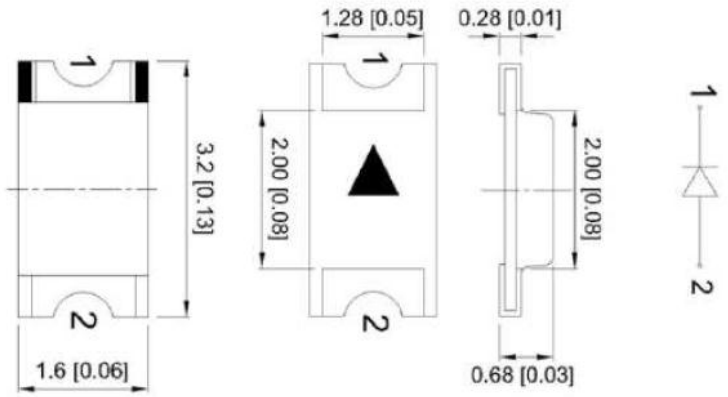
SE-1206T-BC

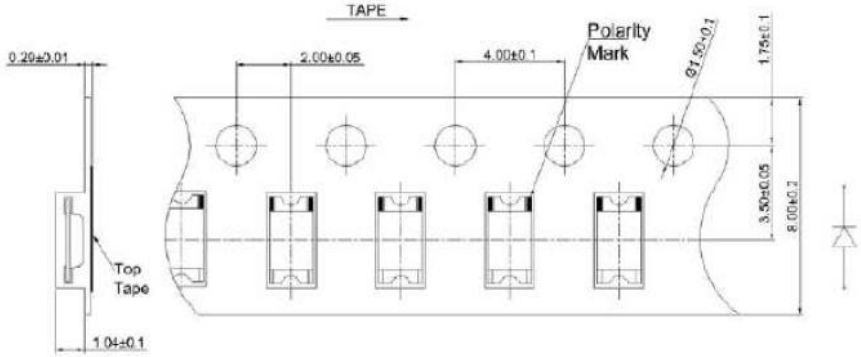
PACKAGE DIMENSION

✧ Package Dimensions of Device

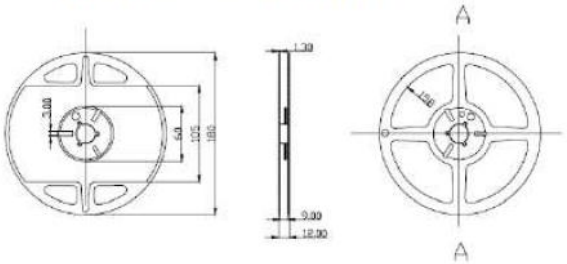
Pb-free



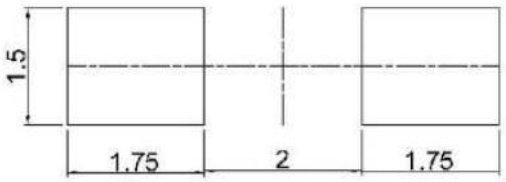
✧ Tape Specification: 3,000pcs per reel



✧ Package Dimensions of Reel



✧ Recommended Soldering Pad Dimensions



NOTES:

1. All dimensions are in millimeter(inch);
2. Tolerance is ±0.2mm(0.008") especially other specified;
3. Specifications are subject to change without notice.

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✧ **Features**

- 3.2mm x 1.6mm SMT LED, 0.68mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Dice materials: **InGaN.**
- Emitted color: **Blue.**
- Lens color: **Water Clear.**

✧ **Description**

The Blue source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Blue Lithe Emitting Diode.

✧ **Absolute Maximum Ratings(Ta=25C°)**

Item	Symbol	Maximum	Unit
Power Dissipation	P_D	114	mW
Continuous Forward Current	I_{Fmax}	30	mA
Peak Forward Current (1/10 Duty Cycle 0.1ms Pulse Width)	I_{FP}	160	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +85	°C

✧ **Electrical / Optical Characteristics(Ta=25C°)**

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=20mA	3.00	3.20	3.80	V
Luminous Intensity	Iv	I_F=20mA	125	250	--	mcd
Peak Emission Wavelength	λ_P	I_F=20mA	--	472	--	nm
Dominant Wavelength	λ_D	I_F=20mA	465	470	--	nm
Viewing Angle	2θ½	I_F=20mA	--	120	--	deg
Capacitance	C	V_F=0V; f=1MHz	--	110	--	pF
Reverse Current	I_R	V_R=5V	--	5	10	uA

Note:

1. θ½ is the angle from optical centerline where the luminous intensity is ½ the optical centerline value.
2. The above luminous intensity measurement allowance tolerance ±10%.

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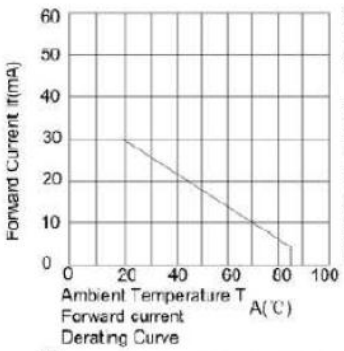
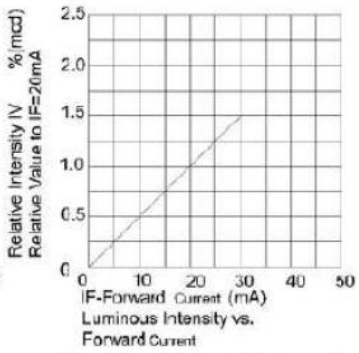
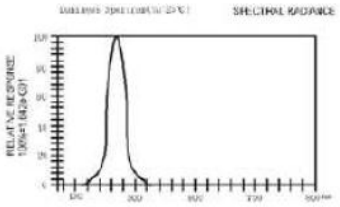
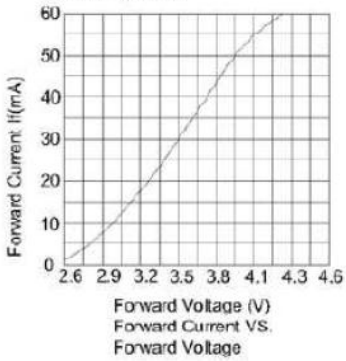
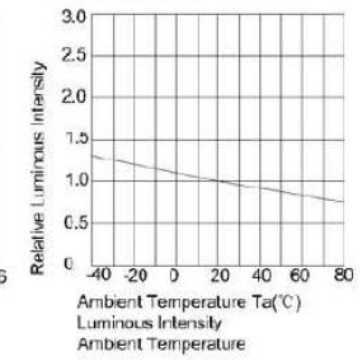
Typical Electro-Optical Charateristics Curves

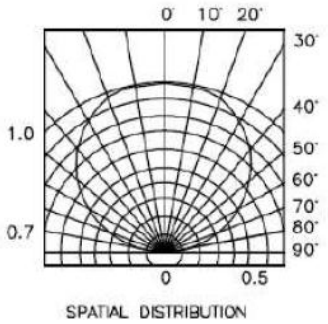




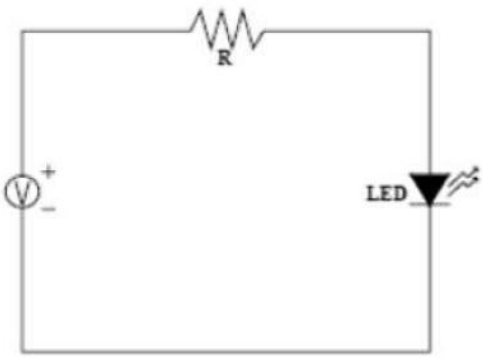








Test Circuit



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✧ Reliability Test Items And Condifitions

NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q"ty	Ac/Re
1	Reflow	TEMP:260℃±5℃; Min. 5sec	6 min	22pcs	0/1
2	Temperature Cycle	H: +100℃ 15mins to (5mins) L: -40℃ 15mins	300 cycles	22pcs	0/1
3	Thermal Shock	H: +100℃ 15mins to (10sec) L: -10℃ 15mins	300 cycles	22pcs	0/1
4	High Temperature Storage	TEMP: +100℃	1000 hrs	22pcs	0/1
5	Low Temperature Storage	TEMP: -40℃	1000 hrs	22pcs	0/1
6	DC Operating Life	IF=20mA	1000 hrs	22pcs	0/1
7	High Temperature	85℃	1000 hrs	22pcs	0/1
8	High Humidity	85%R.H.	1000 hrs	22pcs	0/1

SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.