

◇ **Features:**

- 2.0*1.25*0.8 mm
- Mono-color type
- Soldering methods :All SMT assembly methods
- Comply ROHS standard

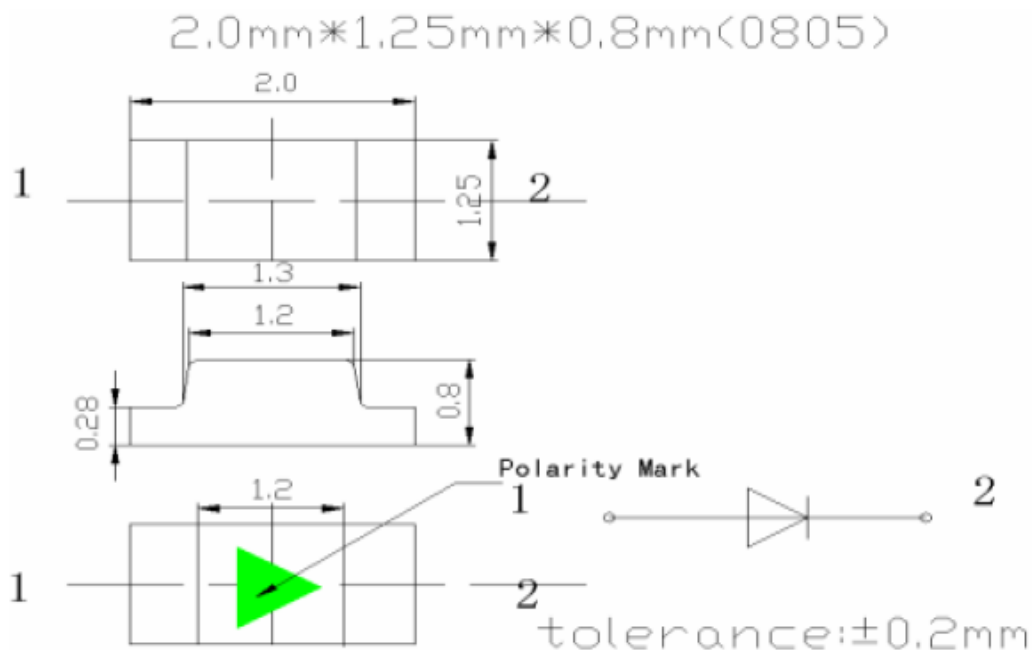
◇ **Description**

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**



NOTES:

1. All dimensions are in millimeter[unit];
2. Tolerance is ±0.05mm unless other specified;
3. Specifications are subject to change without notice.

Emitted Color	Len's Color	Chip Material
Pure White	Yellow	InGaN

◇ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

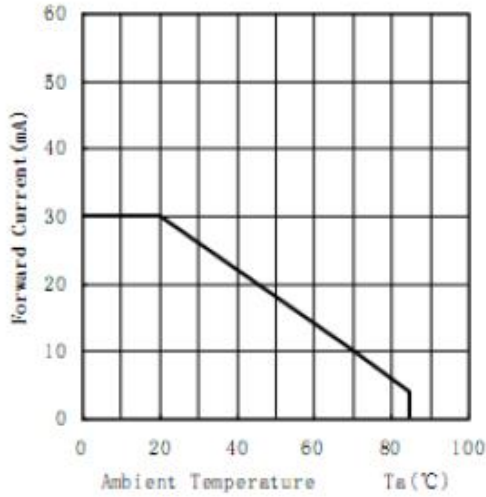
Item	Symbol	Maximum	Unit
Power Dissipation	PD	111	mW
Continuous Forward Current	I_{Fmax}	30	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	I_{FP}	125	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{opr}	-40 to+85	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to+85	$^\circ\text{C}$
Lead Solder Temperature	T_{sol}	260 $^\circ\text{C}$ for 3 seconds	

◇ Electrical/Optical Characteristics($T_a=25^\circ\text{C}$)

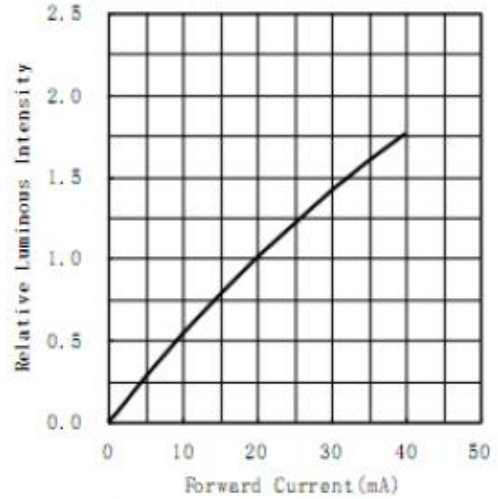
Item	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	2.8	-	3.7	V
Luminous Intensity	I_V	$I_F=20\text{mA}$	350	---	550	mcd
Color Temperature	T_c	$I_F=20\text{mA}$	5000	---	7000	K
Coordinates X,Y	K	$I_F=20\text{mA}$	0.27	--	0.29	--
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	--	140	--	Deg
Reverse Current	I_R	$V_R=5\text{V}$	--	--	10	μA

✧ Typical Electro-Optical Characteristics Curves

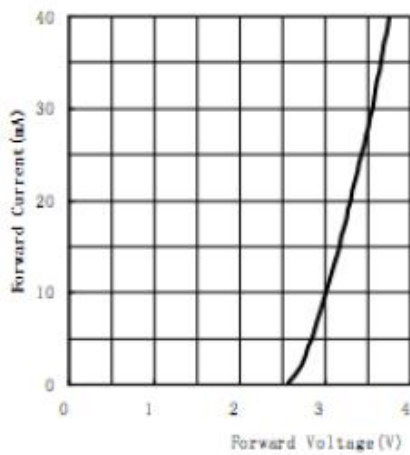
Ambient Temperature VS. Forward Current



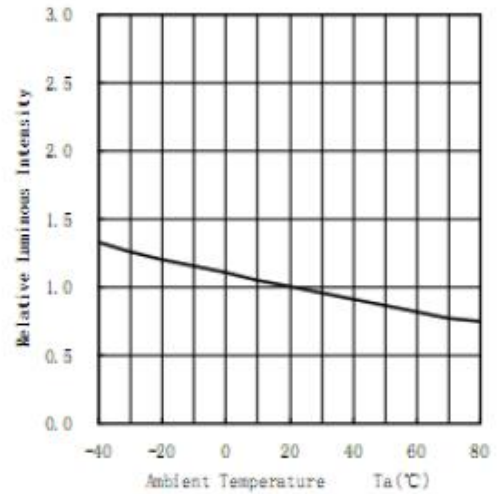
Forward Current VS. Relative Intensity



Forward Voltage VS. Forward Current



Ambient Temperature VS. Relative Intensity



Relative spectral emission

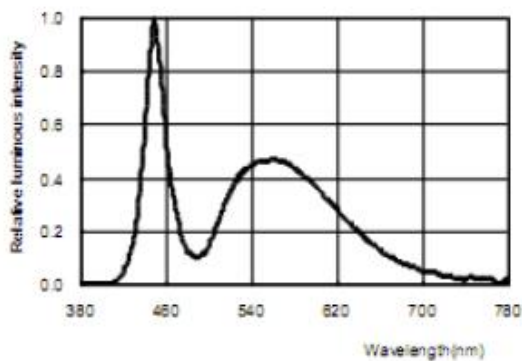
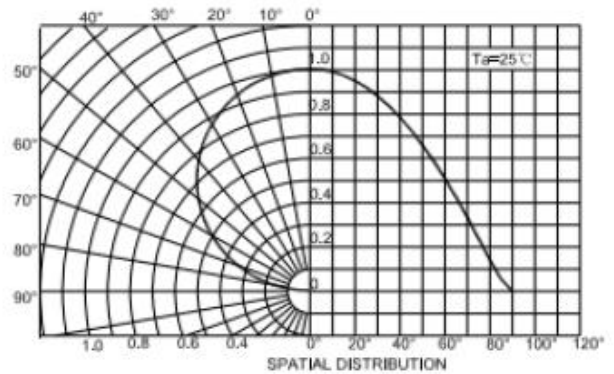


Diagram characteristics of radiation



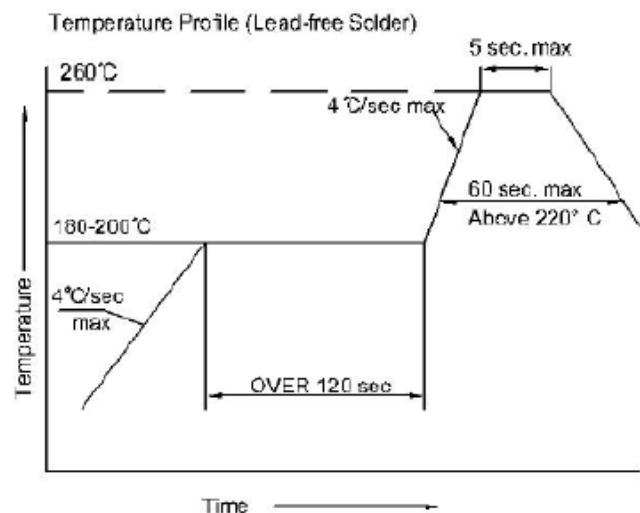
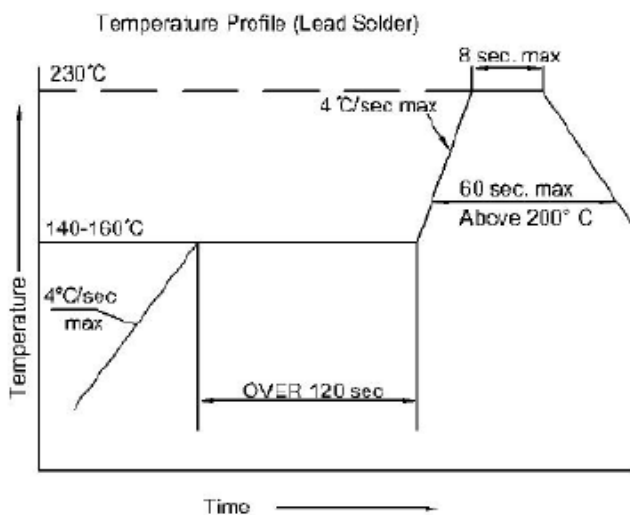
❖ Reliability Test Items And Conditions

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	Low Temperature Storage	TEMP:-40°C	1000hrs	22pcs	0/1
5	DC Operating Life	IF=20MA	1000hrs	22pcs	0/1
6	High Temperature	85°C	1000hrs	22pcs	0/1
7	High Humidity	85%R.H.	1000hrs	22pcs	0/1

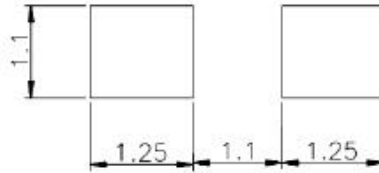
❖ SMT Reflow Soldering Instructions

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

