

## SPECIFICATION FOR APPROVAL

## 承认书

CUSTOMER'S CODE

客户代码

DESCRIPTION

品名 大功率发光管

SPECIFICATION

规格 3W 模顶发射管

DATE

送样日期

PART NO.

本厂型号 SN-HP3W-940nm Invisible

REFERENCE NO.

档案号

NUMBER OF  
SAMPLE

送样数量

COPY OF  
ACKNOWLEDGEMENT

承认书份数

Approved By Customer 客户承认	Qualified By 核准	Form Designer 制作

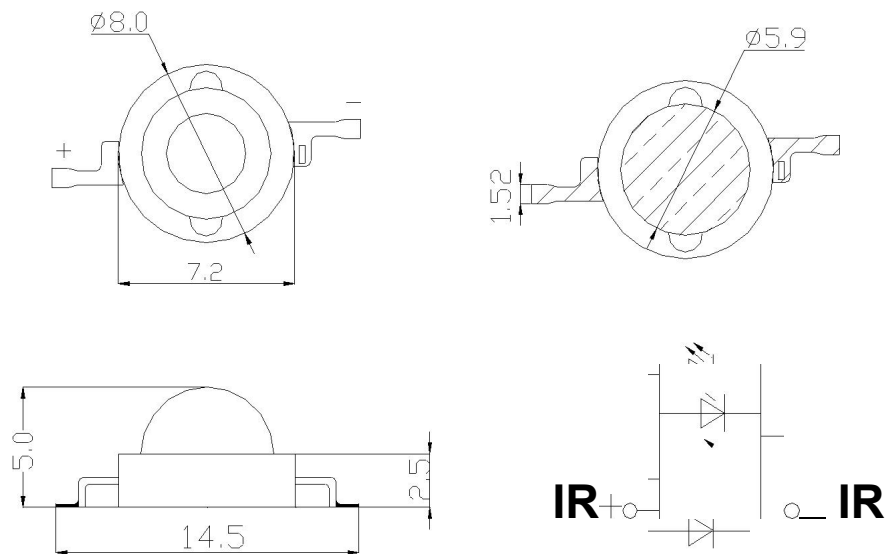
## High Power LED

Part Number	Chip		Lens Color
	Material	Source Color	
SN-IR3W-940nm	AlGaInP	IR	Water Clear

## Features

- High brightness IR LED round package
- Light output intensity grade Viewing angle 140 degree
- Light color. IR
- RoHS compliant

## Dimensions



### Notes:

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.1$ mm unless otherwise noted.

### Absolute Maximum Rating @ Ta=25°C

Parameter	Symbol	Maximum Rating	Unit
Continuous Forward Current	IF	700	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	1000	mA
Reverse Voltage	VR	5	V
Electrostatic discharge	ESD	1000	V
Operating Temperature Range	TOPR	-20°C to +60°C	
Storage Temperature Range	TSTG	-20°C to +60°C	
Lead Soldering Temperature [1.6mm(.63")From Body]	TSOL	260°C for 5 Seconds	

### Electrical / Optical Characteristic @ Ta=25°C

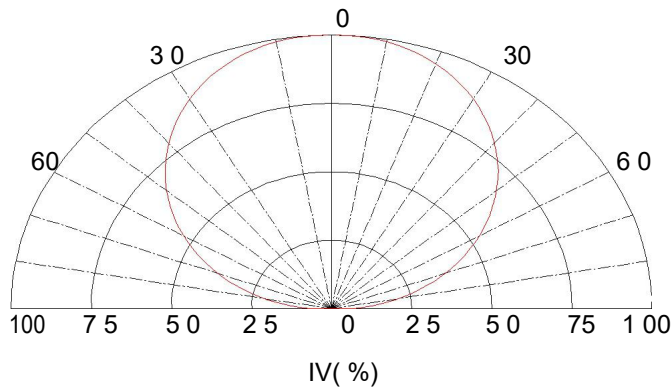
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	VF	1.4	1.6	1.8	V	IF=700mA
Luminous Flux	Φ				Lm	IF=700mA
Wavelength	Wld		940	950	nm	IF=700mA
Reverse Current	IR	0		10	μA	VR=5V
Viewing Angle	2θ1/2			140	deg	IF=700mA
Recommend Forward Current	IF(rec)			700	mA	

tolerance of measurement of forward voltage±0.1V

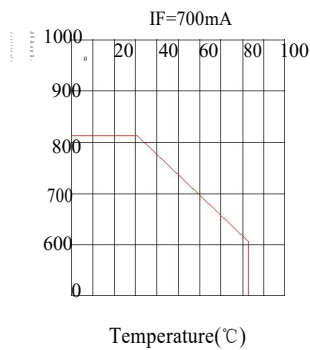
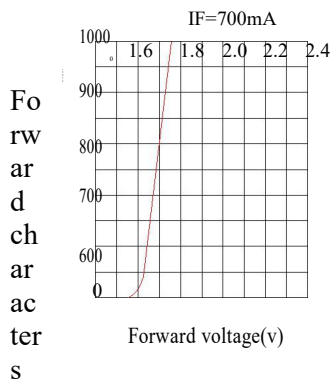
## Typical Electrical / Optical Character Curves

( 25 ° Ambient Temperature Unless Otherwise Noted )

Spatial Distribution

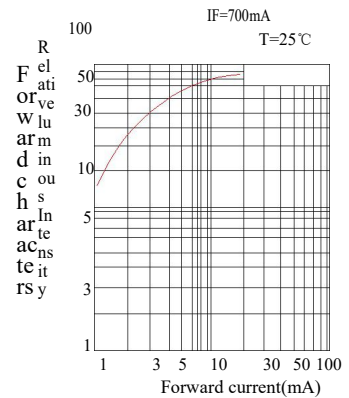
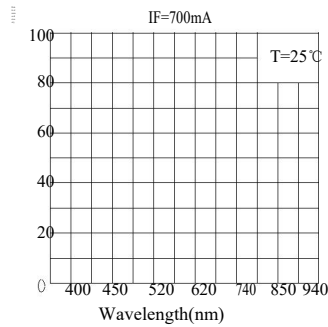
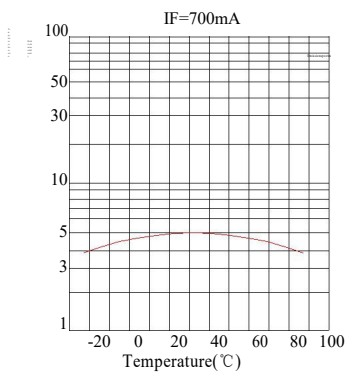


### Typical electrical-optical Characteristics curves



**Notes:**

The data are a typical presentation of the product, Contact customer service for details of technical information and warranty. The product is sensitive to static antistatic operation environment is recommended Products are shipped in either bulk

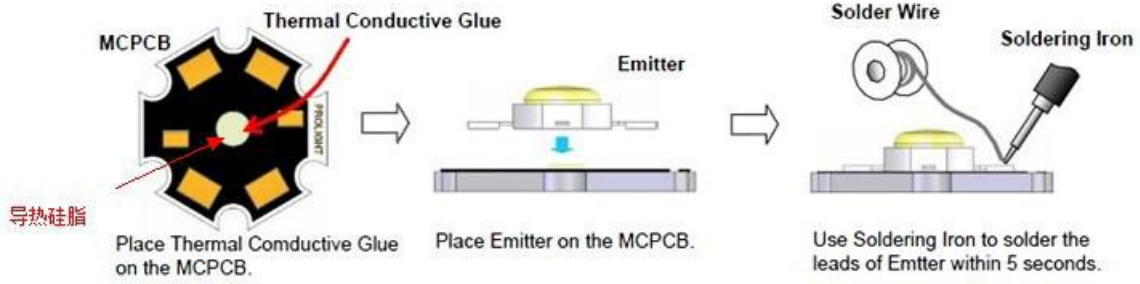


## Reliability Tests

Type	Test Item	REF Standard	Test Condition	Note	Number of Damaged
Environment Sequence	Temperature Cycle	JIS C 7021 (1997)A-4	-20°C*30mins~25°C *5mins~80°C * 30mins	100 cycles	0/100
	High Humidity Heat Cycle	JIS C 7021 (1997)A-5	30°C →65°C, RH= 90% 24hrs/1cycle	10 cycles	0/100
	High Temperature Storage	JIS C 7021 (1997)B-10	Ta= 80°C	1000h	0/100
	Humidity Heat Storage	JIS C 7021 (1997)B-11	Ta=60°C RH=90%	1000h	0/100
	Low Temperature Storage	JIS C 7021 (1997)B-12	Ta= -30°C	1000h	0/100
Operation Sequence	DC Operating Life	JIS C 7035 (1985)	Ta= 25°C, IF=700mA	1000h	0/100
	High Humidity Low Temperature Heat Life Test	*	Ta=60°C RH=90% IF=700mA	500h	0/100 0/100
	Life Test	*	Ta= -20°C, IF=700mA	1000h	
Destructive Sequence	Resistance to Soldering Heat	JIS C 7021 (1997)A-11	Tsol=260±5°C,10sec (3mm from the base of the epoxy bulb)	1 time	0/20
	Solderability	JIS C 7021 (1997)A-2	Tsol=235 ±5°C,5sec (Using flux)	1 time (over 95%)	0/20
	Lead Pull/Bend Test	JIS C 7021 (1997)A-11	Load 2.5N (0.25kgf) 0°→90°→0°Bending 3 times	No noticeable damage	0/20

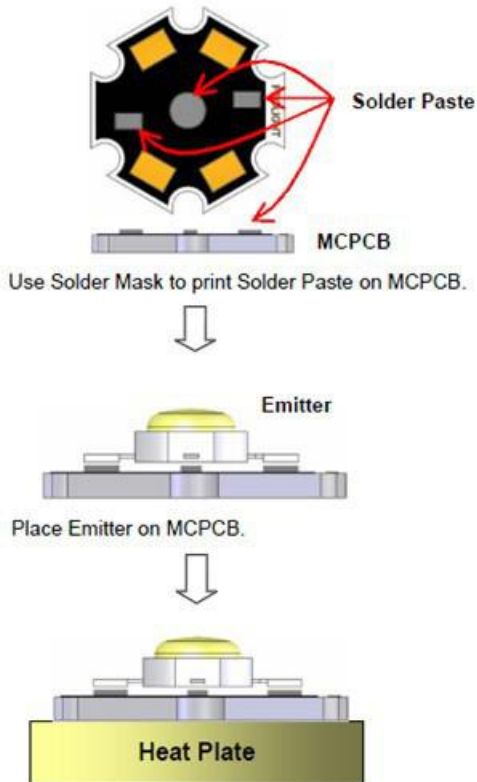
\*Refer to reliability test standard specification for in this line.

**Manual Hand Soldering**

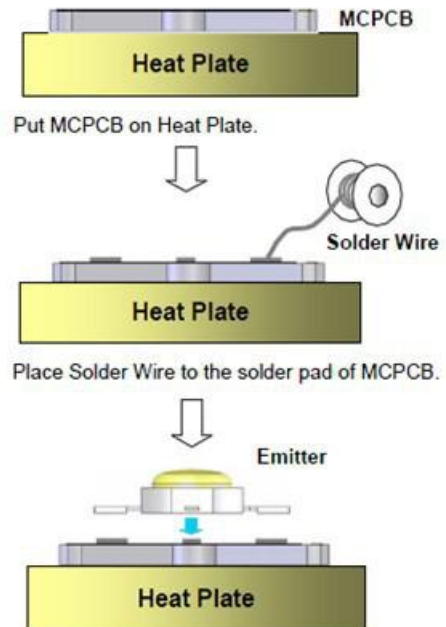


**Heat Plate Soldering Condition**

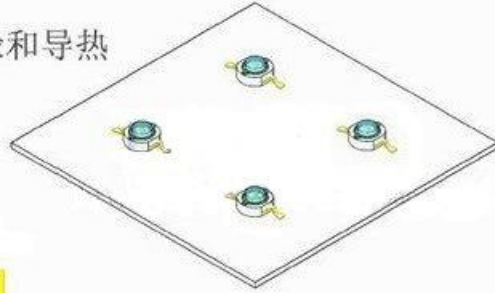
(1) Soldering Process for Solder Paste



(2) Soldering Process for Solder Wire



大功率LED需装上铝基板，绝缘和导热



仅铝基板散热有限，须加散热器

