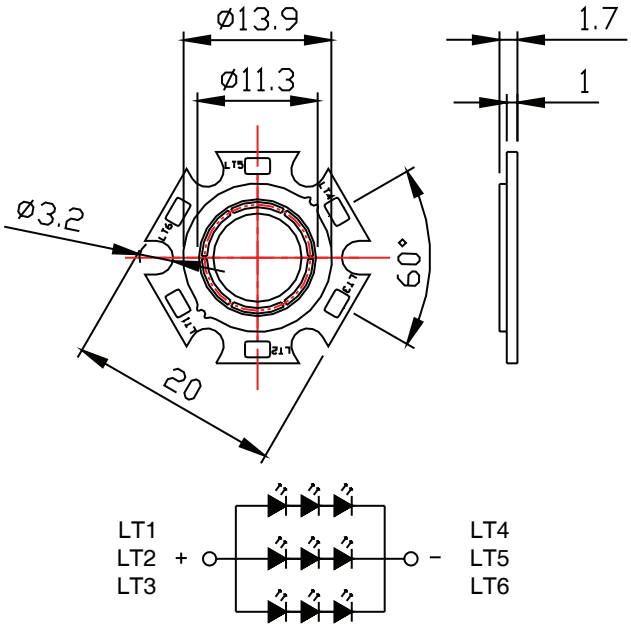
3W High Power LED

RoHS Compliant

Package Dimensions:



All dimensions are in mm
Tolerance: ±0.25mm

Features:

- Pb-Free soldering application
- Multi-Chip package
- High reliability

Applications:

- Bulb
- Indoor decoration lighting
- Signal and symbol luminaries
- Reading lights
- Portable flashlight

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation*	P_D	540	mW
LED Junction Temperature*	Tj	120	V
Reverse Voltage*	Vr	5	mA
D.C. Forward Current*	Ir	150	µA
Peak Current (1 / 10 Duty Cycle, 0.1ms Pulse Width)*	If (Peak)	500	mA
Storage Temperature Range	Tstg.	-40 to +85	°C
Soldering Temperature (1.6mm from body)	Tsld.	Dip Soldering: 260°C for 10sec. Hand Soldering: 350°C for 3sec.	
Electric Static Discharge Threshold (HBM)*	ESD	300	V

* The values are based on 1 die performance.

Electrical & Optical Characteristics

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Flux		Φv	IF=1,050mA	150	200		lm
	Rank L1			150		200	
	Rank L2			200		250	
Forward Voltage		VF	IF=1,050m		9.5		V
	Rank V1			9		9.5	
	Rank V2			9.51		10	
	Rank V3			10.01		10.5	
Correlated Colour Temperature		CCT	IF=1,050mA	2,875	3,000		K
CIE Chromaticity Coordinates: X Axis		X	IF=1,050mA		0.4338		
CIE Chromaticity Coordinates: Y Axis		Y	IF=1,050mA		0.4030		
Reverse Current		IR	Vr=5V			50	μA
Viewing Angle at 50%			2 θ ½		120		Deg
Thermal Resistance Junction to Case			R θ j-c		15		°C / W

Notes: 1. The data is tested by IS tester.
2. Customer's special requirements are also welcome.

Typical Electrical & Optical Characteristics Curves:

(25°C Ambient temperature unless otherwise noted)

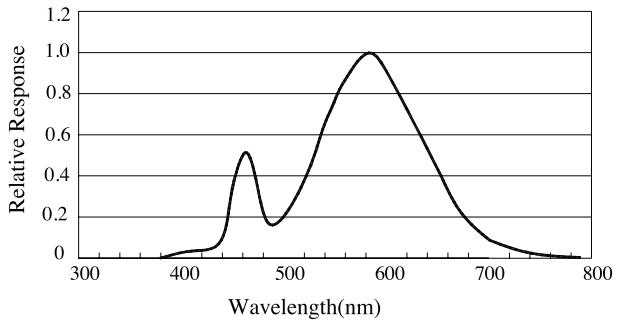
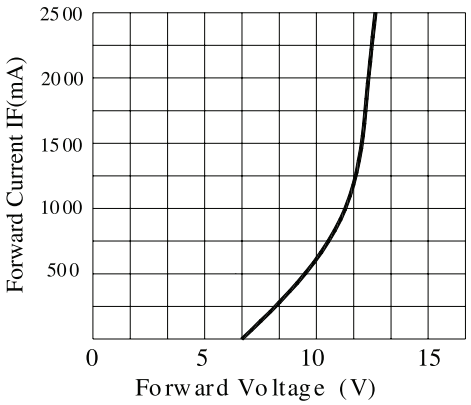
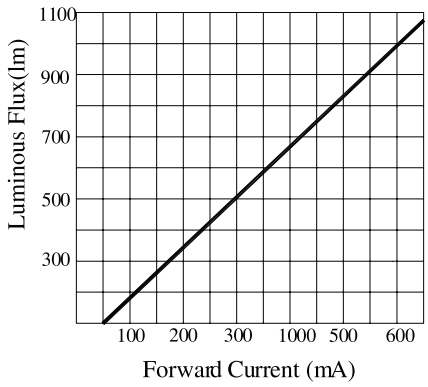


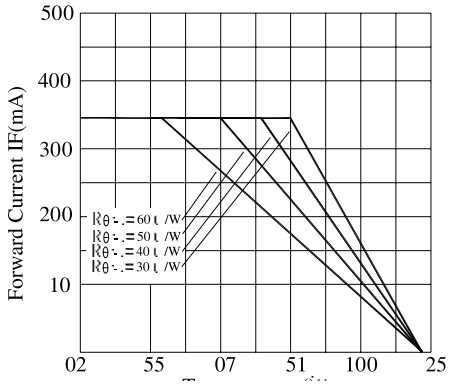
Fig.1 WARM WHITE LED Spectrum VS. WAVELENGTH



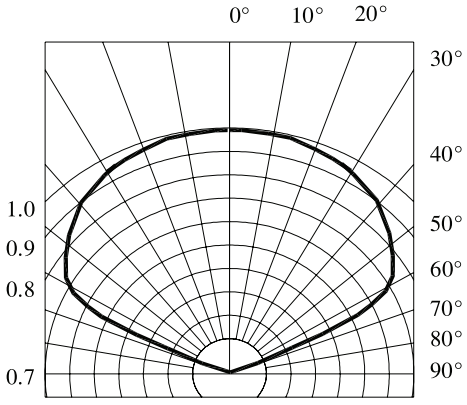
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Flux



Ambient Temperature VS. Forward Current



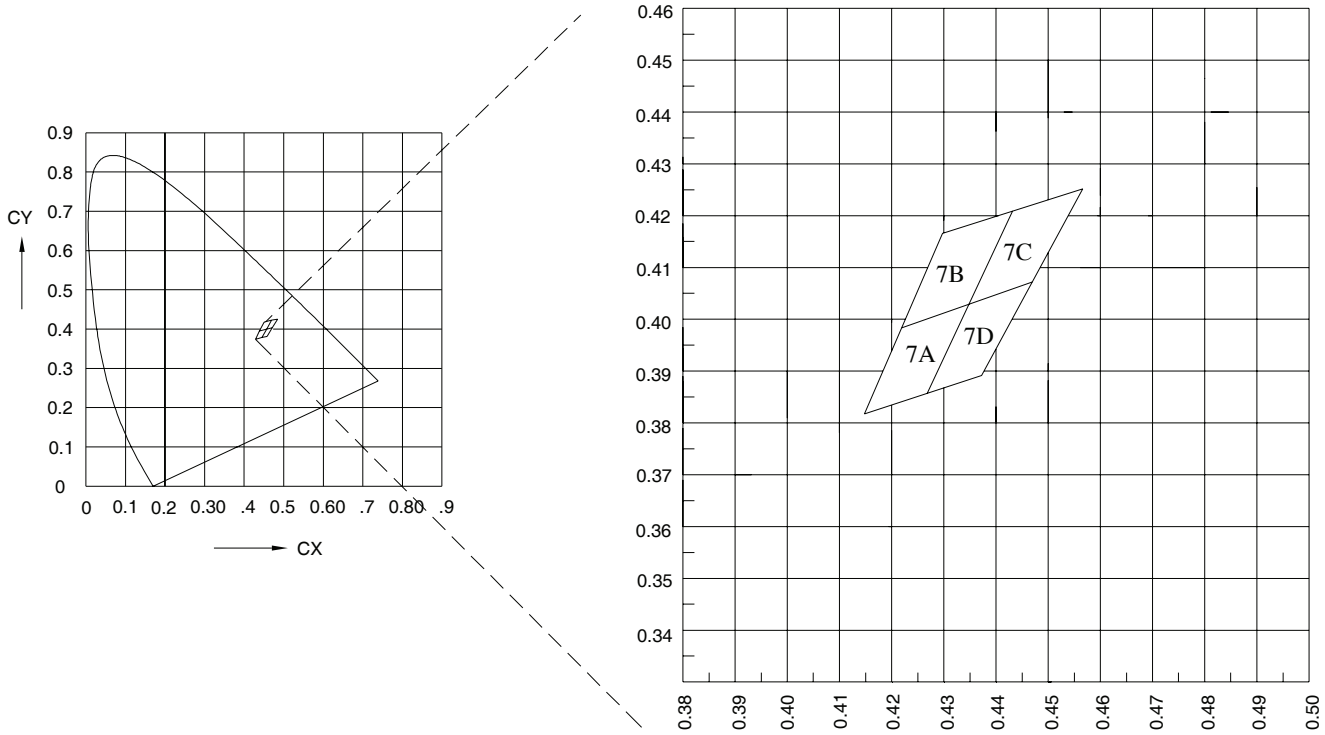
Radiation Diagram

Chromaticity Coordinates Specifications for Bin Grading:

Bin	Rank				
7A	X	0.4147	0.4221	0.4342	0.4259
	Y	0.3814	0.3984	0.4028	0.3853
7B	X	0.4221	0.4299	0.4430	0.4342
	Y	0.3984	0.4165	0.4212	0.4028
7C	X	0.4342	0.4430	0.4562	0.4465
	Y	0.4028	0.4212	0.4260	0.4071
7D	X	0.4259	0.4342	0.4465	0.4373
	Y	0.3853	0.4028	0.4071	0.3893

Note: X. Y
Tolerance each Bin limit is ±0.01

Chromaticity Coordinates & Bin Grading Diagram:



Part Number Table

LED Chip		Lens Colour	Part Number
Material	Colour Coordinates		
InGaN/Sapphire	Warm white	Yellow diffused	703-0115