

❖ **Features:**

- 1.7mm x 0.6mm SMT LED, 1.1mm thickness
- Mono-color type
- Soldering methods :All SMT assembly methods
- Comply ROHS standard



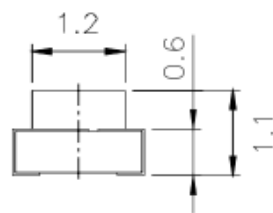
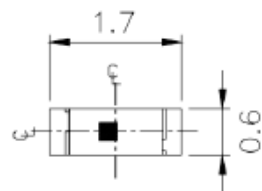
❖ **Description**

The Blue source color devices are made with InGaN on sapphire Light Emitting Diode.

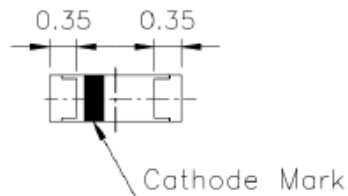
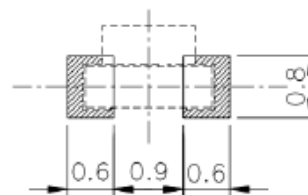
❖ **Application**

- Optical indicator
- Indicator and backlighting in telephone and fax
- Flat backlight for LCD, switch and symbol
- Light pipe application
- General use

❖ **Package Dimensions**



For Reflow Soldering (propose)



**NOTES:**

1. All dimensions are in millimeter[unit];
2. Tolerance is  $\pm 0.1\text{mm}$  ( $0.004''$ ) especially other specified;
3. Specifications are subject to change without notice.

Emitted Color	Len's Color	Chip Material
Blue	Water clear	InGaN

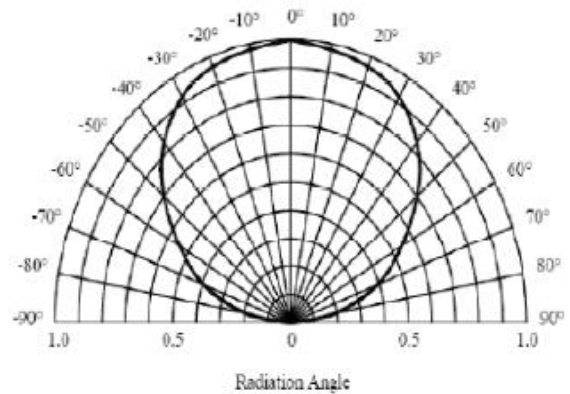
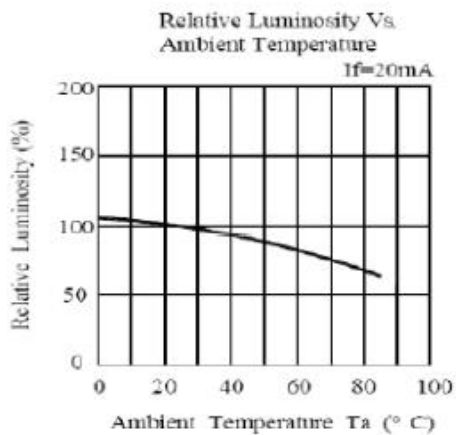
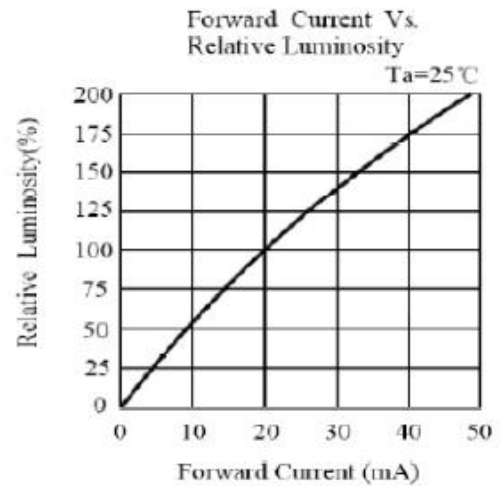
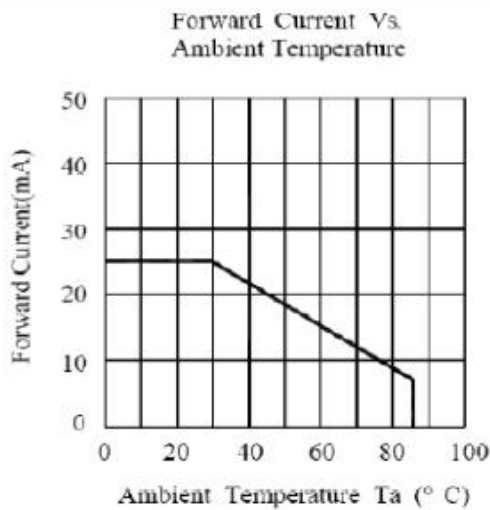
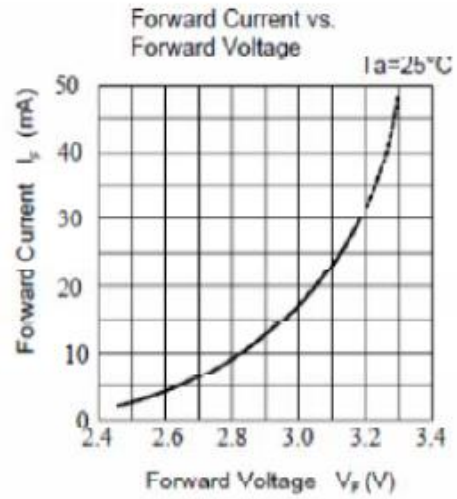
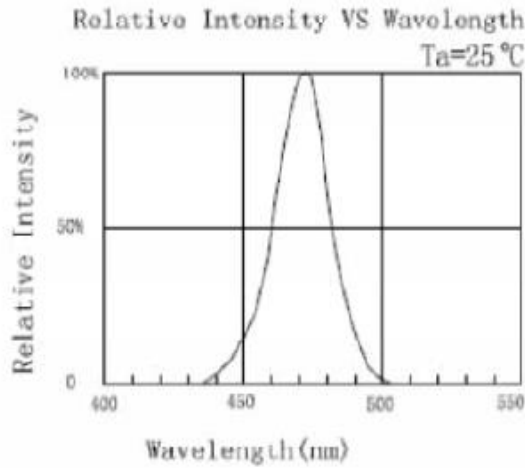
◇ Absolute Maximum Ratings(Ta=25°C)

Item	Symbol	Maximum	Unit
Power Dissipation	PD	110	mW
Continuous Forward Current	I <sub>Fmax</sub>	25	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature Range	T <sub>opr</sub>	-40 to+85	°C
Storage Temperature Range	T <sub>stg</sub>	-40 to+85	°C

◇ Electrical/Optical Characteristics(Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	2.8	3.2		V
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> =20mA	28		72	mcd
Wavelength	λ	I <sub>F</sub> =20mA	465	470	475	nm
Color Temperature	T <sub>c</sub>	I <sub>F</sub> =20mA	--	---	--	K
Chromaticity Coordinates	X	I <sub>F</sub> =20mA	--	--	--	--
	Y	I <sub>F</sub> =20mA	--	--	--	--
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	--	120	--	Deg
Capacitance	C	V <sub>F</sub> =0V, f=1MHZ	--	45	--	pF
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	--	5	10	uA

❖ Typical Electro-Optical Characteristics Curves



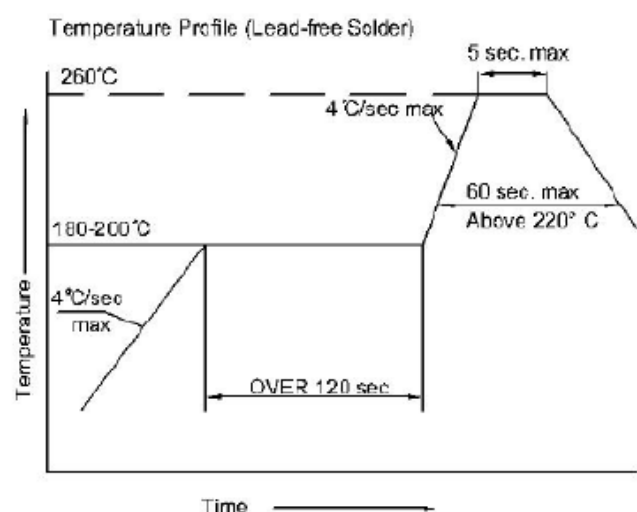
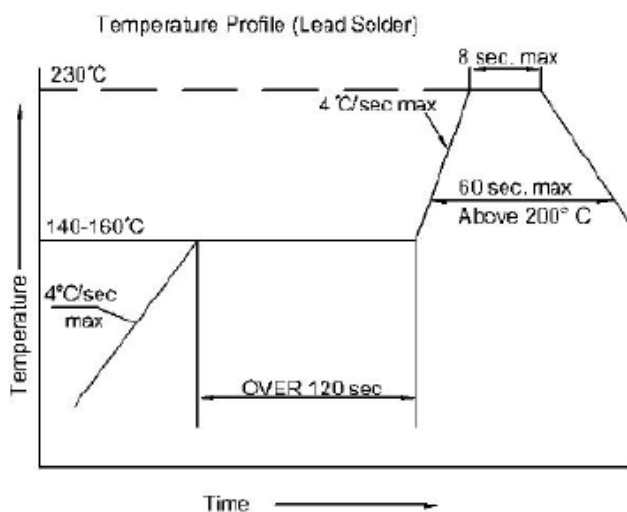
❖ Reliability Test Items And Conditions

NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q'ty	Ac/Re
1	Reflow	TEMP:260±5°C; Min.5Sec	6 min	22pcs	0/1
2	Temperature Cycle	H:+100°C 15mins To(5mins) L:-40°C 15mins	300 cycles	22pcs	0/1
3	Thermal Shock	H:+100°C 15mins To(5mins) L:-40°C 15mins	300 cycles	22pcs	0/1
4	High Temperature Storage	TEMP:+260°C	1000hrs	22pcs	0/1
5	Low Temperature Storage	TEMP:-40°C	1000hrs	22pcs	0/1
6	DC Operating Life	IF=20MA	1000hrs	22pcs	0/1
7	High Temperature	85°C	1000hrs	22pcs	0/1
8	High Humidity	85%R.H.	1000hrs	22pcs	0/1

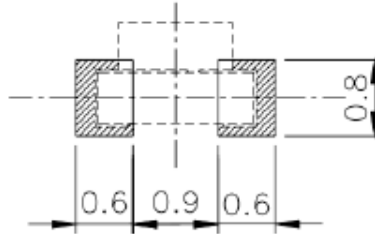
❖ SMT Reflow Soldering Instructions

Number of reflow process shall be than 2 times and cooling

Process to normal temperature is required between first and second soldering process



❖ Recommended Soldering Pad Dimensions



❖ Tape Specification: 3,000PCS per reel

