

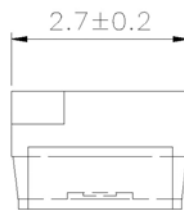
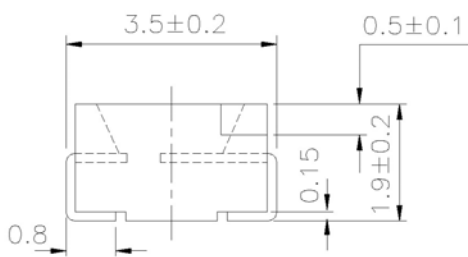
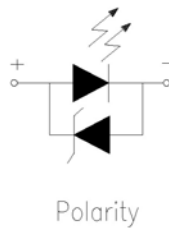
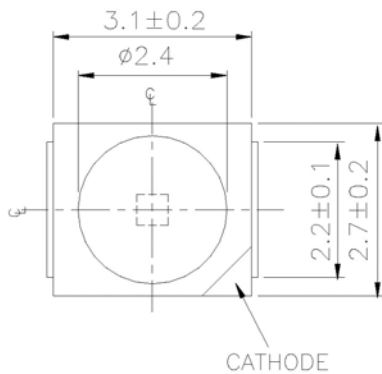
**Features**

- Fit automatic placement equipment.
- Fit Compatible with vapor-phase reflow, Infrared reflow and wave solder processes.
- White package.
- Pb-free.
- RoHS compliant.

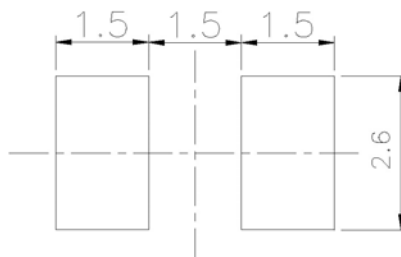
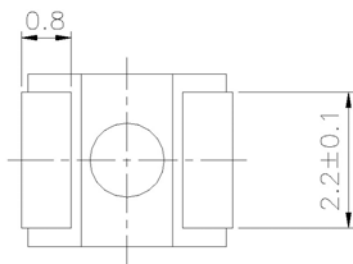
**Descriptions**

- For higher packing density .
- For minature applications .
- Water clear lens .
- Chip material : InGaN .
- Emitting color : Blue .

**Package Outline Dimensions**



For reflow soldering (Proposal)



**Notes:** Tolerances Unless Dimension ±0.1mm ,Unit = mm

### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	25	mA
Peak Forward Current (Duty 1/10 @1KHz)	I <sub>FP</sub>	100	mA
Power Dissipation	P <sub>d</sub>	110	mW
Electrostatic Discharge(HBM)	ESD	2000	V
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +90	°C
Soldering Temperature	Tsol	Reflow Soldering : 260 °C for 10 sec Hand Soldering : 350 °C for 3 sec.	

### Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I <sub>v</sub>	90	-----	225	mcd	I <sub>F</sub> =20mA
Viewing Angle	2θ 1/2	-----	120	-----	deg	I <sub>F</sub> =20mA
Peak Wavelength	λ <sub>p</sub>	-----	468	-----	nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	464.0	-----	472.0	nm	I <sub>F</sub> =20mA
Spectrum Radiation Bandwidth	△λ	-----	35	-----	nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	2.7	-----	3.5	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	-----	-----	50	μA	V <sub>R</sub> =5V

Specific binning requirements- please contact our home office

#### Notes:

- 1.Tolerance of Luminous Intensity ±10%
- 2.Tolerance of Dominant Wavelength ± 1nm

### Bin Range Of Dominant Wavelength

Group	BinCode	Min.	Max.	Unit	Condition
F	AA1	464	466	nm	I <sub>F</sub> =20mA
	AA2	466	468		
	AA3	468	470		
	AA4	470	472		

### Bin Range Of Luminous Intensity

Bin	Min	Max	Unit	Condition
Q2	90	112	mcd	I <sub>F</sub> =20mA
R1	112	140		
R2	140	180		
S1	180	225		

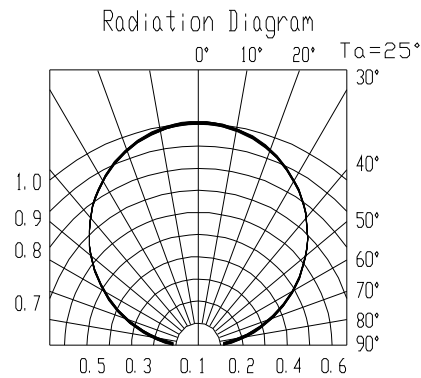
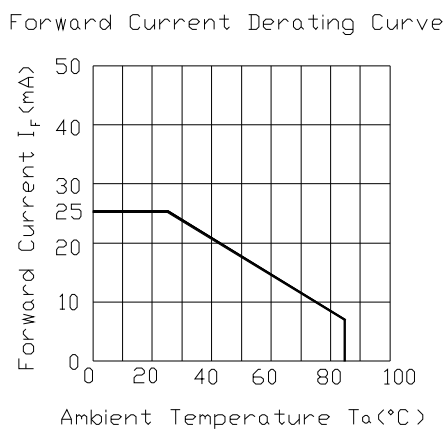
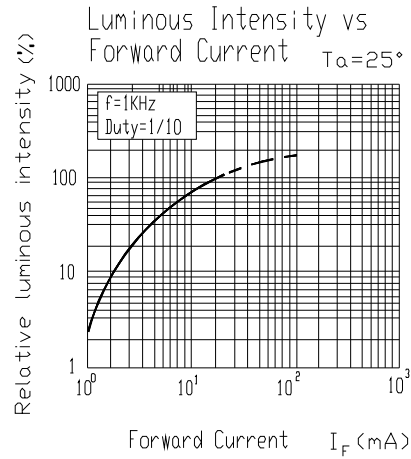
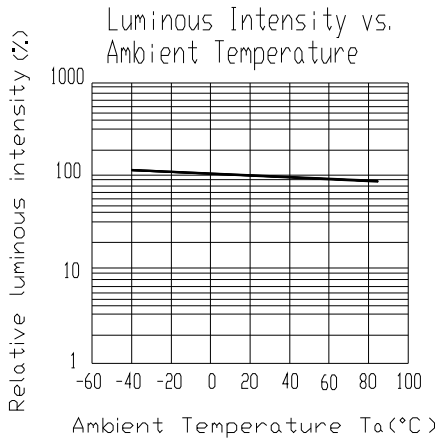
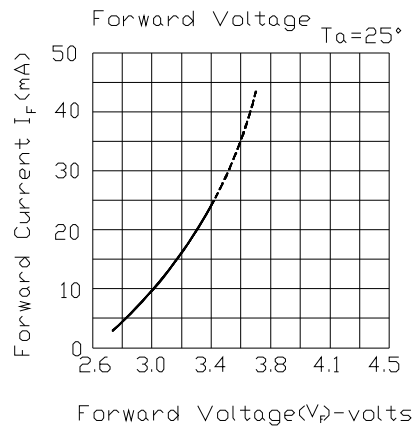
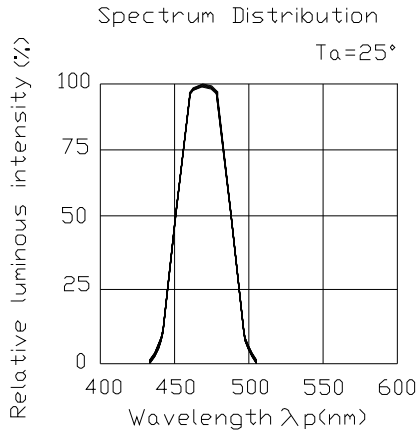
### Bin Range Of Forward Voltage

Group	Bin Code	Min.	Max.	Unit	Condition
F	10	2.7	2.9	V	I <sub>F</sub> =20mA
	11	2.9	3.1		
	12	3.1	3.3		
	12	3.3	3.5		

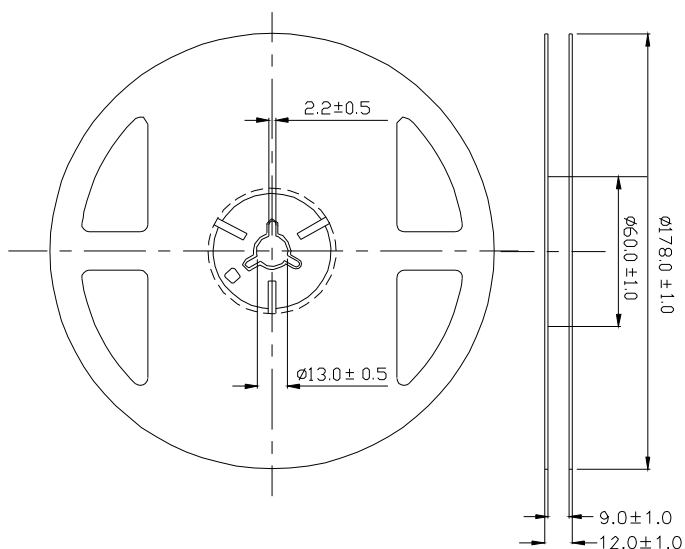
#### Notes:

1. Tolerance of Luminous Intensity  $\pm 10\%$
2. Tolerance of Dominant Wavelength  $\pm 1\text{nm}$
3. Tolerance of Forward Voltage  $\pm 0.1\text{V}$

## Typical Electro-Optical Characteristics Curves

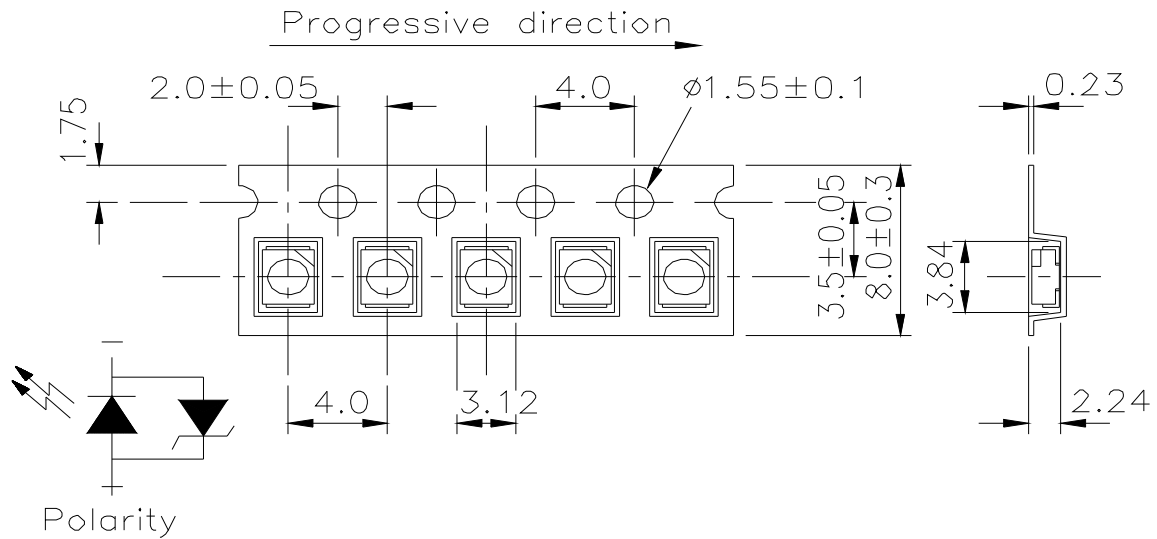


## Reel Dimensions



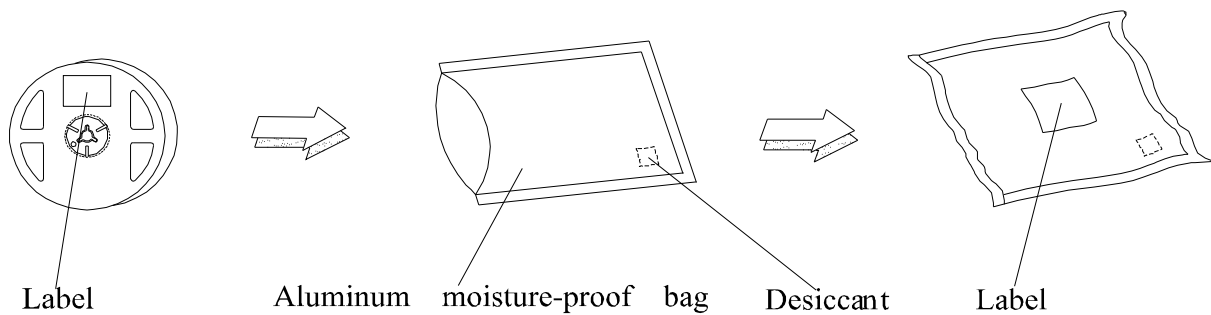
**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm ,Unit = mm

**Carrier Tape Dimensions: Loaded quantity 2000 PCS per reel.**



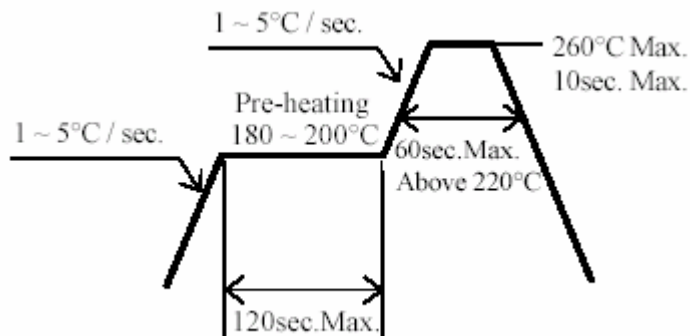
**Note:** The tolerances unless mentioned is  $\pm 0.1$ mm ,Unit = mm

**Moisture Resistant Packaging**



## Soldering Condition

### 1. Pb-free solder temperature profile



2. Reflow soldering should not be done more than two times.
- 3 When soldering, do not put stress on the LEDs during heating.
- 4 After soldering, do not warp the circuit board.

## Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than  $350^{\circ}\text{C}$  for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.