

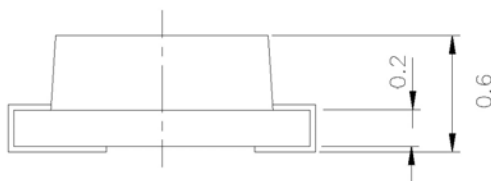
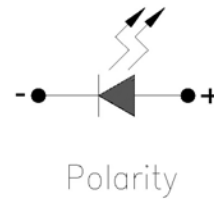
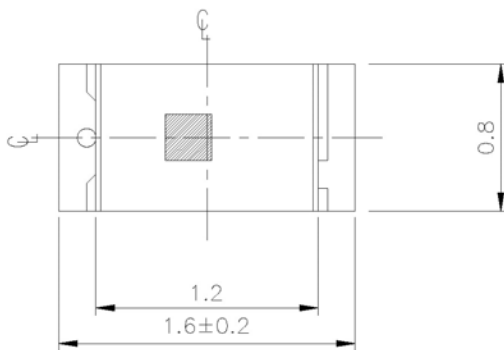
Features

- Fit automatic placement equipment.
- Fit Compatible with infrared and vapor phase reflow solder process.
- Pb-free.
- RoHS compliant.

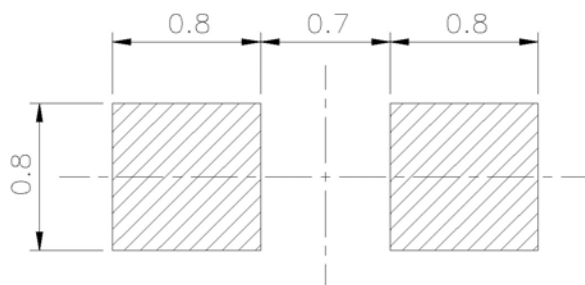
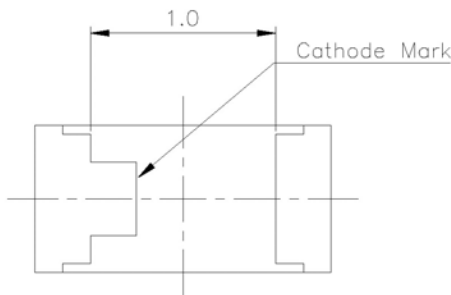
Descriptions

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

Package Outline Dimensions



For reflow soldering (Propose)



Note: The tolerances unless mentioned is ± 0.1 mm ,Unit = mm

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	25	mA
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +90	°C
Soldering Temperature	T _{sol}	260 (for 5 second)	°C
Electrostatic Discharge (HBM)	ESD	2000	V
Power Dissipation	P _d	60	mW
Peak Forward Current (Duty 1/10 @1KHz)	I _{FP}	60	mA
Soldering Temperature	T _{sol}	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 _v	16	---	50	mcd	I _F =10mA
Viewing Angle	2θ 1/2	---	120	---	deg	
Peak Wavelength	λ _p	---	650	---	nm	
Dominant Wavelength	λ _d	633	---	643	nm	
Spectrum Radiation Bandwidth	Δλ	---	20	---	nm	
Forward Voltage	V _F	---	2.0	2.4	V	
Reverse Current	I _R	---	---	10	μA	V _R =5V

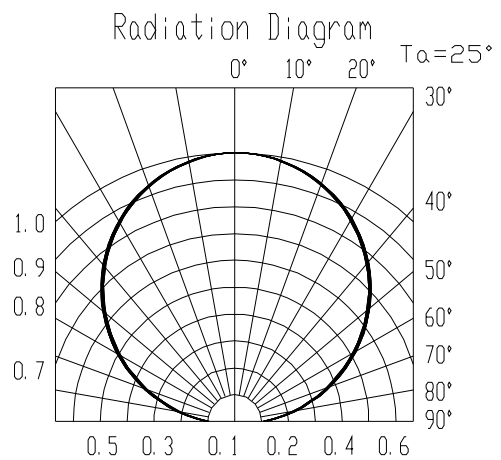
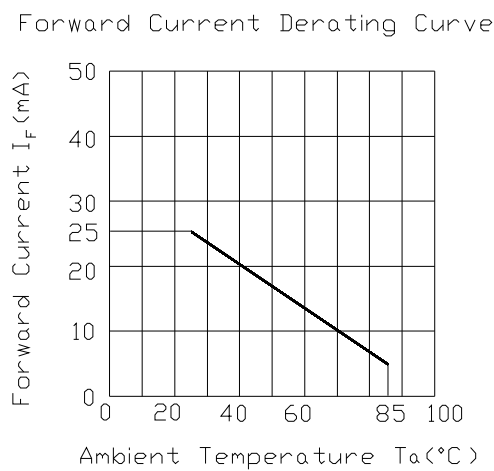
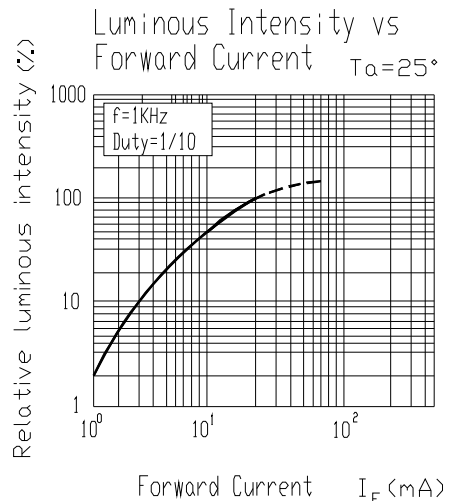
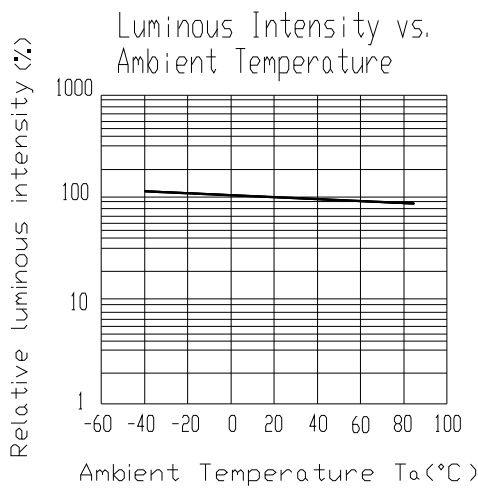
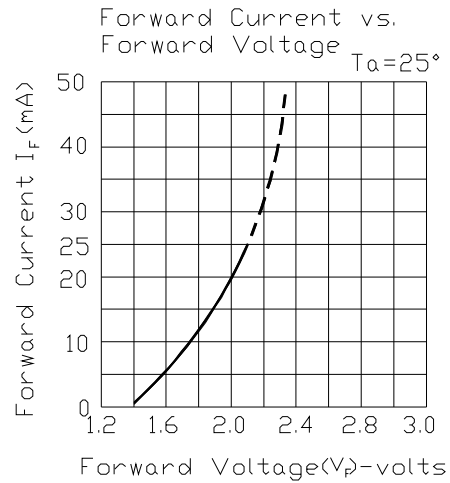
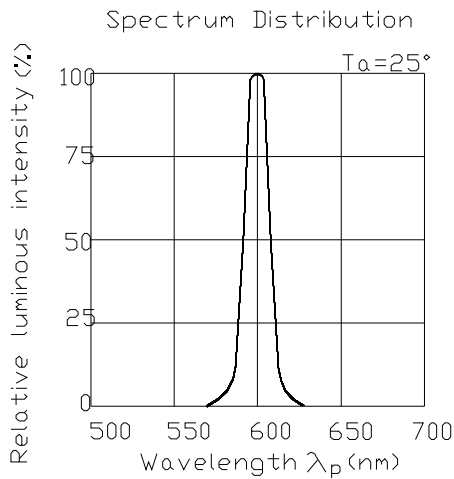
Bin Range Of Luminous Intensity & Dom. Wavelength

Bin code	Min	Max	Unit	Condition
M	16.0	32.0	mcd	I _F =10mA
N	25.0	50.0		
1	633	638	nm	
2	638	643		

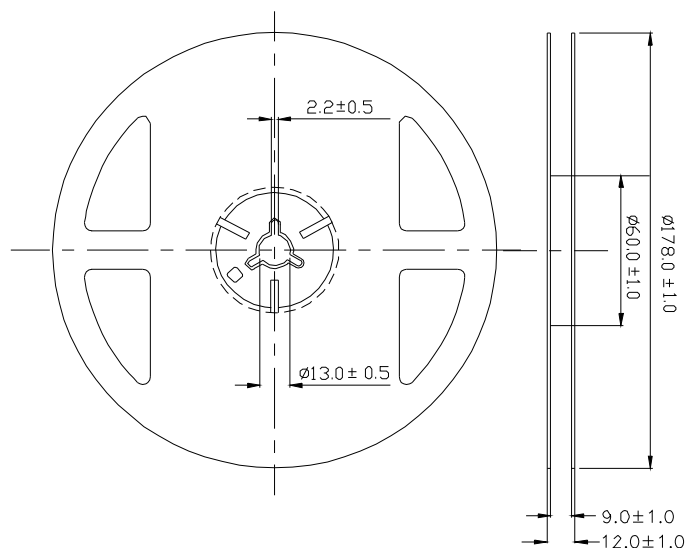
Notes:

Tolerance of Dominant Wavelength ±1nm

Typical Electro-Optical Characteristics Curves

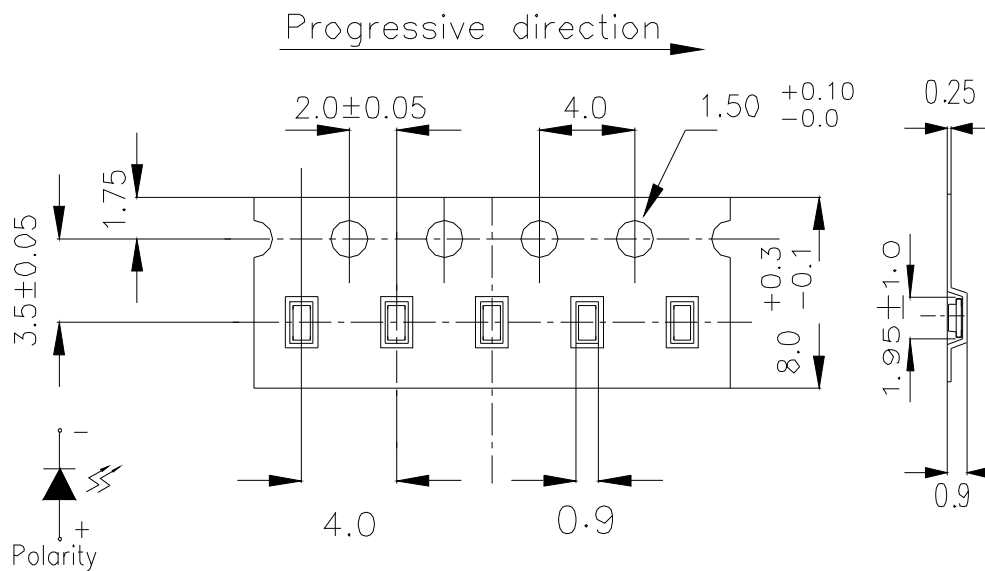


Reel Dimensions



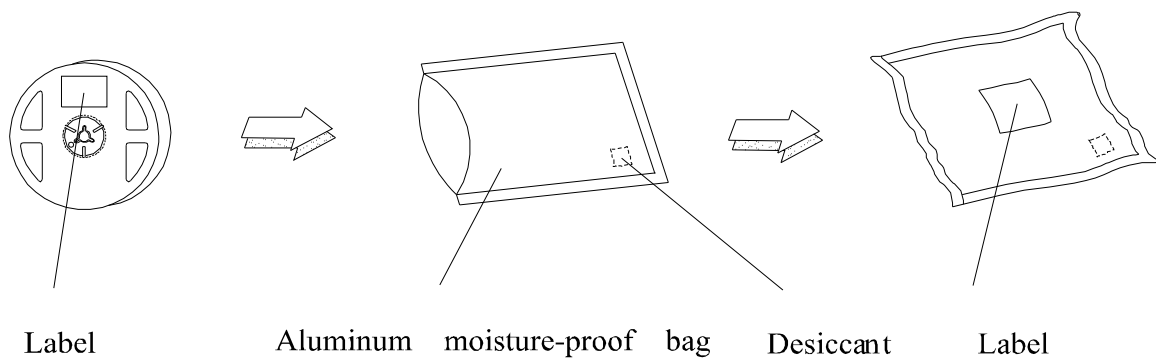
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Carrier Tape Dimensions: Loaded quantity 3000 PCS per reel



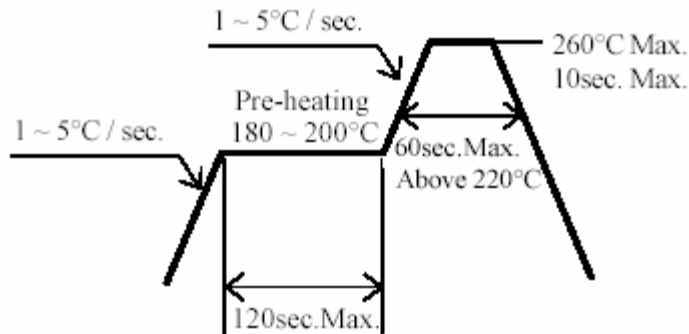
Note: The tolerances unless mentioned is ± 0.1 mm, Unit = mm

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°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.