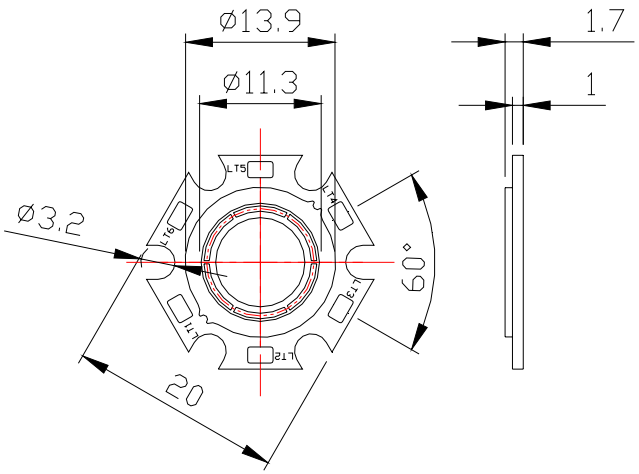
3W High Power LED

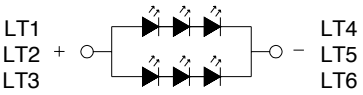
RoHS Compliant

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	
703-0114	InGaN/Sapphire	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*	Tj	120	°C
Reverse Voltage*	Vr	5	V
D.C. Forward Current*	If	150	mA
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		Φ_V	IF=1050mA	200	250		lm
	Rank L1			200		250	
	Rank L2			250		300	
Forward Voltage		VF	IF=1050m		9.5		V
	Rank V1			9.00		9.50	
	Rank V2			9.51		10.00	
	Rank V3			10.01		10.50	
Correlated Colour Temperature		CCT	IF=1050mA	5250	5750		K
CIE Chromaticity Coordinates: X Axis		X	IF=1050mA		0.3287		
CIE Chromaticity Coordinates: Y Axis		Y	IF=1050mA		0.3417		
Reverse Current		I_R	Vr=5V			50	µA
Colour Rendering Index		CRI	IF=1050mA		72		Ra
Viewing Angle at 50%			$2\theta_{1/2}$		120		Deg
Thermal Resistance Junction to Case			$R\theta_{J-C}$		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)

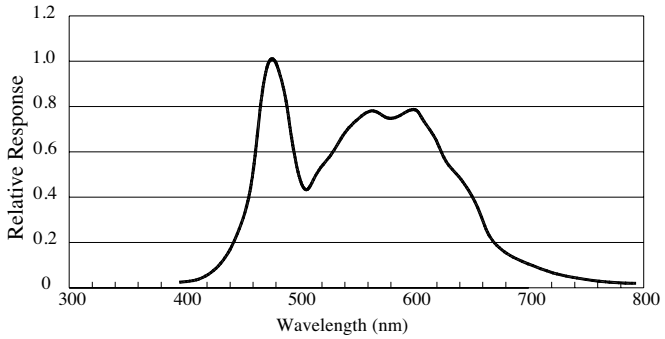
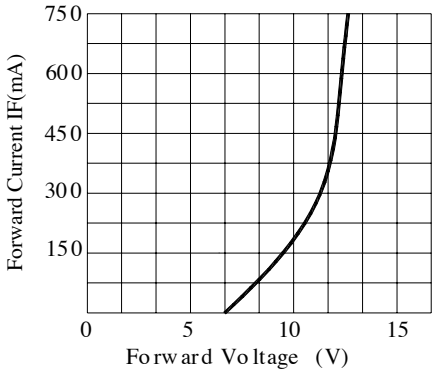
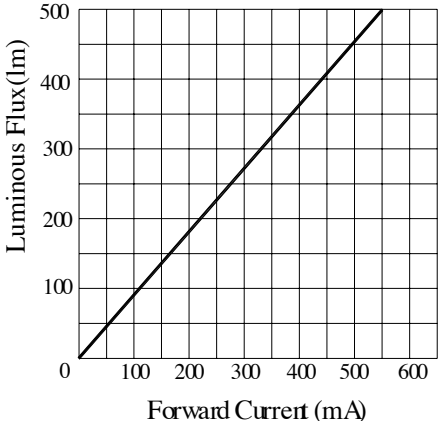


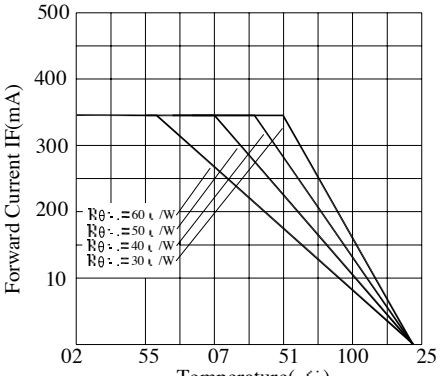
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



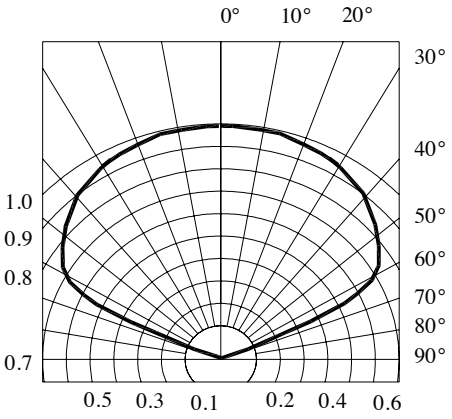
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Flux



Ambient Temperature VS. Forward Current



Radiation Diagram

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Chromaticity Coordinates Specifications for Bin Grading:

Bin	Rank					Bin	Rank				
WB6	X	0.3327	0.3394	0.3390	0.3324	WB7	X	0.3324	0.3390	0.3385	0.3324
	Y	0.3650	0.3719	0.3591	0.3519		Y	0.3519	0.3591	0.3465	0.3388
WC6	X	0.3264	0.3327	0.3324	0.3268	WC7	X	0.3268	0.3324	0.3324	0.3272
	Y	0.3551	0.3650	0.3519	0.3430		Y	0.3430	0.3519	0.3388	0.3305
WD6	X	0.3210	0.3264	0.3268	0.3218	WD7	X	0.3218	0.3268	0.3272	0.3227
	Y	0.3468	0.3551	0.3430	0.3353		Y	0.3353	0.3430	0.3305	0.3233
WE6	X	0.3164	0.3210	0.3218	0.3175	WE7	X	0.3175	0.3218	0.3227	0.3186
	Y	0.3395	0.3468	0.3353	0.3283		Y	0.3283	0.3353	0.3233	0.3169

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

Chromaticity Coordinates & Bin Grading Diagram: