliminary)								
A	X	0.22	0.22	0.26	0.26				
	Y	0.22	0.28	0.31	0.25				
B	X	0.26	0.26	0.29	0.29				
	Y	0.25	0.31	0.33	0.27				
C	X	0.29	0.29	0.32	0.32				
	Y	0.27	0.33	0.35	0.29				
D	X	0.32	0.32	0.36	0.36				
	Y	0.29	0.35	0.38	0.32				
Tolerance		X= ± 0.02		Y= ± 0.02					



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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=5V	-----	50 μ A
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----