

SPECIFICATION FOR APPROVAL

Customer: _____

Product Name: NationStar® High Power LED

Part No: NSHL-WLLM2-4600

Customer Part No.: _____

Date: _____

APPROVED SIGNATURES			



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APPROVE	CHECK	DRAW

SPECIFICATION

Product Name: NationStar® High Power LED
Part No.: NSHL-WLLM2-460O

NSHL-WLLM2-460O

FEATURES:

Power Grade: 1w

Color: white

Small size, low power consumption, high reliability and long life

Viewing Angle: 120°

Flux: 100 lm

Emitting Light Efficiency: 95 lm/W

Low Thermal Resistance: 12 K/W

According with the RoHS Direction



Application:

Household and Architecture lighting, Floodlighting, Decorating lighting, Advertising lighting, Automotive lighting, Automotive Signal lighting, Traffic Signal lighting, TFT-LCD back lighting and Flash light.

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$):

Parameter	Symbol	Value	Unit
Pulse Forward Current	I_{FM}	400* MAX	mA
Forward Current	I_F	350 MAX	mA
Reverse Voltage	V_R	5 MAX	V
Operating Temperature	T_{OPR}	-20 ~ +85	°C
Storage Temperature	T_{stg}	-30 ~ +100	°C
Soldering Temperature	T_{sld}	Handwork Soldering: 260 °C <5sec.	°C

- Pulse width: Max. 0.1ms, Duty ratio: Max 1/10.



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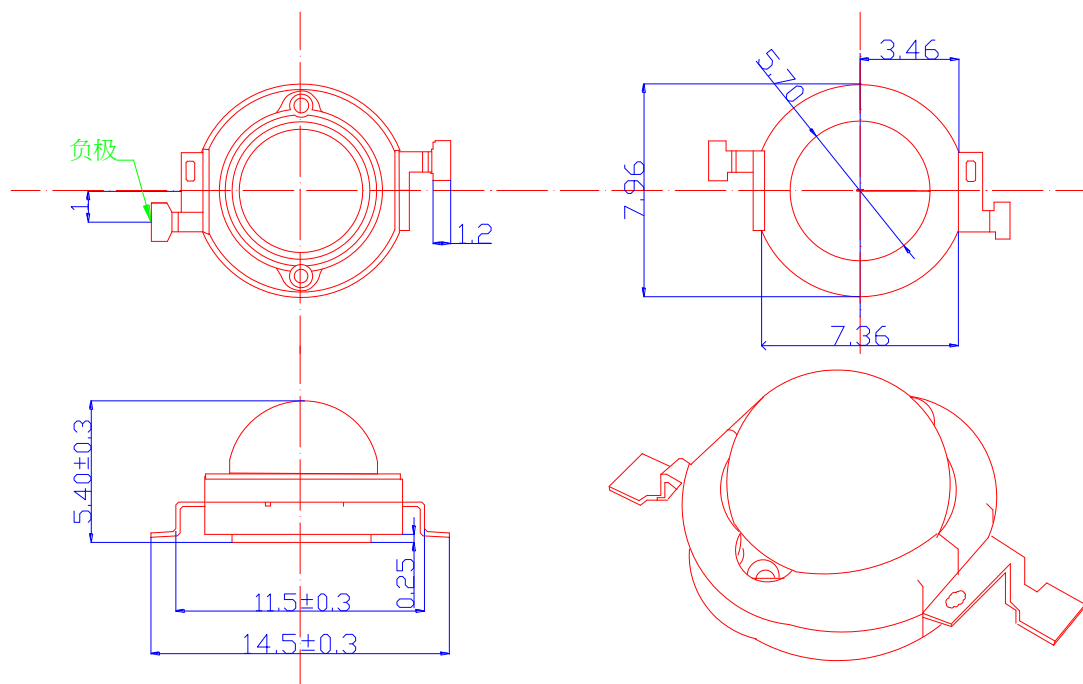
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Electrical/Optical Characteristics (T_A=25℃):

Parameter	Symbol	Condition	Unit	Min.	Typ.	Max.
Forward Current	I _S		mA		350	
Forward Voltage V _F	V _F	I _F =350mA	V	3.0		3.4
Reverse Current I _R	I _R	V _R =-5V	μ A			10
Flux Φ _v	Φ _v	I _F =350mA	lm		100	
Color reproduction index	Ra		%		80	
Viewing angle	2θ _{1/2}		°		120	
Thermal Resistance	R _θ		K/W		12	
Color temperature	T _c		K		6000	

Package Dimensions:



All dimensions are millimeters.

Tolerance is 0.25mm unless otherwise

Application Notes:



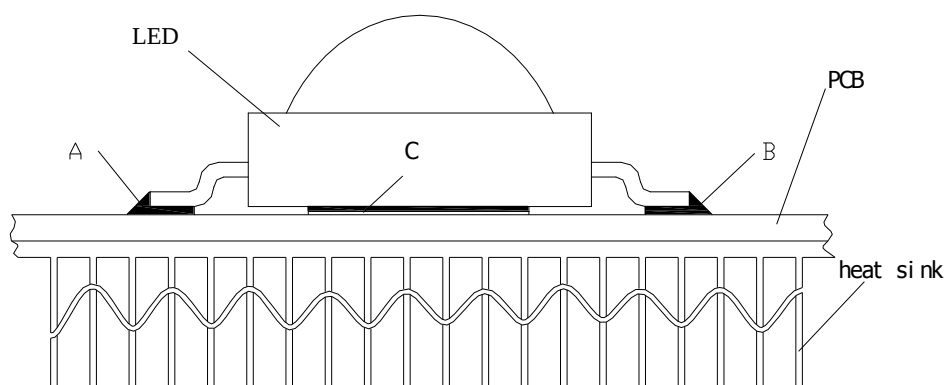
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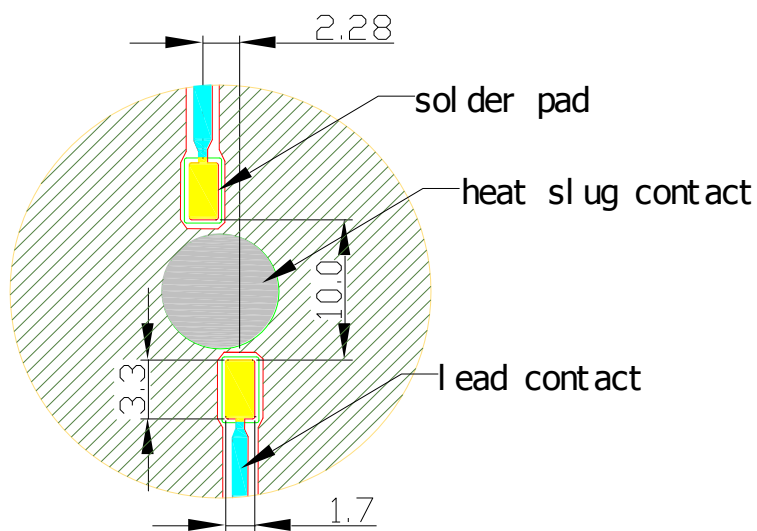
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- 1、 During the use and application, it avoids that lens supports any external force.
- 2、 Products are sensitive to static electricity and a high standard of care must be taken when handling products.
- 3、 The system should have well dispersing heat capability during the application.

Point A, B, C is soldering joint, the electric is separated from each other between A, B and C.



Recommended solder Pad



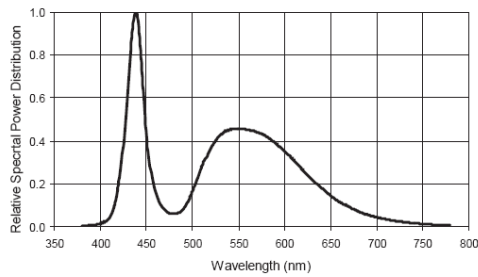
CHARACTERISTIC CURVES: ($T_{amb}=25^{\circ}\text{C}$):



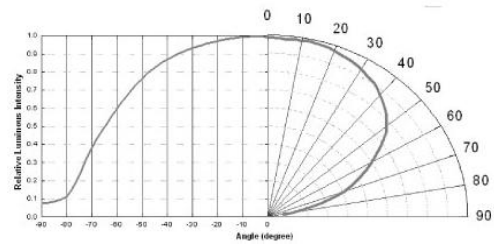
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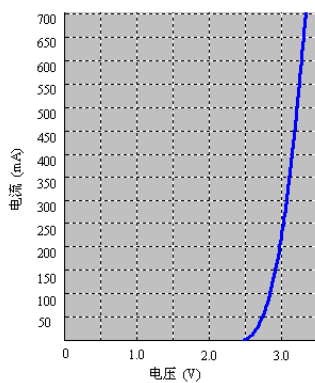
Product Name: NationStar® High Power LED
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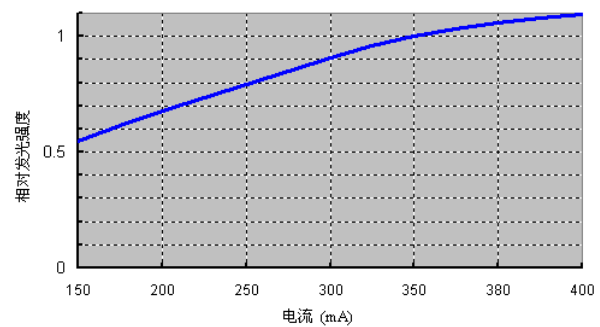
The Characteristic Curve of Spectrum Distribution



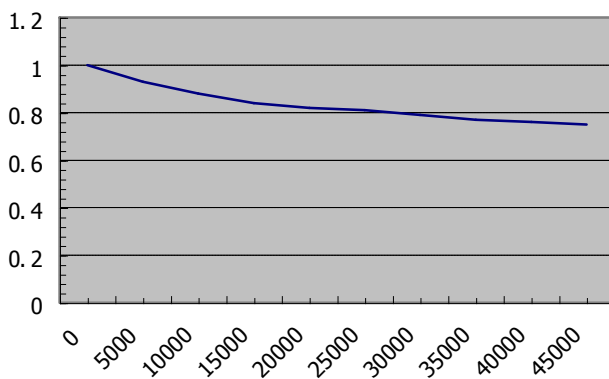
The Characteristic Curve of Luminous Intensity Distribution



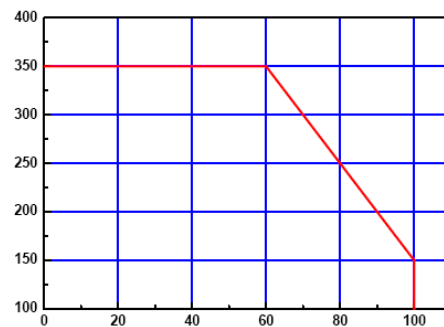
The Characteristic Curve of forward



The Characteristic Curve of luminous intensity changing with current



The Characteristic Curve of luminous intensity changing with time



The Characteristic Curve of Max operating current changing with the temperature



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