

3W High Power LED



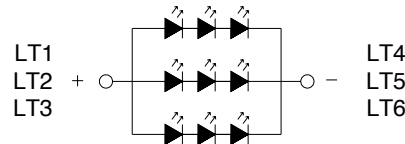
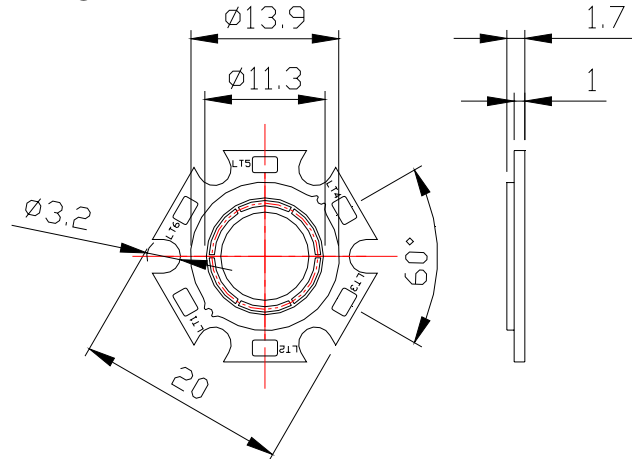
Features:

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

Applications:

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

Package Dimensions:



* All dimensions are in mm
* Tolerance: ±0.6mm

Ant Part No.	LED Chip		Lens Colour
	Material	Colour Coordinates	
703-0115	InGaN/Sapphire	Warm white	Yellow diffused

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Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Power Dissipation*	P _D	540	mW
LED Junction Temperature*	T _j	120	°C
Reverse Voltage*	V _r	5	V
D.C. Forward Current*	I _f	150	mA
Peak Current (1 / 10 Duty Cycle, 0.1ms Pulse Width)*	I _f (Peak)	500	mA
Storage Temperature Range	T _{stg.}	-40 to +85	°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	I _F =1050mA	150	200		lm	
			Rank L1	150			200
			Rank L2	200			250
Forward Voltage	V _F	I _F =1050mA		9.5		V	
			Rank V1	9.00			9.50
			Rank V2	9.51			10.0
			Rank V3	10.01			10.5
Correlated Colour Temperature	CCT	I _F =1050mA	2875	3000		K	
CIE Chromaticity Coordinates: X Axis	X	I _F =1050mA		0.4338			
CIE Chromaticity Coordinates: Y Axis	Y	I _F =1050mA		0.4030			
Reverse Current	I _R	V _r =5V			50	μA	
Viewing Angle at 50%		2θ _{1/2}		120		Deg	
Thermal Resistance Junction to Case		Rθ _{J-C}		15		°C / W	

Notes: 1. The data is tested by IS tester.

2. Customer's special requirements are also welcome.

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Typical Electrical & Optical Characteristics Curves: (25°C Ambient temperature unless otherwise noted)

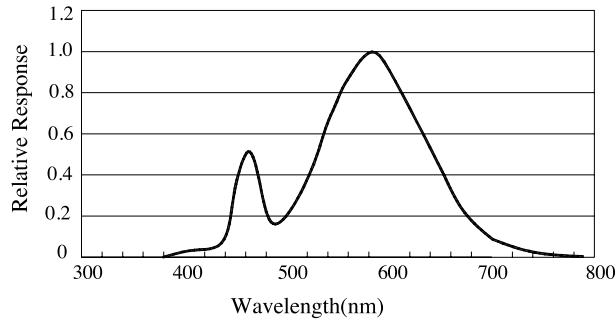
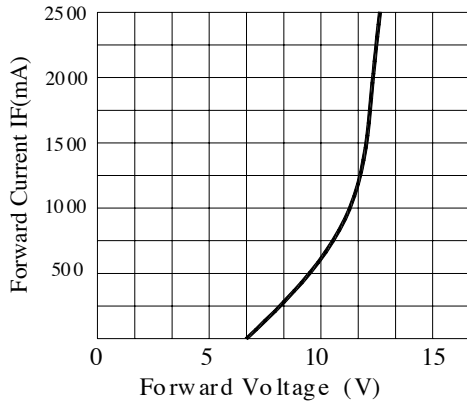
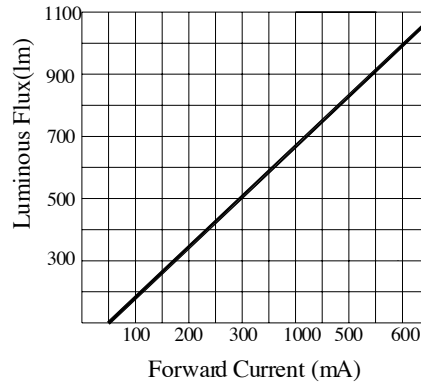


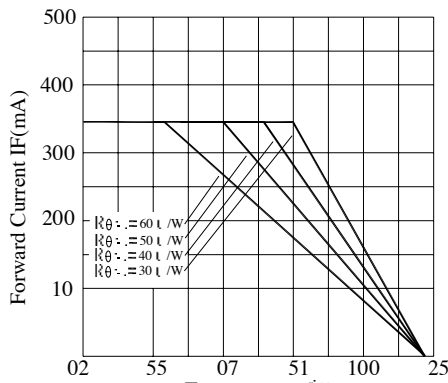
Fig.1 WARM WHITE LED Spectrum VS. WAVELENGTH



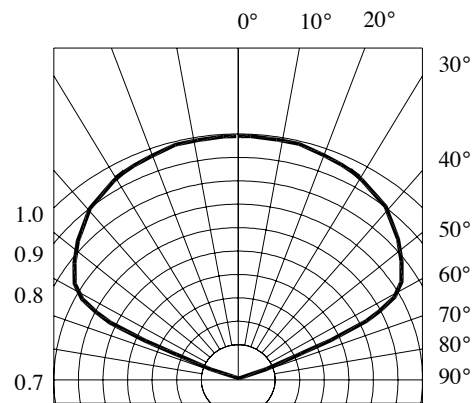
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Flux



Ambient Temperature VS. Forward Current



Radiation Diagram

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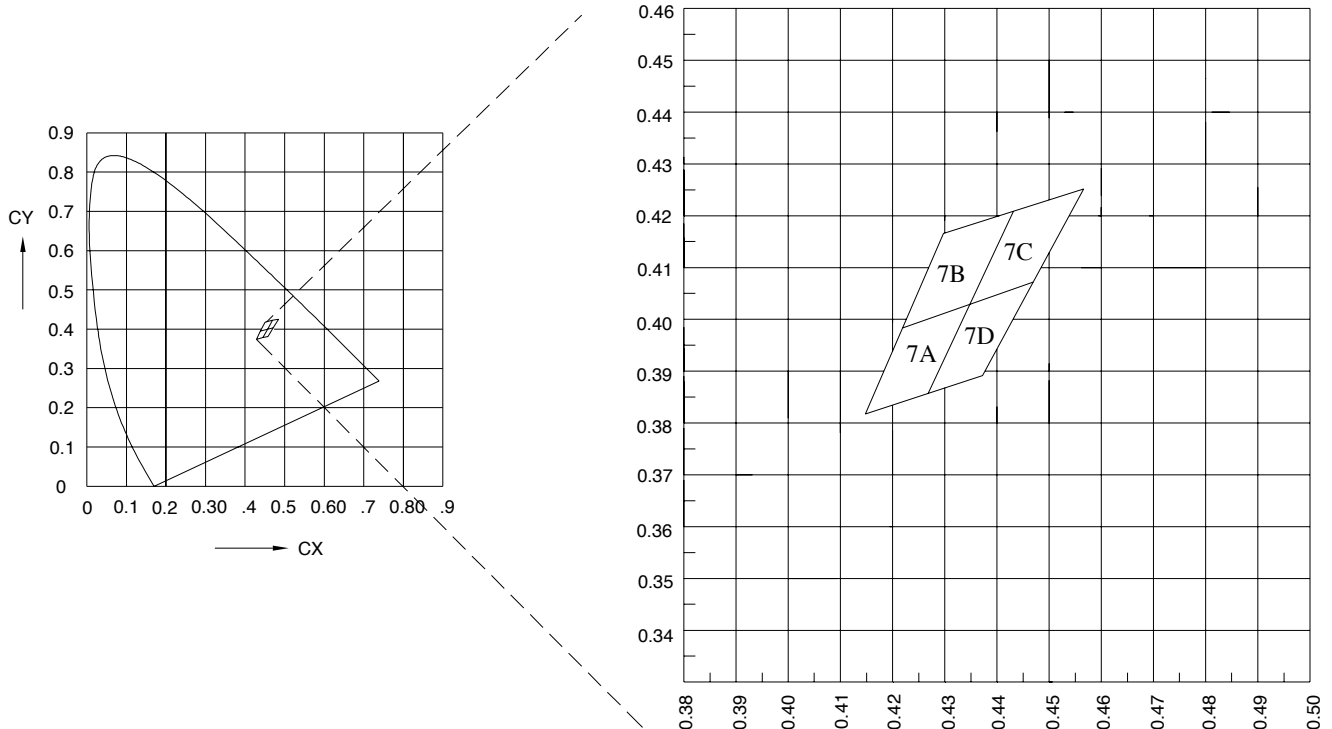


Chromaticity Coordinates Specifications for Bin Grading:

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:



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