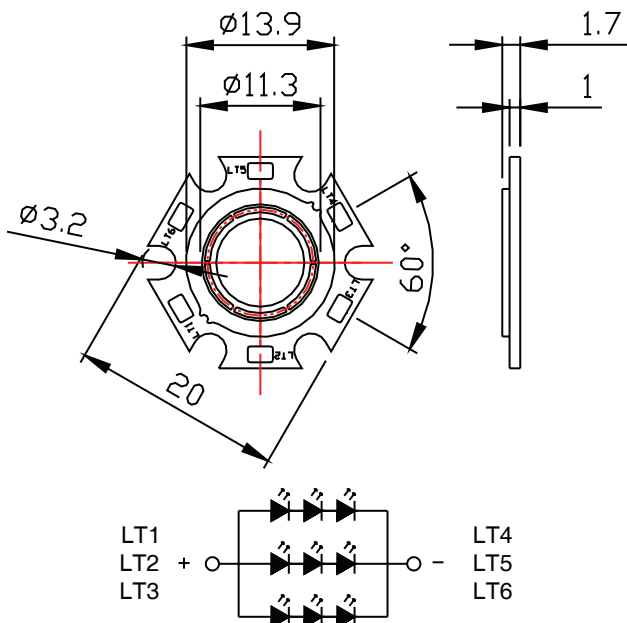


10W High Power LED



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)	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	Φv	IF=1,050mA	550	650		lm	
			Rank L1	550			650
			Rank L2	650			750
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	
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)

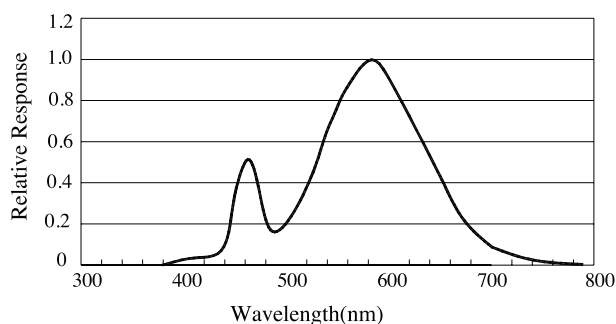
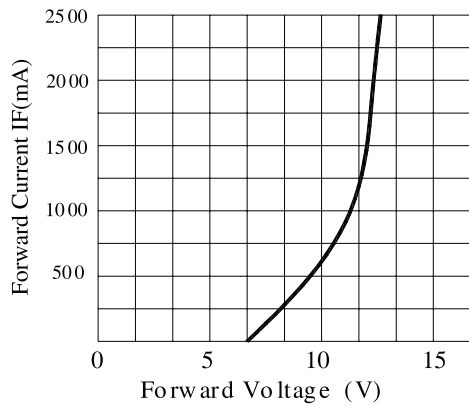
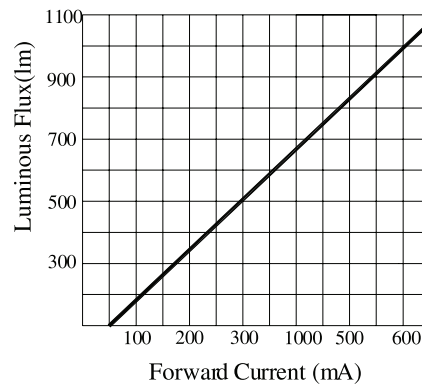


Fig.1 WARM WHITE LED Spectrum VS. WAVELENGTH

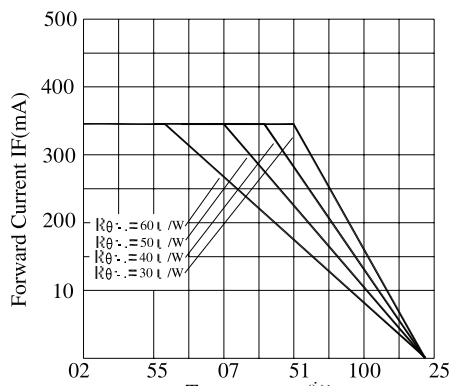
10W High Power LED



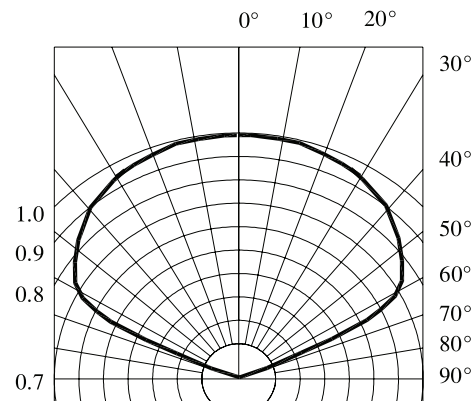
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Flux



Ambient Temperature VS. Forward Current



Radiation Diagram

Chromaticity Coordinates Specifications for Bin Grading:

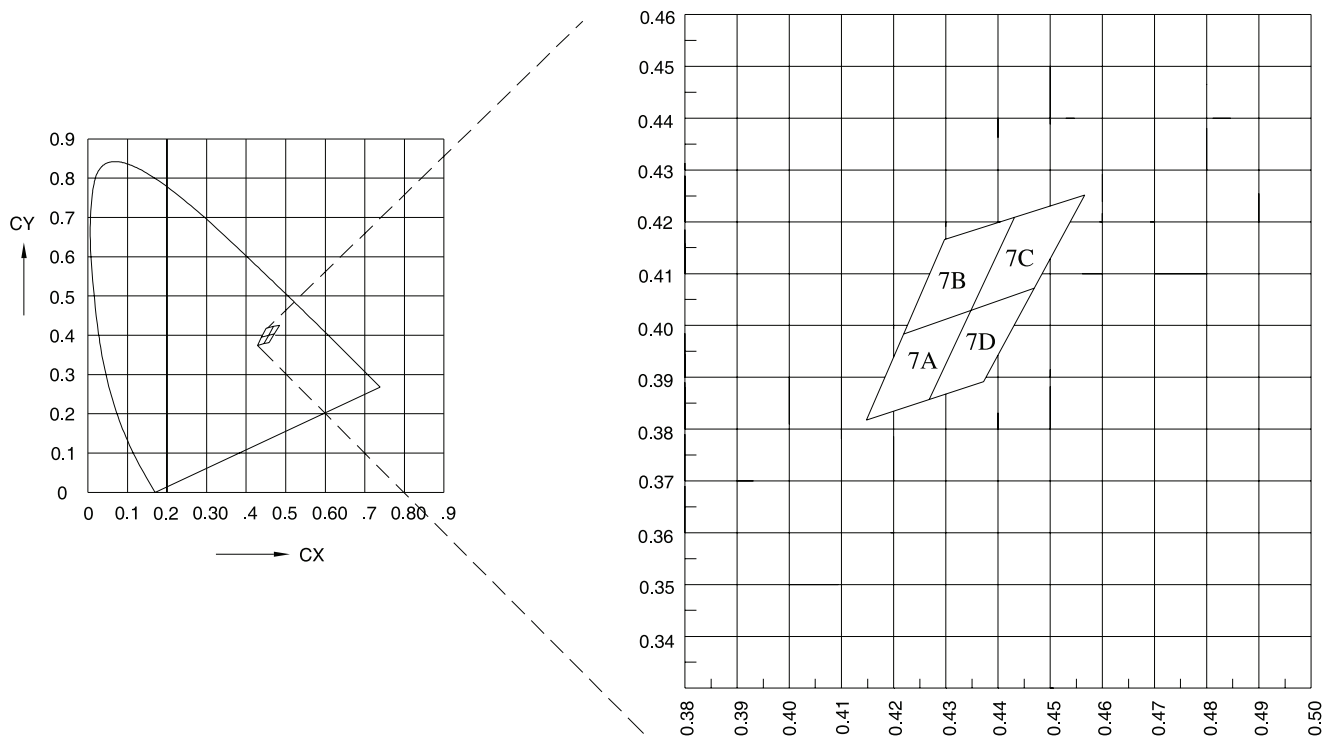
Bin	Rank				
	X	Y	Z	u'	v'
7A	X	0.3327	0.3394	0.3390	0.3324
	Y	0.3650	0.3719	0.3591	0.3519
7B	X	0.3264	0.3327	0.3324	0.3268
	Y	0.3551	0.3650	0.3519	0.3430
7C	X	0.3210	0.3264	0.3268	0.3218
	Y	0.3468	0.3551	0.3430	0.3353
7D	X	0.3164	0.3210	0.3218	0.3175
	Y	0.3395	0.3468	0.3353	0.3283

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	703-0121

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