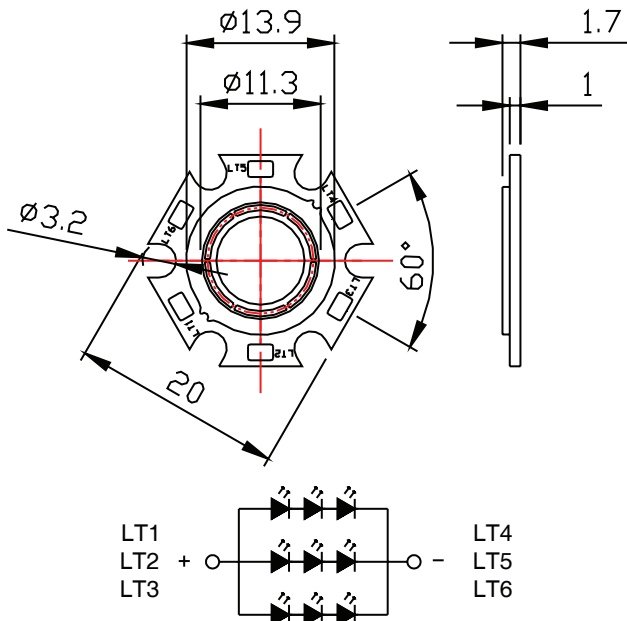


3W High Power LED



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	540	mW
LED Junction Temperature*	T_j	120	V
Reverse Voltage*	V_r	5	mA
D.C. Forward Current*	I_r	150	μA
Peak Current (1 / 10 Duty Cycle, 0.1ms Pulse Width)*	I_f (Peak)	500	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.

Electrical & Optical Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Luminous Flux	Φ _v	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	I _R	V _r =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)

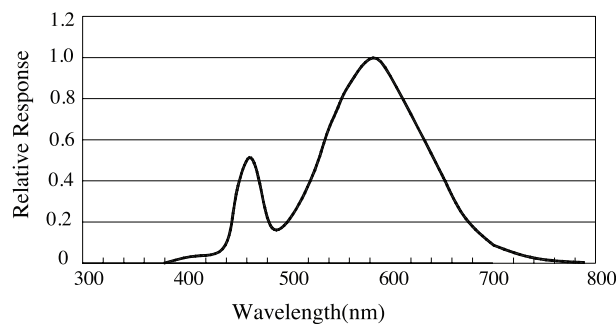
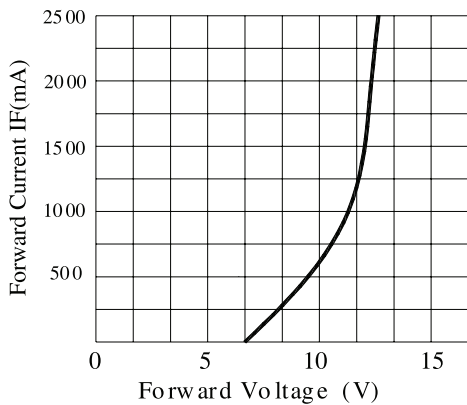
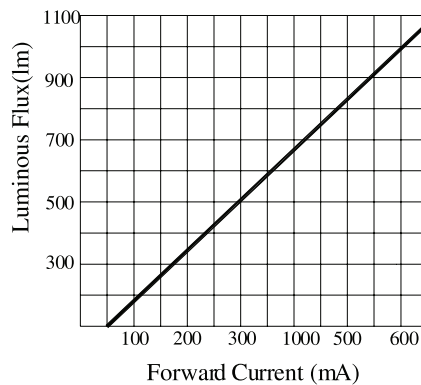


Fig.1 WARM WHITE LED Spectrum VS. WAVELENGTH

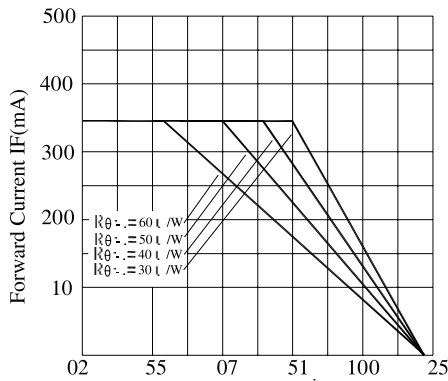
3W High Power LED



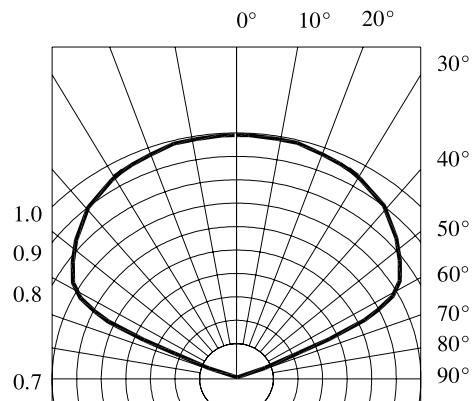
Forward Current VS. Applied Voltage



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

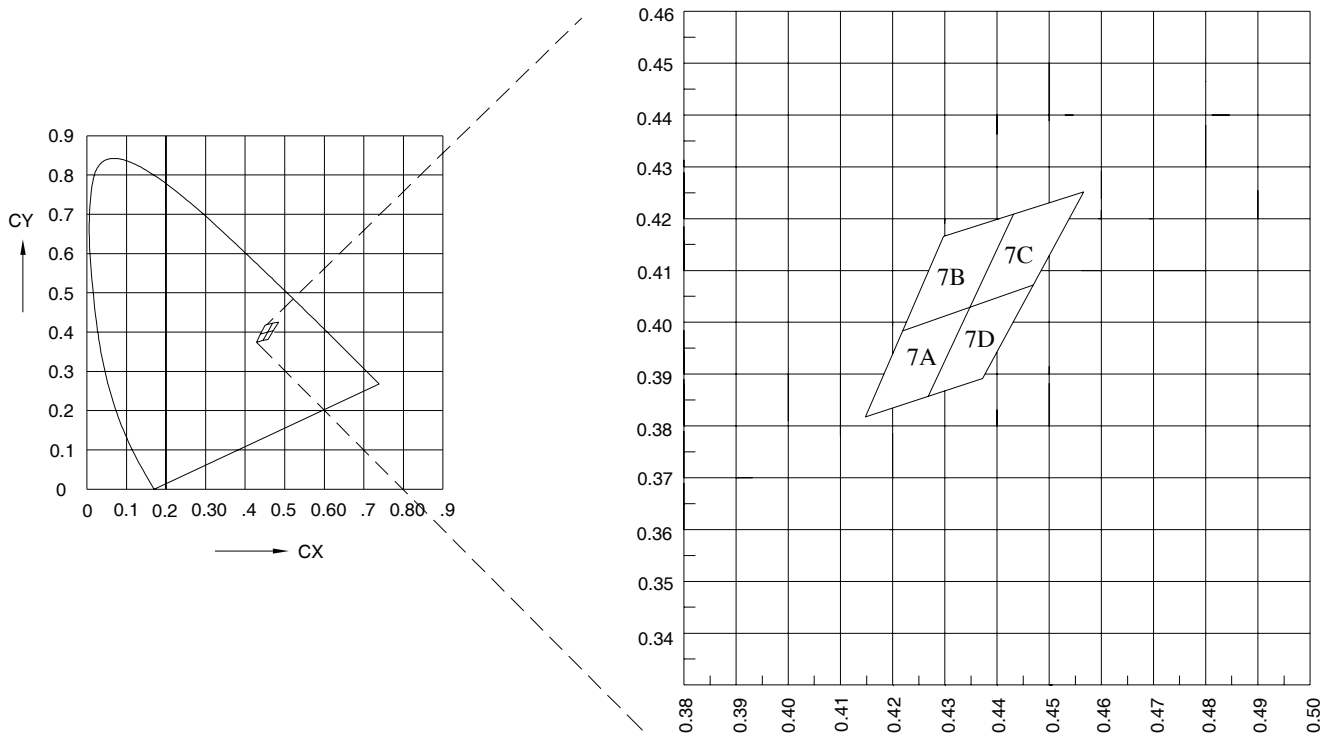
Note: X, Y
Tolerance each Bin limit is ± 0.01



3W 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	703-0115

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