

✧ **Features:**

- 3.5mm×2.8mm SMT LED, 1.90mm thickness
- PLCC-2 package
- White package
- Suitable for all SMT assembly and solder process
- Available on tape and reel



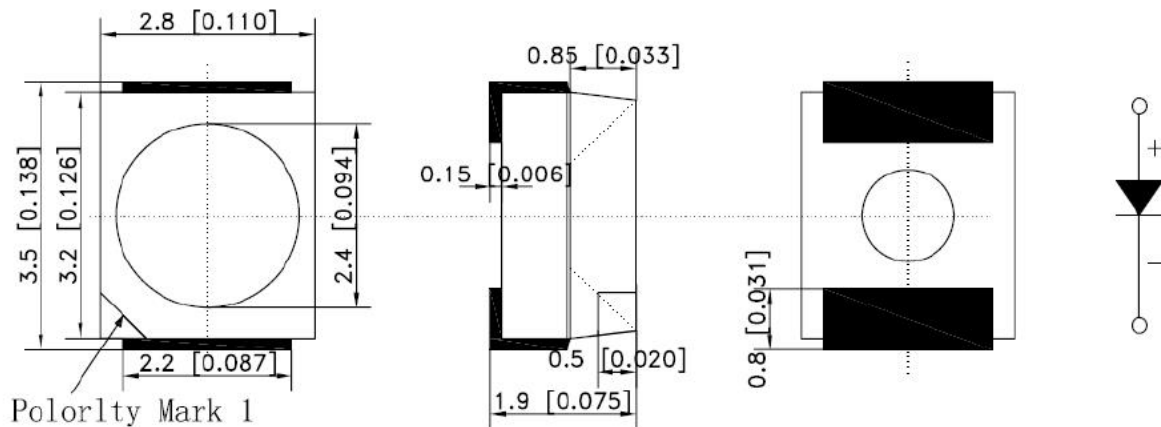
✧ **Description**

The Violet 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
2. Tolerance is±0.2mm unless other specified;
3. Specifications are subject to change without notice.

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

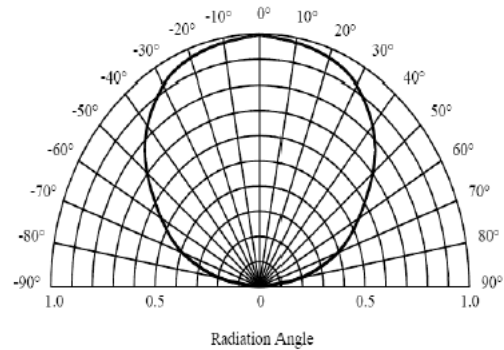
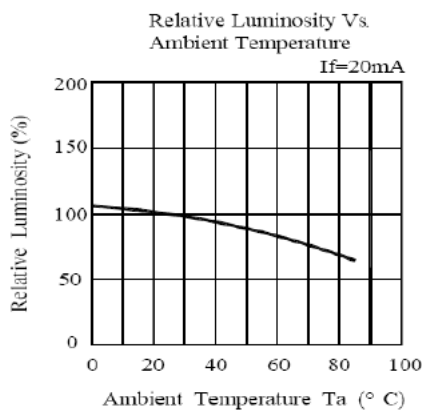
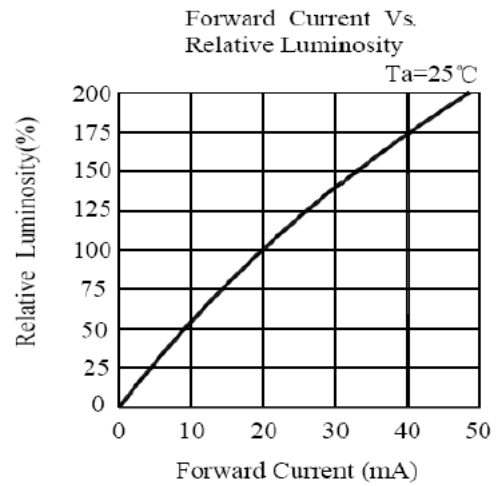
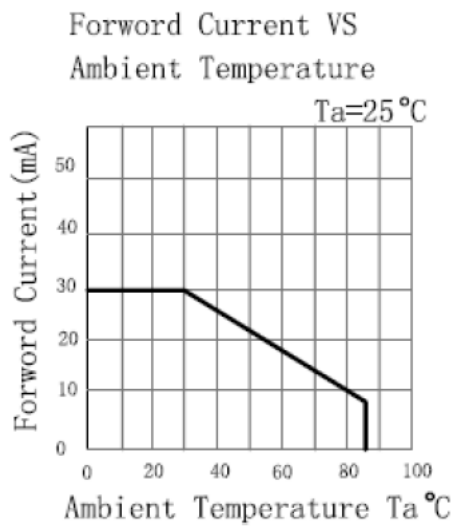
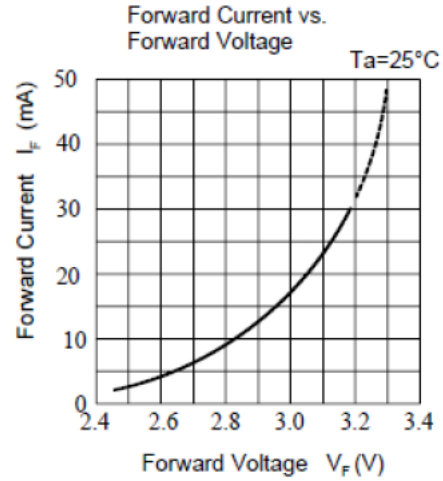
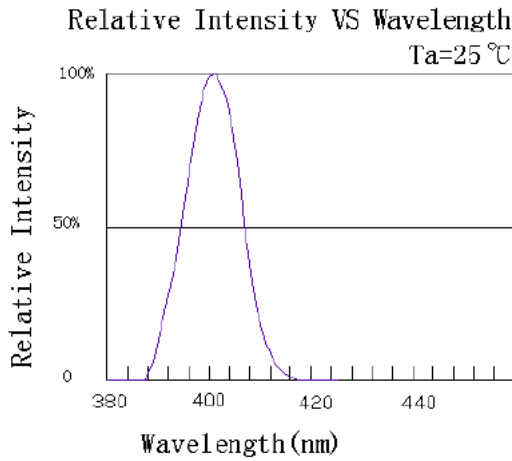
#### ◇ Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

Item	Symbol	Maximum	Unit
Power Dissipation	PD	114	mW
Continuous Forward Current	$I_{Fmax}$	30	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	$I_{FP}$	160	mA
Peverse Voltage	$V_R$	5	V
Operating Temperature Range	$T_{opr}$	-40 to+85	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to+85	$^\circ\text{C}$

#### ◇ 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	3.2	3.6	V
Luminous Intensity	$I_V$	$I_F=20\text{mA}$	50	100	150	mcd
luminous power	$E_e$	$I_F=20\text{mA}$	5	10	15	mW
Wavelength The	$\lambda$	$I_F=20\text{mA}$	400	--	405	nm
Chromaticity Coordinates	X	$I_F=20\text{mA}$	--	--	--	--
	Y	$I_F=20\text{mA}$	--	--	--	--
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	--	120-	--	Deg
Capacitance	C	$V_F=0\text{V}, f=1\text{MHZ}$	--	110	--	pF
Reverse Current	$I_R$	$V_R=5\text{V}$	--		10	$\mu\text{A}$

◇ Typical Electro-Optical Characteristics Curves

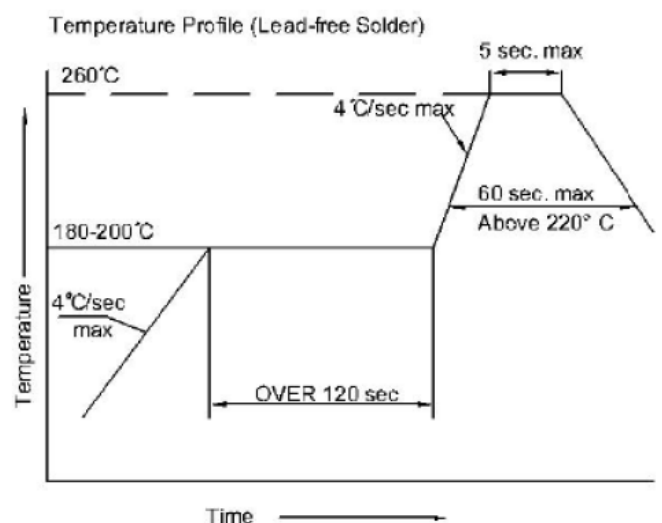
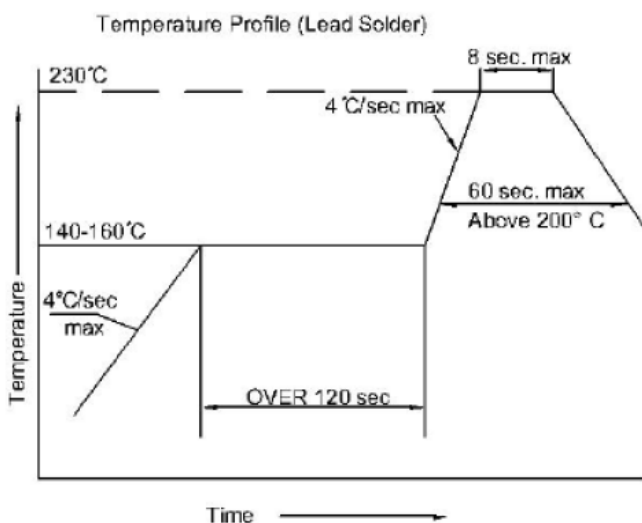


❖ Reliability Test Items And Conditions

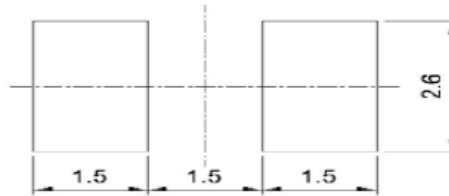
NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q'ty	Ac/Re
1	Reflow	TEMP:260±5°C; Min.5Sec	6 min	22pcs	0/1
2	Temperature Cycle	H:+100°C 15mins To(5mins) L:-40°C 15mins	300 cycles	22pcs	0/1
3	Thermal Shock	H:+100°C 15mins To(5mins) L:-40°C 15mins	300 cycles	22pcs	0/1
4	High Temperature Storage	TEMP: 85°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	TEMP:+260°C	1 min	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: 2,000PCS per reel

