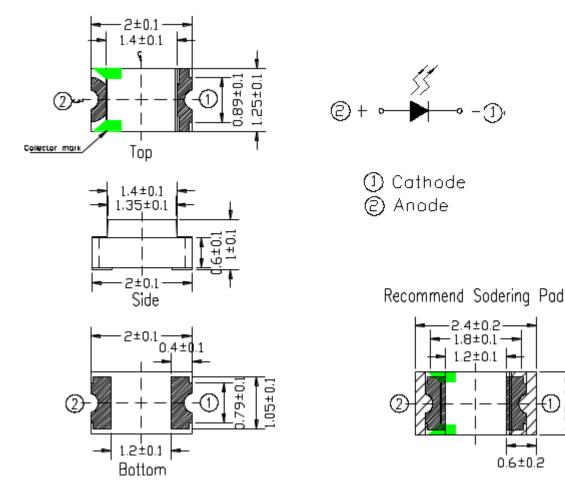
ų

5±0.

# **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

Parameter	Symbol	Rating	Units	
Continuous Forward Current	I <sub>F</sub>	65	mA	
Reverse Voltage	$V_{R}$	5	V	
Operating Temperature	T <sub>opr</sub>	-25 ~ +85	°C	
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C	
Soldering Temperature*1	T <sub>sol</sub>	260	°C	
Power Dissipation at (or below) $25^{\circ}$ C Free Air Temperature	P <sub>d</sub>	130	mW	

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

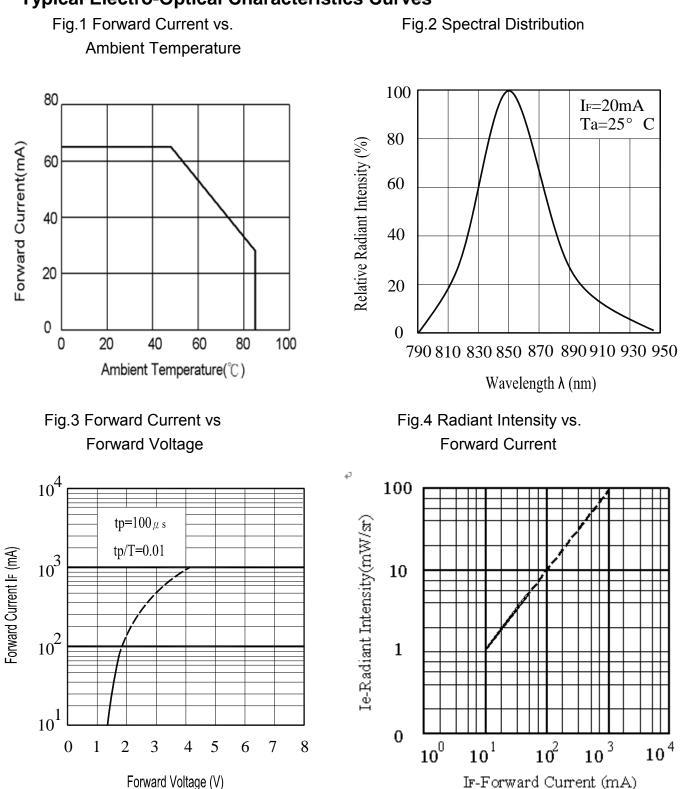
# **Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol	Condition	Min.	Тур.	Max.	Units
Radiant Intensity	le	I <sub>F</sub> =20mA	1.60	2.10	3.20	mW/sr
Peak Wavelength	λр	I <sub>F</sub> =20mA		850		nm
Spectral Bandwidth	Δλ	I <sub>F</sub> =20mA		30		nm
Forward Voltage	$V_{F}$	I <sub>F</sub> =20mA	1.20	1.40	1.70	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	μA
View Angle	201/2	I <sub>F</sub> =20mA		120		deg

## **Radiant Intensity Specifications for Bin Grading**

Rank	Condition	Min.	Max.	Units
А	I <sub>F</sub> =20mA	1.60	2.04	
В		1.96	2.45	
С		2.35	2.85	mW/sr
D		2.74	3.20	

Notes: This bin table is only for reference, not for specific bin shipment.



#### **Typical Electro-Optical Characteristics Curves**

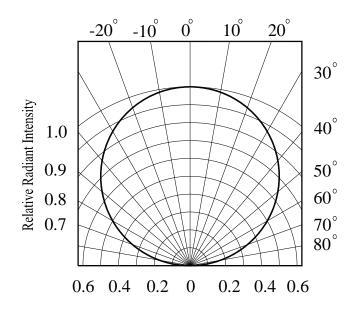
Copyright © 2015, Everlight All Rights Reserved. Release Date : 2015/9/28. Issue No:DIR-0000080. Rev:3

# **EVERLIGHT**

#### **Typical Electro-Optical Characteristics Curves**

Fig.5 Relative Radiant Intensity vs.

Angular Displacement



# EVERLIGHT

## **Precautions For Use**

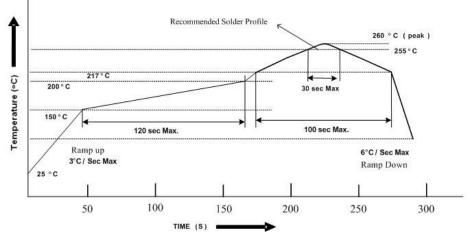
1. Over-current-proof

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  $10^\circ\!C\text{--}30^\circ\!C$  and 90%RH or less.
  - 2.3 The LEDs suggested be used within one year.
  - 2.4 After opening the package, the devices must be stored at 10°C~30°C and ≤ 60%RH, and used within 168 hours (floor life). If unused LEDs remain, it should be stored in moisture proof packages.
  - 2.5 If the moisture absorbent material (desiccant material) has faded or unopened bag has exceeded the shelf life or devices (out of bag) have exceeded the floor life, baking treatment is required.
  - 2.6 If baking is required, refer to IPC/JEDEC J-STD-033 for bake procedure or recommend the following conditions:

96 hours at 60°C ± 5°C and < 5 % RH (reeled/tubed/loose units)

- 3. Soldering Condition
  - 3.1 Pb-free solder temperature profile



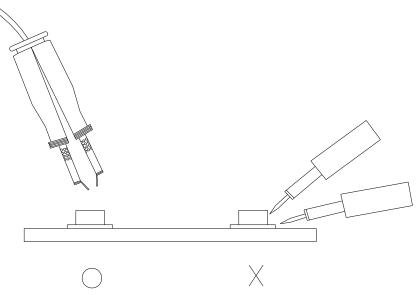
- 3.2 Reflow soldering should not be done more than two times.
- 3.3 When soldering, do not put stress on the LEDs during heating.
- 3.4 After soldering, do not warp the circuit board.

#### 4.Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 350  $^{\circ}$ 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.

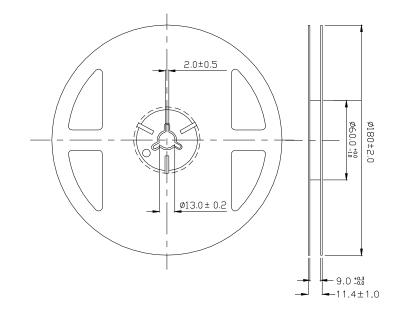
#### 5.Repairing

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.



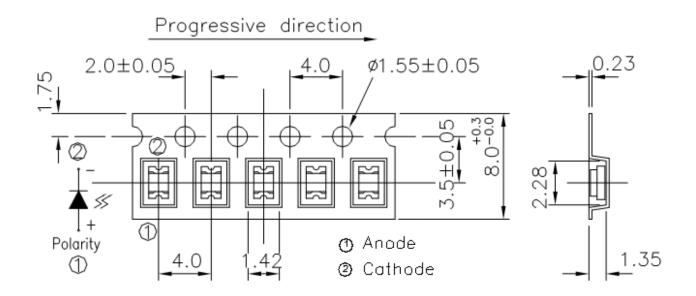


#### **Package Dimensions**



Note: The tolerances unless mentioned are ±0.1mm, Unit: mm

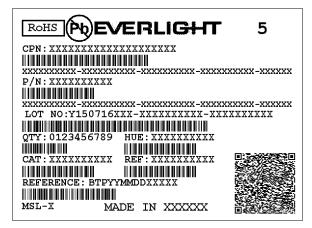
## Carrier Taping Dimensions: (Quantity: 3000PCS/Reel)



Note: The tolerances unless mentioned are ±0.1mm, Unit: mm

Copyright © 2015, Everlight All Rights Reserved. Release Date : 2015/9/28. Issue No:DIR-0000080. Rev:3

### 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

#### Notes

- 1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
- 2. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
- 3. When using this product, please observe the absolute maximum ratings and the instructions for use 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.
- 4. These specification sheets include materials protected under copyright of EVERLIGHT. Reproduction in any form is prohibited without the specific consent of EVERLIGHT.
- 5. This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or life saving applications or any other application which can result in human injury or death. Please contact authorized Everlight sales agent for special application request.

**EVERLIGHT ELECTRONICS CO., LTD.** Office: No. 6-8, Zhonghua Rd., Shulin Dist., New Taipei City 23860, Taiwan Tel: 886-2-2685-6688 Fax: 886-2685-2699 <sup>,</sup> 6897

http://www.everlight.com