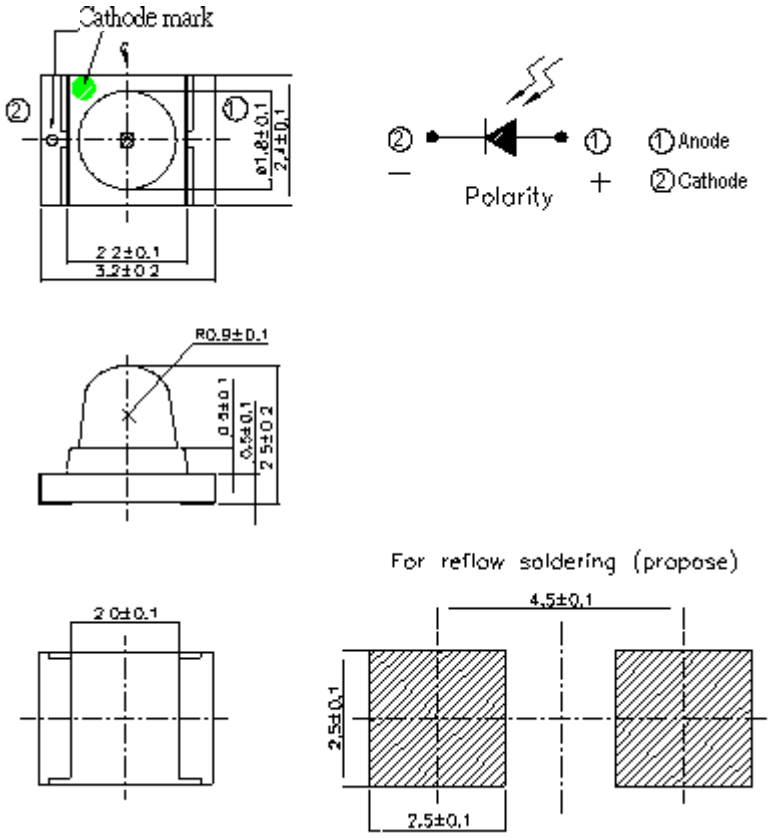
## Package Dimensions




**Notes:** 1.All dimensions are in millimeters

2.Tolerances unless dimensions ±0.1mm

3.Suggested pad dimension is just for reference only

Please modify the pad dimension based on individual need

## Absolute Maximum Ratings (Ta=25℃)

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Reverse Voltage | $V_R$ | 32 | V |
| Operating Temperature | $T_{opr}$ | -25 ~ +85 | ℃ |
| Storage Temperature | $T_{stg}$ | -40 ~ +85 | ℃ |
| Soldering Temperature *1 | $T_{sol}$ | 260 | ℃ |
| Power Dissipation at(or below) 25℃ Free Air Temperature | $P_d$ | 150 | mW |

**Notes:** *1:Soldering time≦5 seconds.

## Electro-Optical Characteristics (Ta=25℃)

| Parameter | Symbol | Condition | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Rang Of Spectral Bandwidth | $\lambda_{0.5}$ | --- | 730 | --- | 1100 | nm |
| Wavelength Of Peak Sensitivity | $\lambda_P$ | --- | --- | 940 | --- | nm |
| Open-Circuit Voltage | $V_{OC}$ | Ee=5mW /cm$^2$ $\lambda_P$=940nm | --- | 0.42 | --- | V |
| Short-Circuit Current | $I_{SC}$ | Ee=1mW /cm$^2$ $\lambda_P$=875nm | --- | 4.0 | --- | μA |
| Reverse Light Current | $I_L$ | Ee=1mW /cm$^2$ $\lambda_P$=875nm $V_R$=5V | 2.0 | 4.0 | --- | μA |
| Dark Current | $I_D$ | Ee=0mW /cm$^2$ $V_R$=10V | --- | --- | 10 | nA |
| Reverse Breakdown Voltage | $V_{BR}$ | Ee=0mW /cm$^2$ $I_R$=100 μA | 32 | 170 | --- | V |

## Typical Electro-Optical Characteristics Curves

Fig.1 Spectral Sensitivity

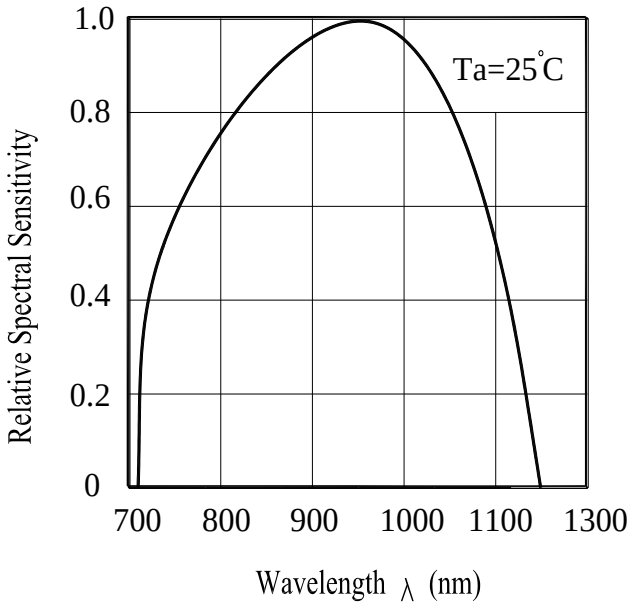
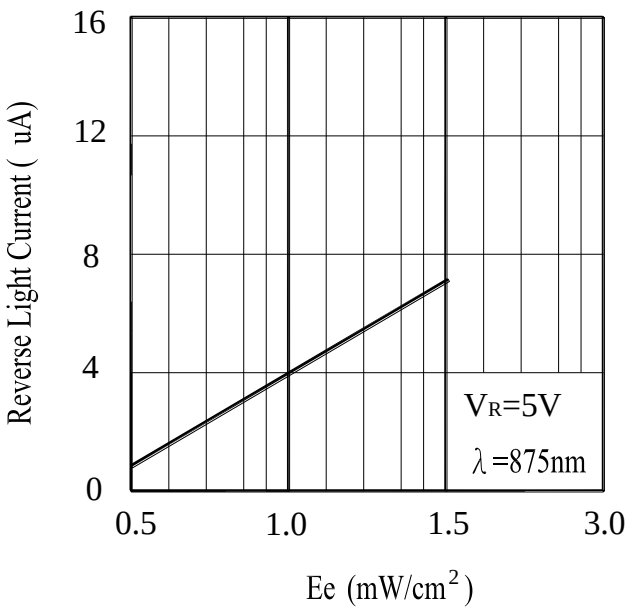



Fig.2 Reverse Light Current vs Ee



## Precautions For Use

1. Over-current-proof

Customer must apply resistors for protection , otherwise slight voltage shift will cause big current change ( Burn out will happen ).

2. Storage

2.1 Do not open moisture proof bag before the products are ready to use.

2.2 Before opening the package, the LEDs should be kept at 30℃ or less and 90%RH or less.

2.3 The LEDs should be used within a year.

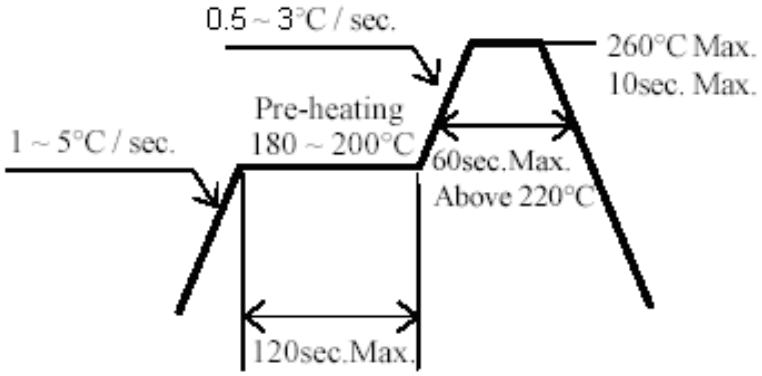
2.4 After opening the package, the LEDs should be kept at 30℃ or less and 60%RH or less.

2.5 The LEDs should be used within 168 hours (7 days) after opening the package.

2.6 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.
Baking treatment : 60±5℃ for 24 hours.

3. Soldering Condition

3.1 Pb-free solder temperature profile




3.2 Reflow soldering should not be done more than two times.

3.3 When soldering, do not put stress on the LEDs during heating.

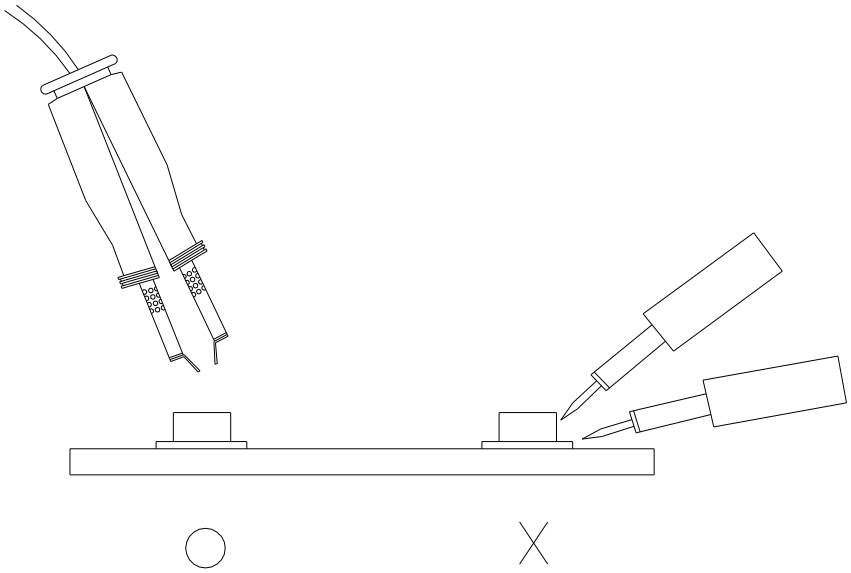
3.4 After soldering, do not warp the circuit board.

4.Soldering Iron

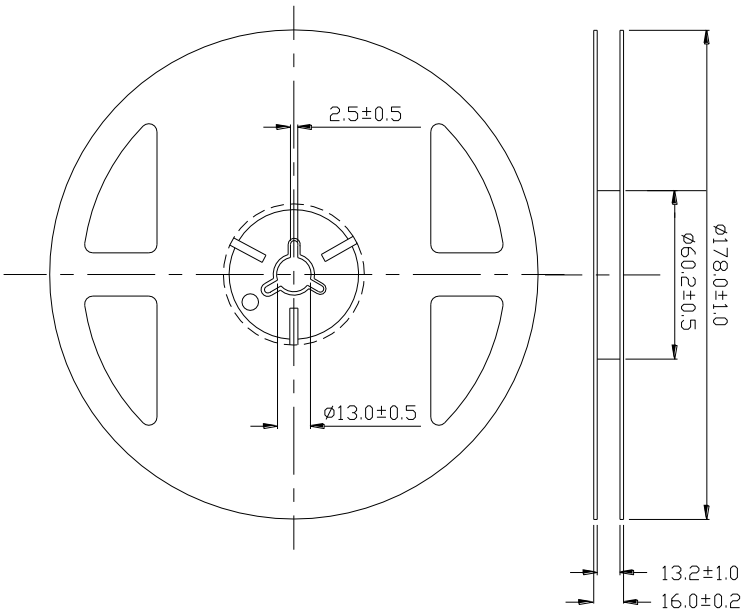
Each terminal is to go to the tip of soldering iron temperature less than 350℃ for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of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

5.Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.

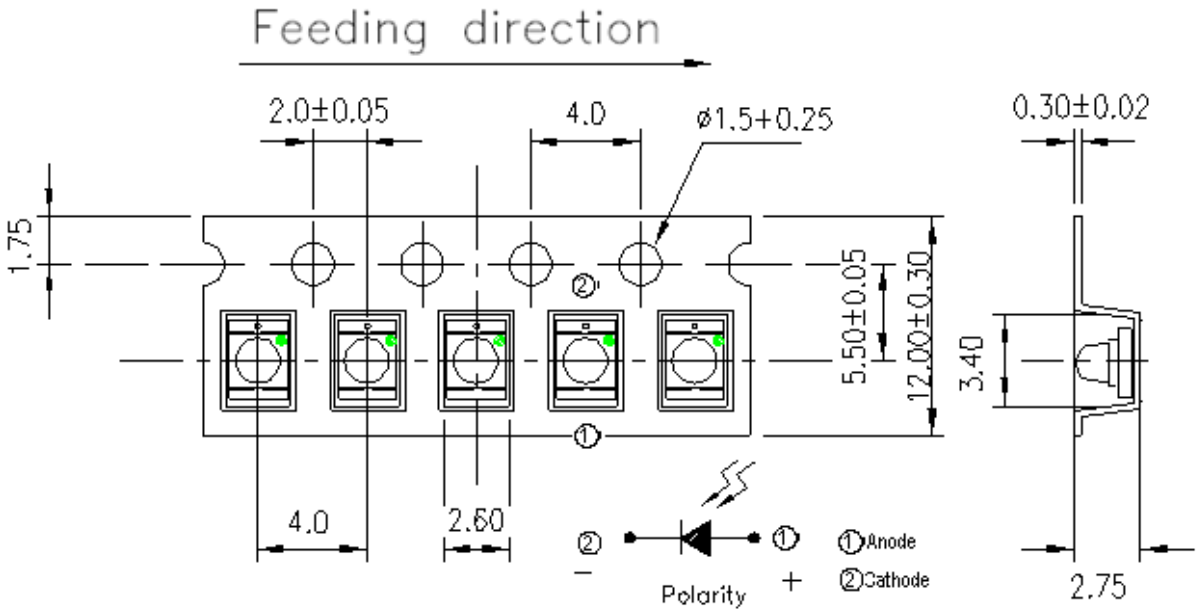


## Package Specification



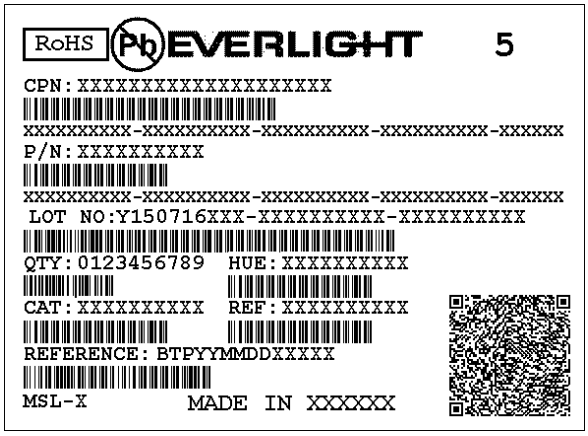

**Note:** The tolerances unless mentioned is ±0.1mm ,Unit = mm

**Carrier Tape Dimensions:(Quantity: 1000pcs/reel)**




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

## Label Form Specification




CPN: Customer's Production Number
P/N : Production Number
LOT No: Lot Number
QTY: Packing Quantity
HUE: Peak Wavelength
CAT: Ranks
REF: Reference
MSL-X: MSL Level
Made In: Manufacture place

## DISCLAIMER

1. EVERLIGHT reserves the right(s) on the adjustment of product material mix for the specification.
2. The product meets EVERLIGHT published specification for a period of twelve (12) months from date of shipment.
3. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
4. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from the use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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