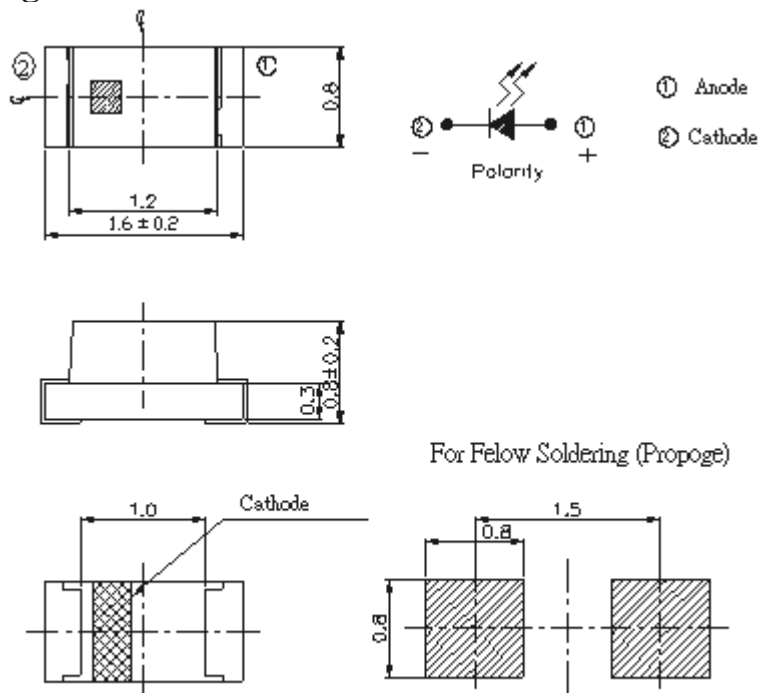


## Package Dimensions



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

2.Tolerances unless dimensions  $\pm 0.1\text{mm}$

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

| Parameter  | Symbol    | Rating         | Units            |
|--|-----------|----------------|------------------|
| Continuous Forward Current   | $I_F$     | 65             | mA               |
| Reverse Voltage  | $V_R$     | 5              | V                |
| Operating Temperature  | $T_{opr}$ | $-25 \sim +85$ | $^\circ\text{C}$ |
| Storage Temperature  | $T_{stg}$ | $-40 \sim +85$ | $^\circ\text{C}$ |
| Soldering Temperature *1   | $T_{sol}$ | 260            | $^\circ\text{C}$ |
| Power Dissipation at(or below)<br>25 $^\circ\text{C}$ Free Air Temperature | $P_d$     | 130            | mW               |

**Notes:** \*1:Soldering time  $\leq 5$  seconds.

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

| Parameter          | Symbol         | Condition            | Min. | Typ. | Max. | Units  |
|--------------------|----------------|----------------------|------|------|------|--------|
| Radiant Intensity  | I <sub>e</sub> | I <sub>F</sub> =20mA | 0.2  | 0.8  | --   | mW /sr |
| Peak Wavelength    | λ <sub>p</sub> | I <sub>F</sub> =20mA | --   | 850  | --   | nm     |
| Spectral Bandwidth | Δ λ            | I <sub>F</sub> =20mA | --   | 45   | --   | nm     |
| Forward Voltage    | V <sub>F</sub> | I <sub>F</sub> =20mA | --   | 1.45 | 1.65 | V      |
| Reverse Current    | I <sub>R</sub> | V <sub>R</sub> =5V   | --   | --   | 10   | μ A    |
| View Angle         | 2 θ 1/2        | I <sub>F</sub> =20mA | --   | 145  | --   | deg    |

## Typical Electro-Optical Characteristics Curves

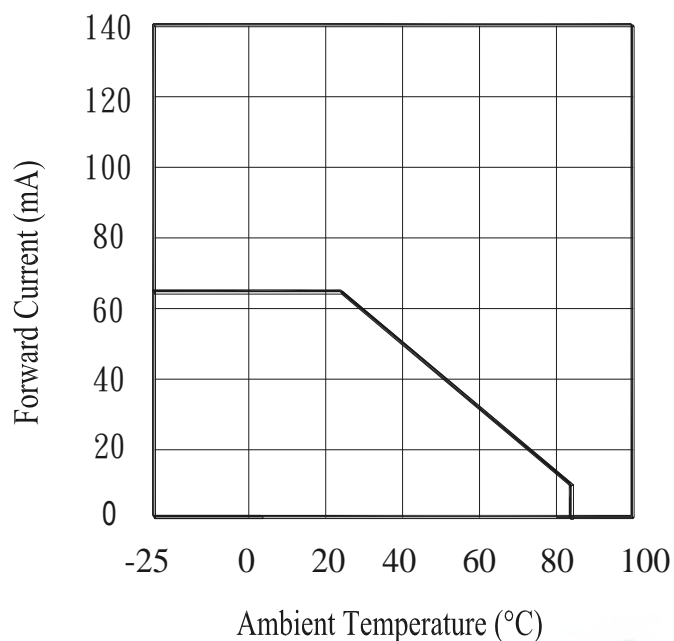
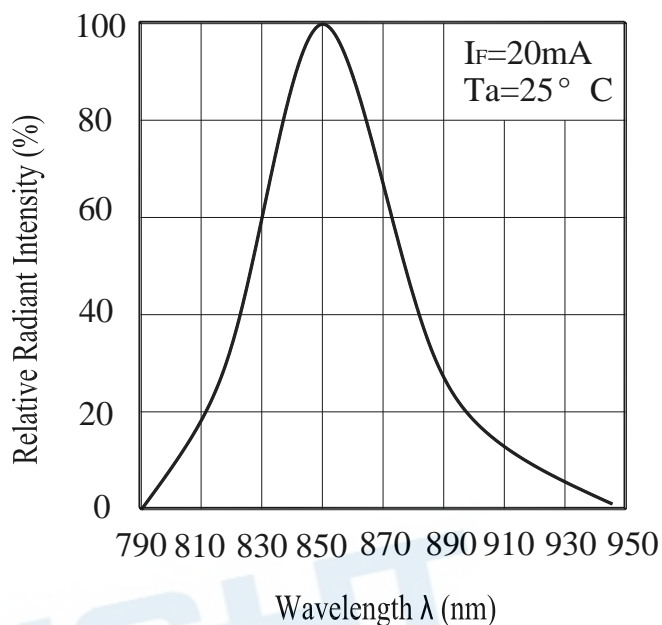
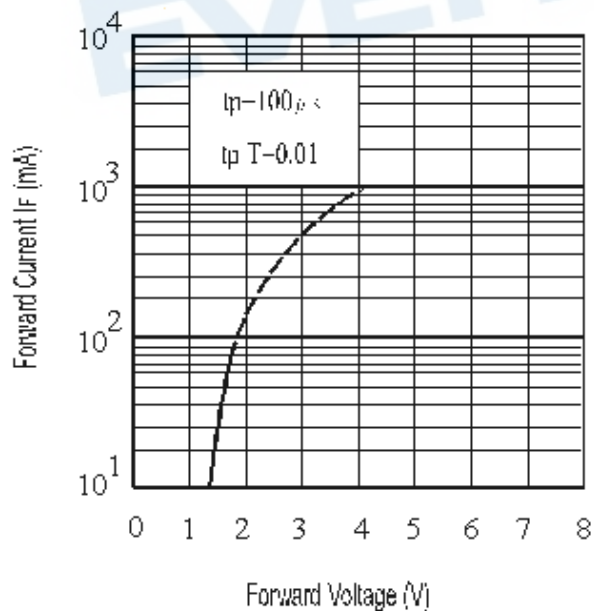
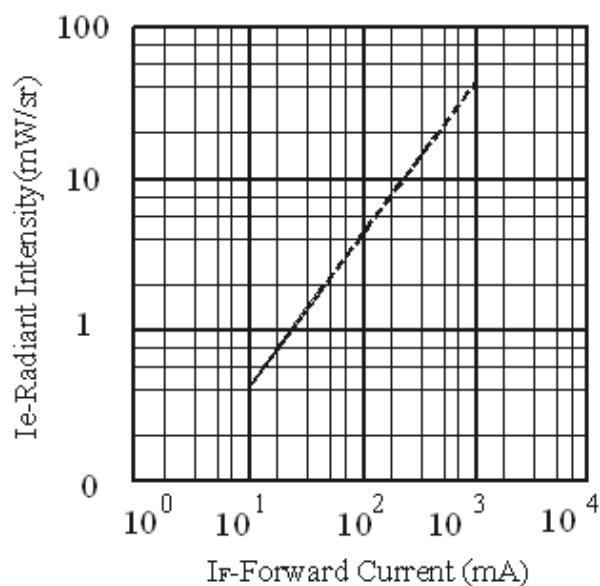
Fig.1 Forward Current vs.  
Ambient Temperature

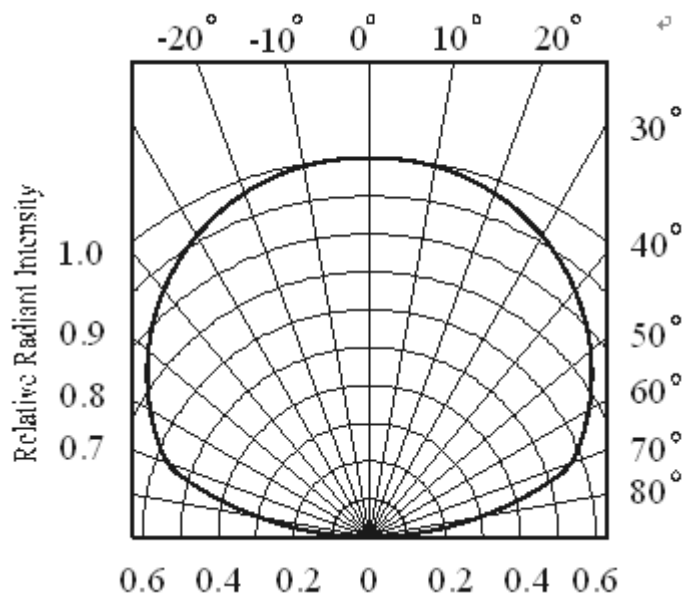
Fig.2 Spectral Distribution

Fig.3 Forward Current  
vs. Forward VoltageFig.4 Relative Intensity vs.  
Forward Current

**Typical Electro-Optical Characteristics Curves**

Fig.5 Relative Radiant Intensity vs.

Angular Displacement



## 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°C 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°C or less and 70%RH or less.

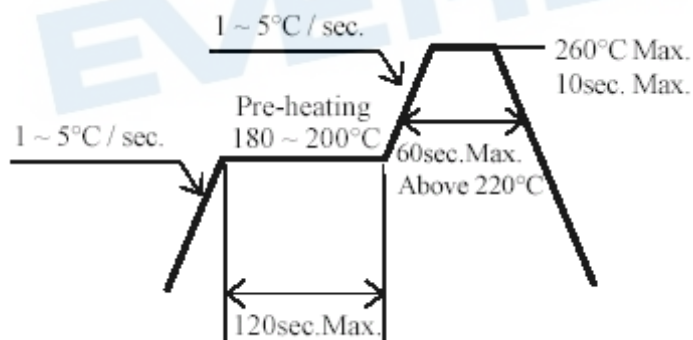
2.5 The LEDs should be used within 168 hours (7 days) after opening the package.

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 :  $60\pm5^{\circ}\text{C}$  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.

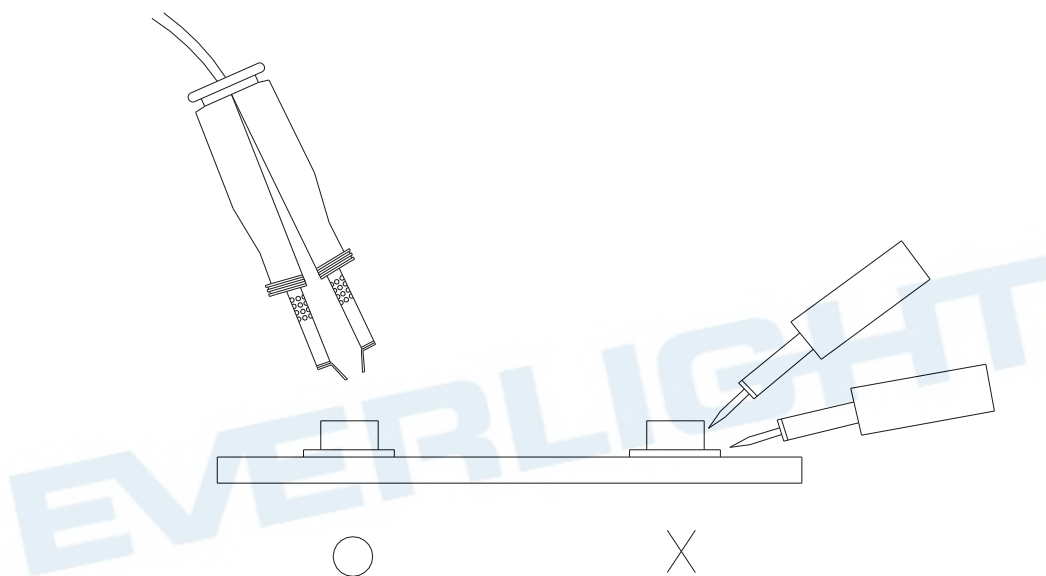
3.4 After soldering, do not warp the circuit board.

#### 4.Soldering Iron

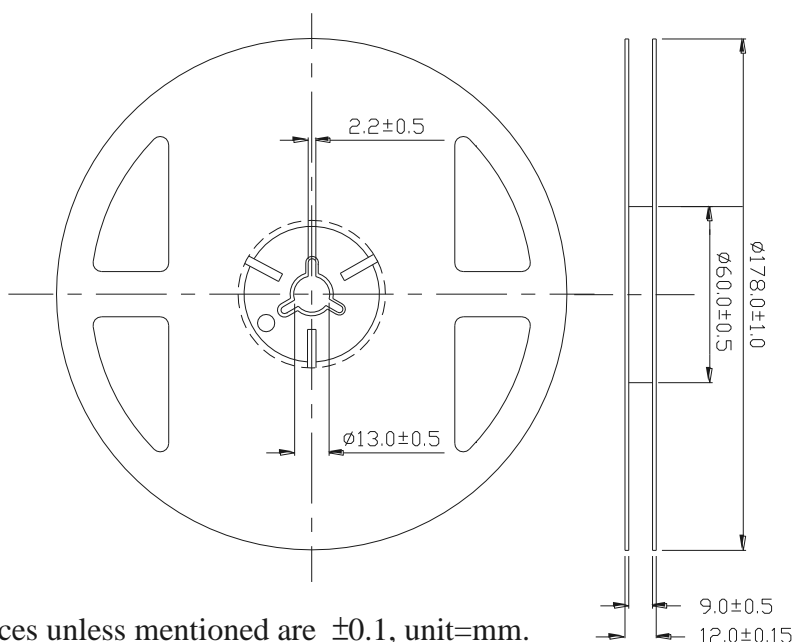
Each terminal is to go to the tip of soldering iron temperature less than  $350^{\circ}\text{C}$  for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started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

#### 5.Repairing

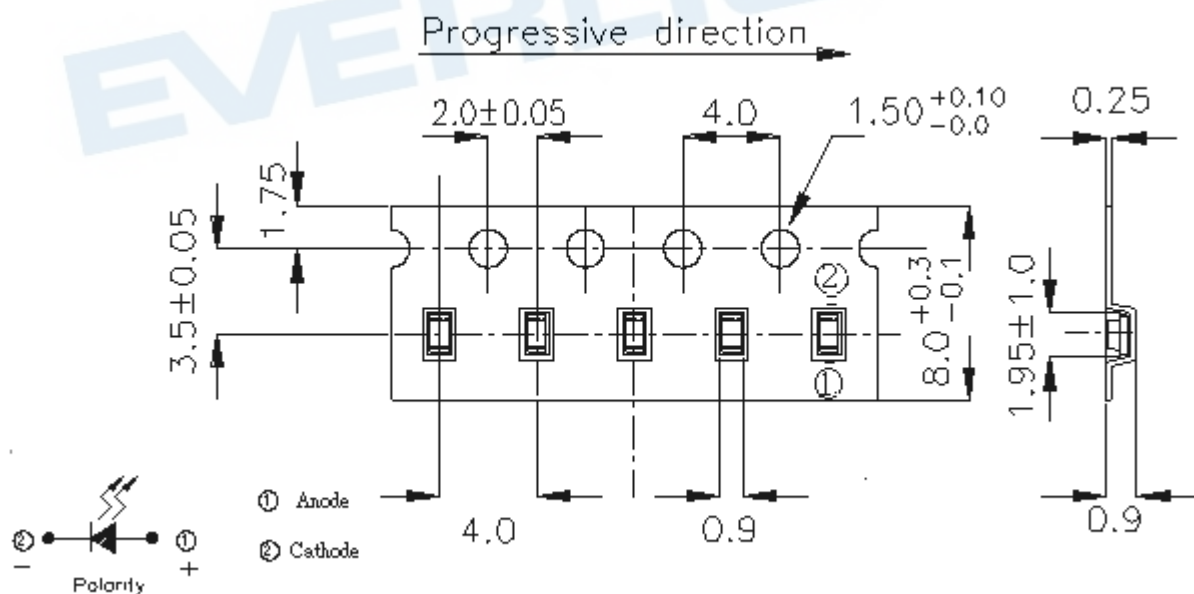
Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.



## Package Dimensions

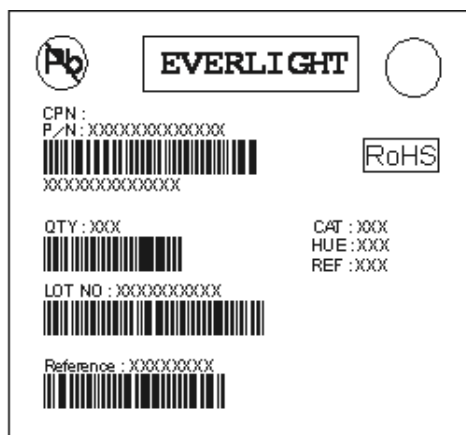


## Carrier Taping Dimensions: Loaded Quantity Per Reel 3000PCS/Reel



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

## Label Form Specification



CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot Number

## Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. 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 use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

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