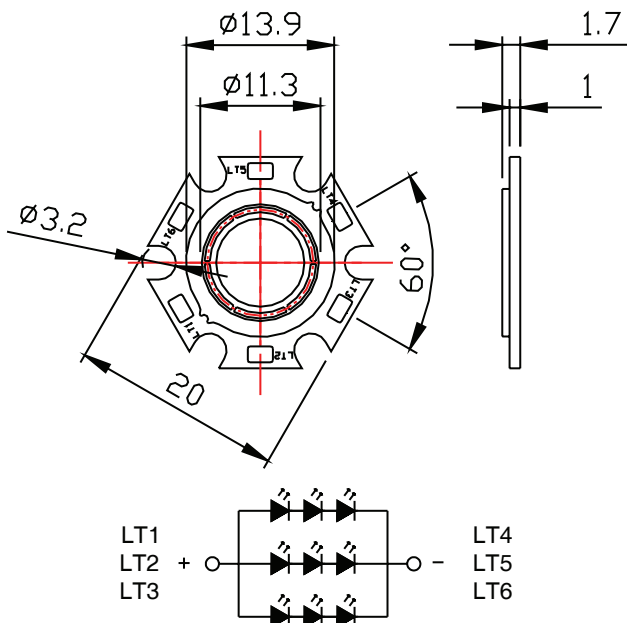


5W High Power LED



Package Dimensions:



Features:

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

Applications:

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

All dimensions are in mm
Tolerance: $\pm 0.25\text{mm}$

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Power Dissipation*	P_D	1,260	mW
LED Junction Temperature*	T_j	120	V
Reverse Voltage*	V_r	5	mA
D.C. Forward Current*	I_r	350	μA
Peak Current (1 / 10 Duty Cycle, 0.1ms Pulse Width)*	I_f (Peak)	1,000	mA
Storage Temperature Range	$T_{stg.}$	-40 to +85	$^\circ\text{C}$
Soldering Temperature (1.6mm from body)	$T_{sld.}$	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.

5W High Power LED



Electrical & Optical Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Flux		IF=1,050mA	250	300		lm
	Rank L1		250		300	
	Rank L2		300		350	
Forward Voltage		IF=1,050m		6.5		V
	Rank V1		6		6.5	
	Rank V2		5.51		7	
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
Colour Rendering Index	CRI	IF=1,050mA		74		Ra
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)

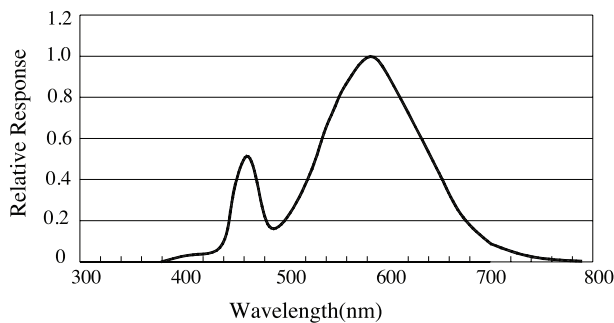
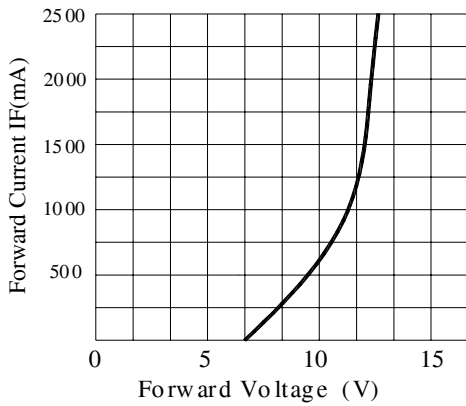
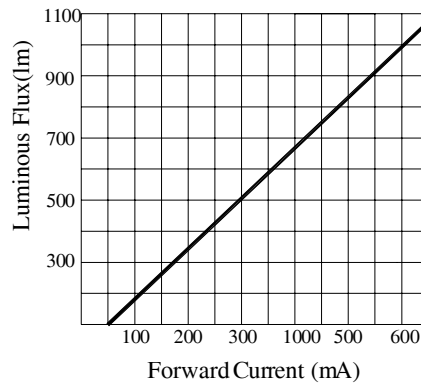


Fig.1 WARM WHITE LED Spectrum VS. WAVELENGTH

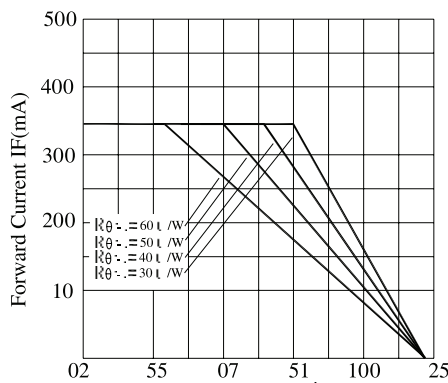
5W High Power LED



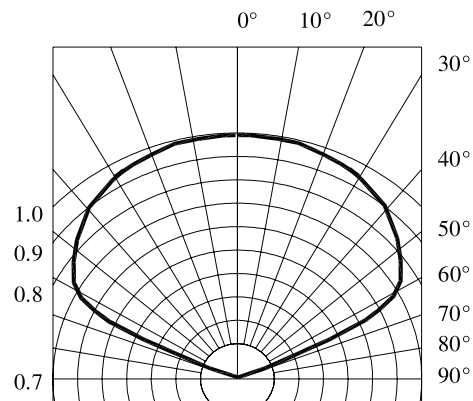
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Flux



Ambient Temperature VS. Forward Current



Radiation Diagram

Chromaticity Coordinates Specifications for Bin Grading:

Bin	Rank				
	X	Y	Z	u'	v'
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

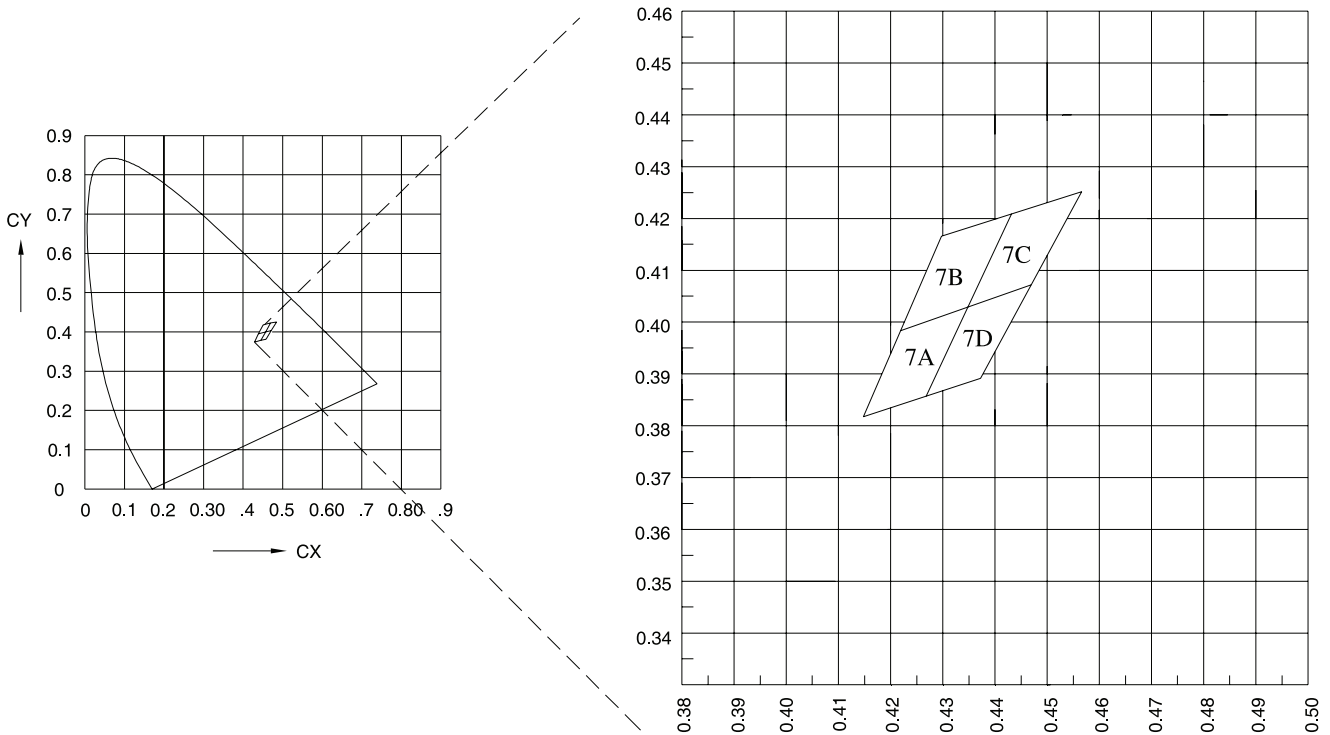
Note: X, Y
Tolerance each Bin limit is ± 0.01



5W High Power LED



Chromaticity Coordinates & Bin Grading Diagram:



Part Number Table

LED Chip		Lens Colour	Part Number
Material	Colour Coordinates		
InGaN/Sapphire	Warm white	Yellow diffused	703-0117

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