

# TH-UV365T0.2WXA-2835H

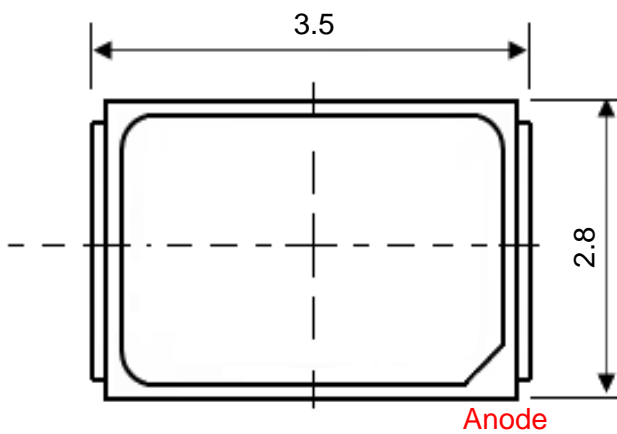


**CAUTION**

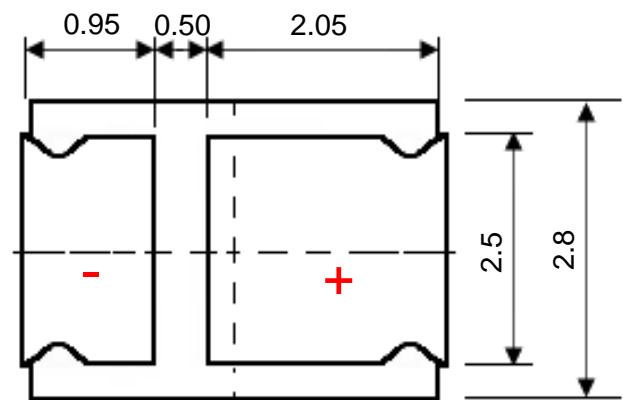
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



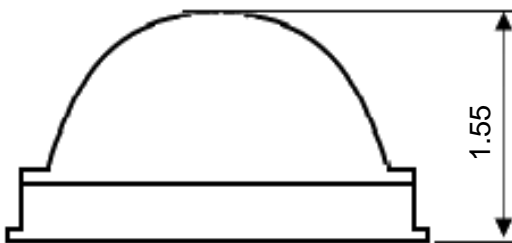
## Mechanical Dimensions



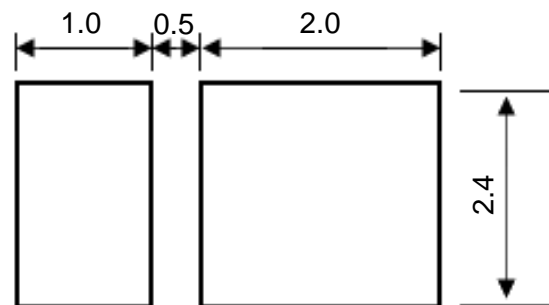
Front Side



Back Side



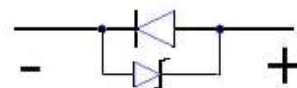
Side View



Solder Pad of PCB

Notes :

- [1] All dimensions are in millimeters.
- [2] Scale : none
- [3] Undefined tolerance is  $\pm 0.2\text{mm}$



Zener Diode



### Electro-Optical characteristics

( $T_a=25^\circ\text{C}$ , RH=30%)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Current	$I_F$			50		mA
Forward Voltage <sup>[4]</sup>	$V_F$	$I_F=50\text{mA}$	3.2	3.6	4.0	V
Radiant Flux <sup>[2]</sup>	$\Phi_e$ <sup>[3]</sup>	$I_F=50\text{mA}$	40	-	100	mW
Peak Wavelength <sup>[1]</sup>	$\lambda_p$	$I_F=50\text{mA}$	365	-	375	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=50\text{mA}$		120		deg.
Spectrum Half Width	$\Delta\lambda$	$I_F=50\text{mA}$		12		nm
Thermal Resistance	$R_{\theta_{j-b}}$ <sup>[5]</sup>	$I_F=50\text{mA}$		29.5		$^\circ\text{C}/\text{W}$

### Absolute Maximum Ratings

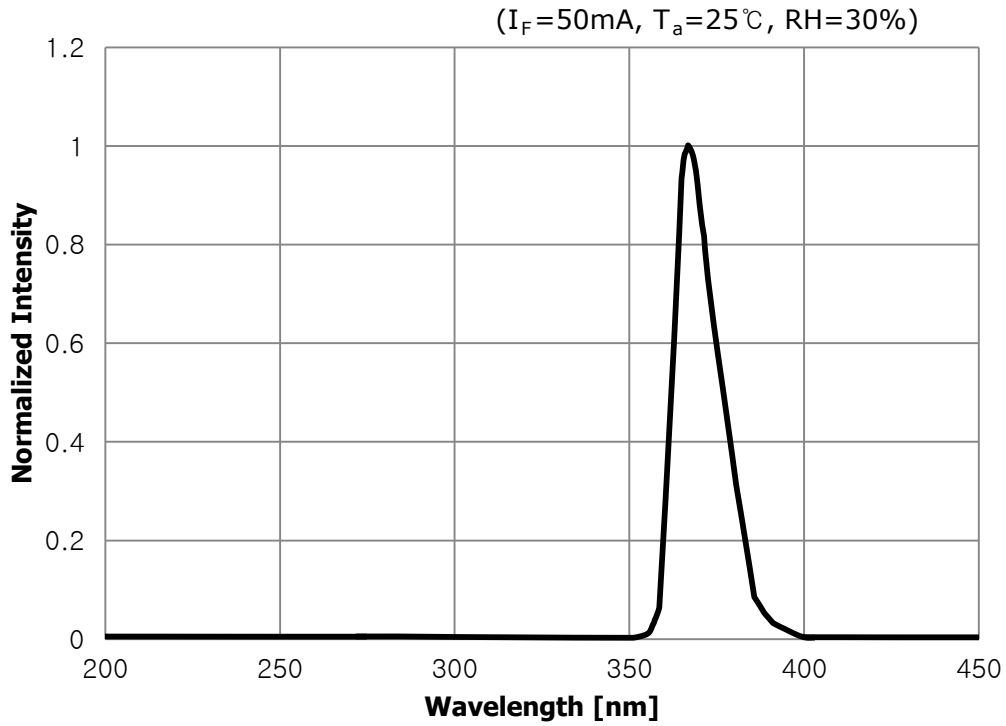
Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	$I_F$	90	mA
Power Dissipation	$P_D$	350	mW
Operating Temperature	$T_{opr}$	-30 ~ +60	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 ~ +100	$^\circ\text{C}$

Notes :

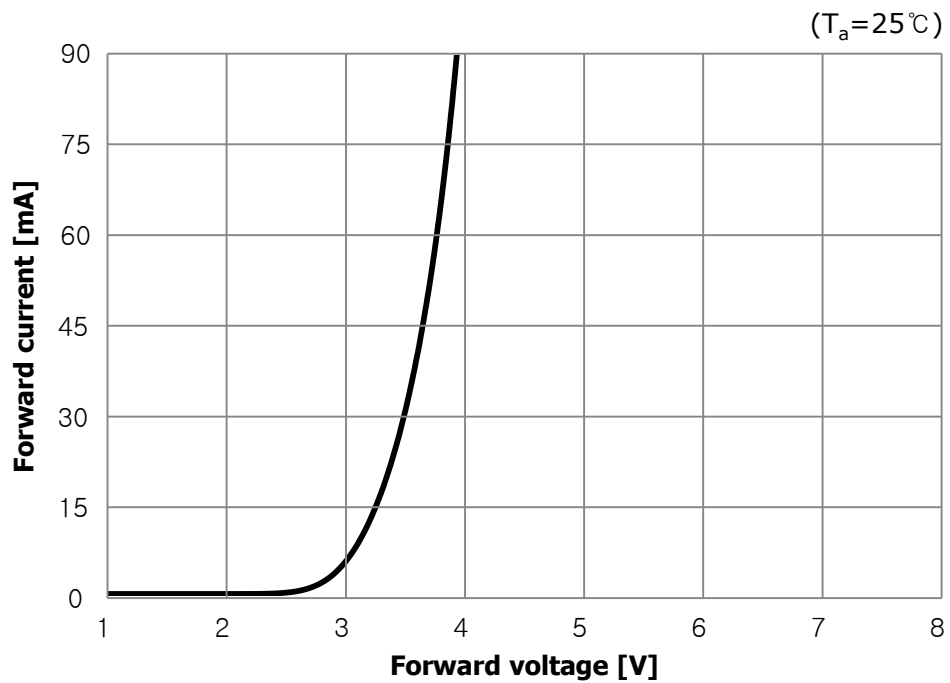
1. Peak Wavelength Measurement tolerance :  $\pm 3\text{nm}$
2. Radiant Flux Measurement tolerance :  $\pm 10\%$
3.  $\Phi_e$  is the Total Radiant Flux as measured with an integrated sphere.
4. Forward Voltage Measurement tolerance :  $\pm 3\%$
5.  $R_{\theta_{j-b}}$  is the thermal resistance between chip junction to PCB board bottom.  
The PCB is made of aluminium and the size of PCB is 3.5mm by 2.8mm



### Spectral Power Distribution

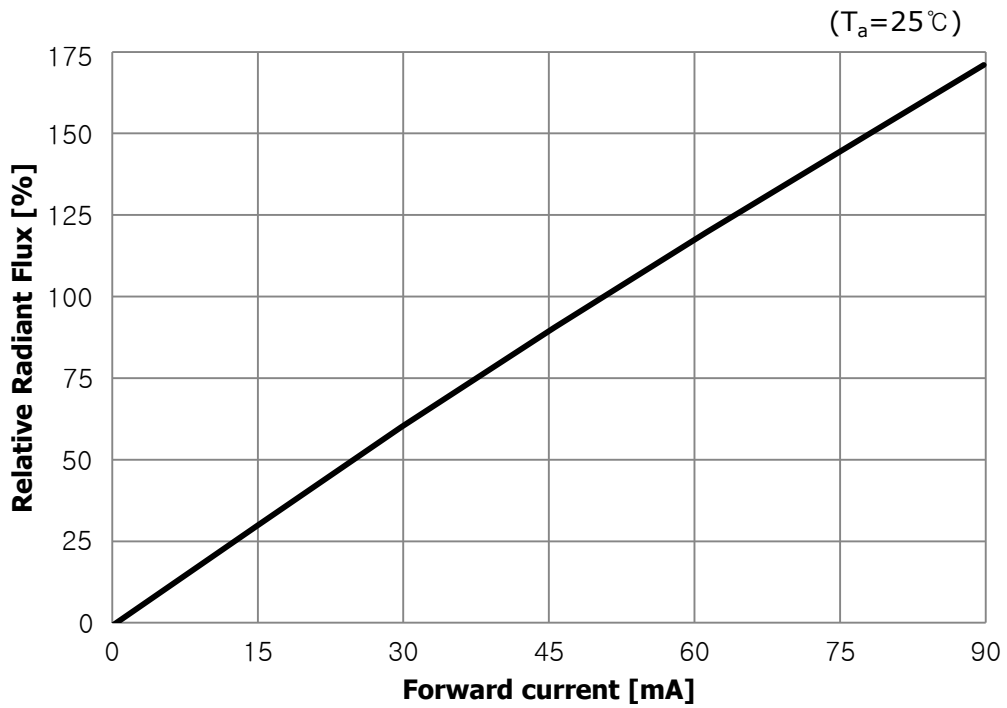


### Forward current vs. Forward Voltage

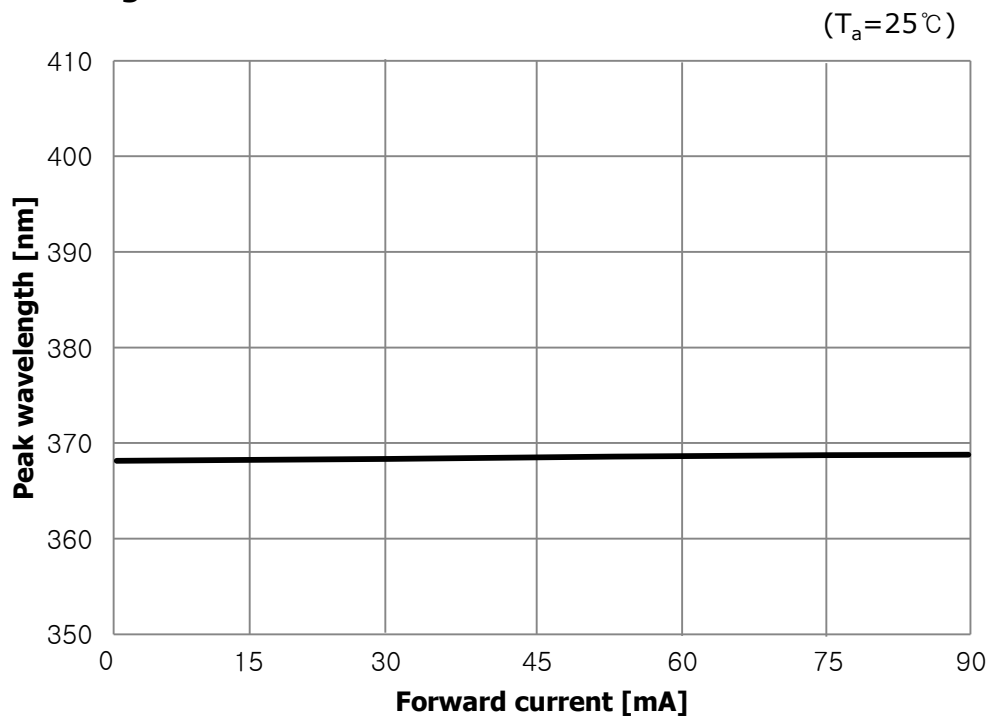




### Relative Radiant Flux vs. Forward Current

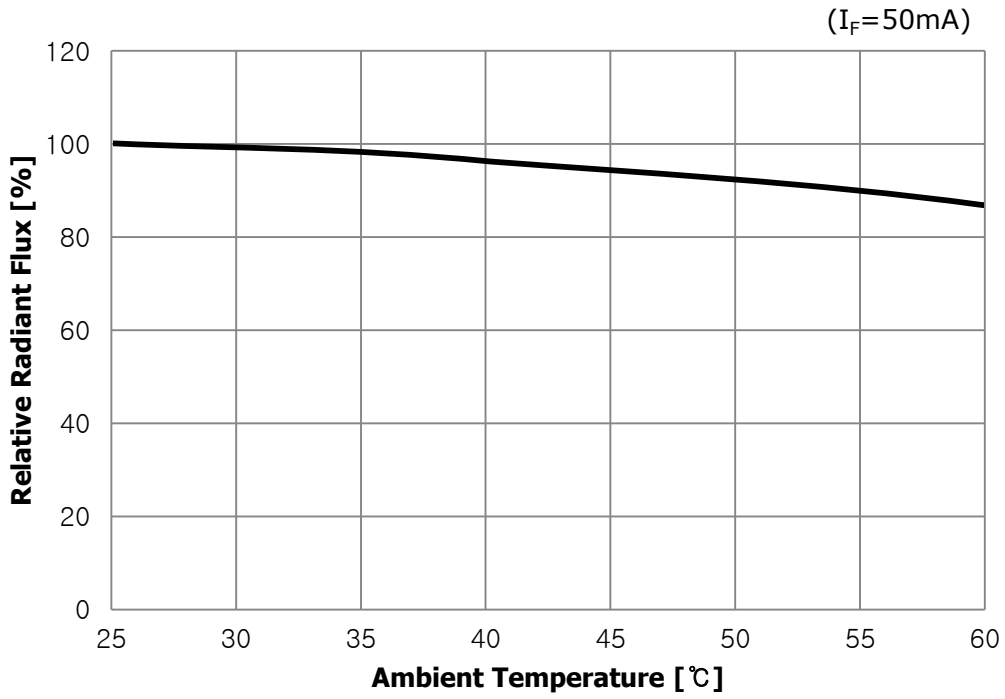


### Peak Wavelength vs. Forward current

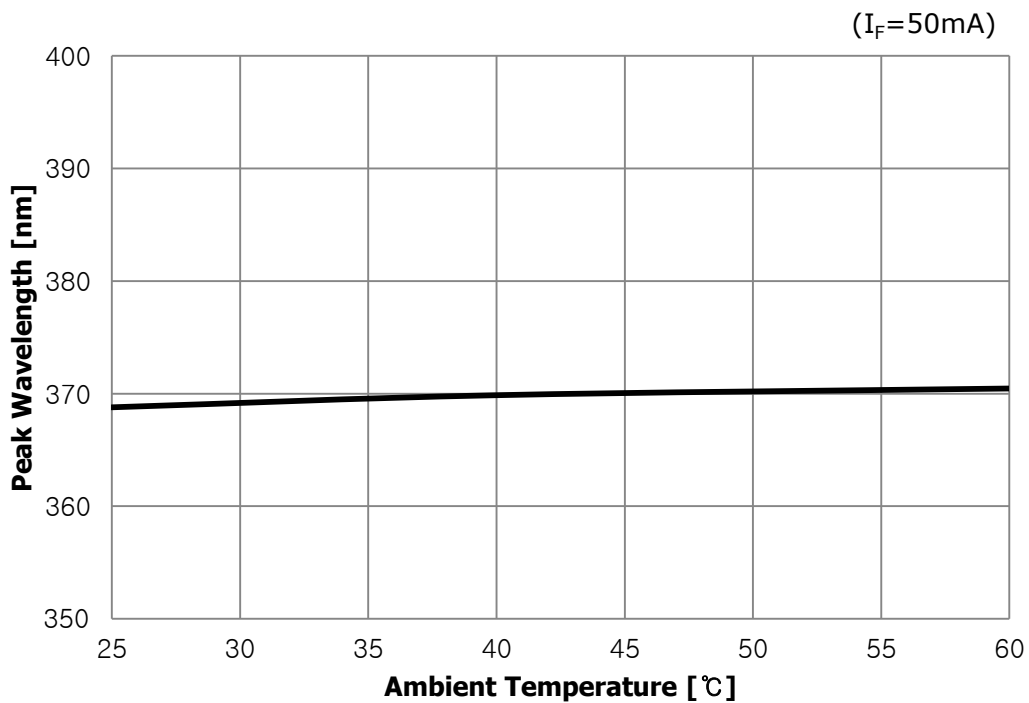




### Relative Radiant Flux vs. Ambient Temperature

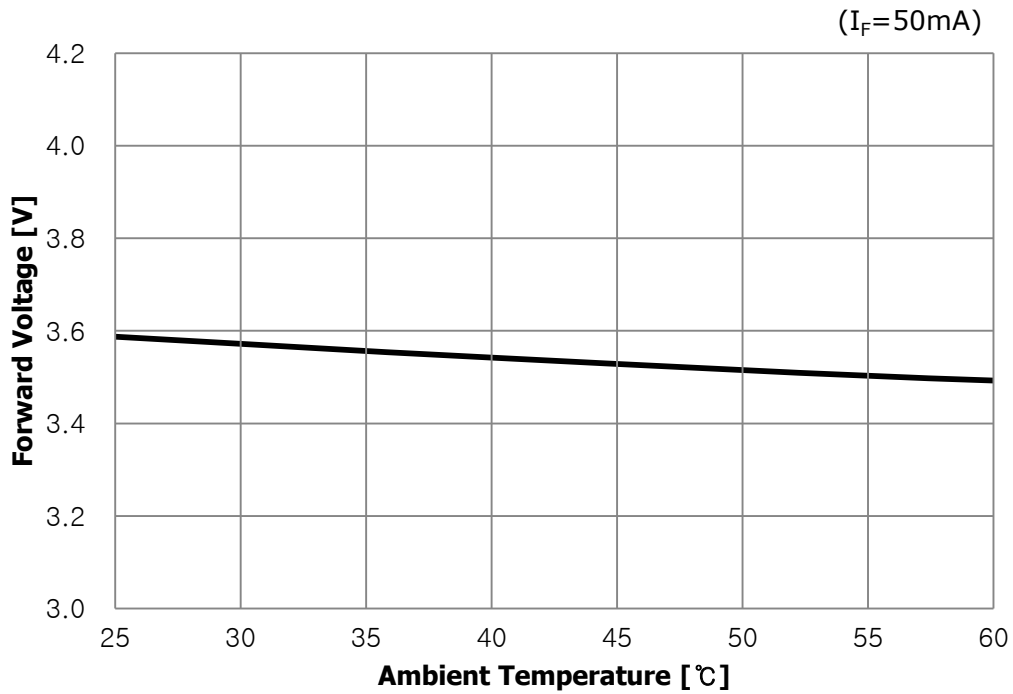


### Peak Wavelength vs. Ambient Temperature

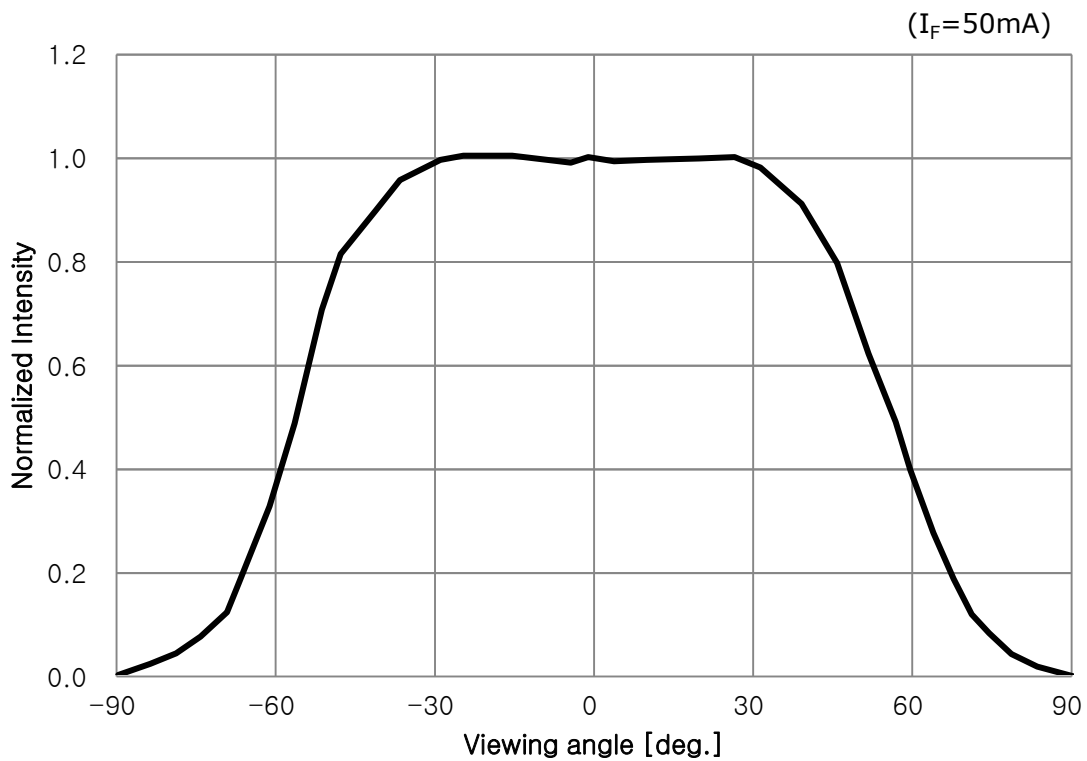




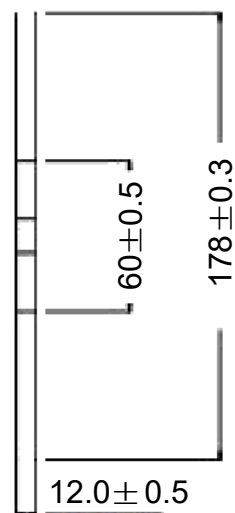
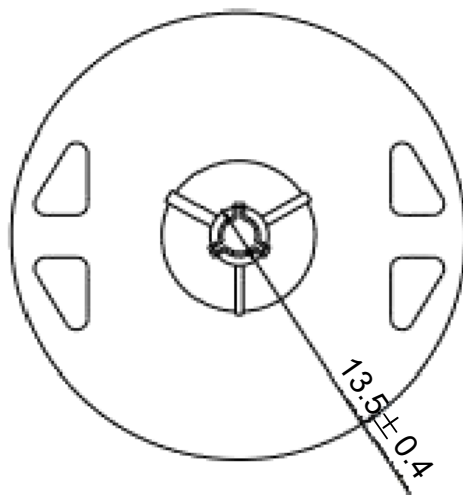
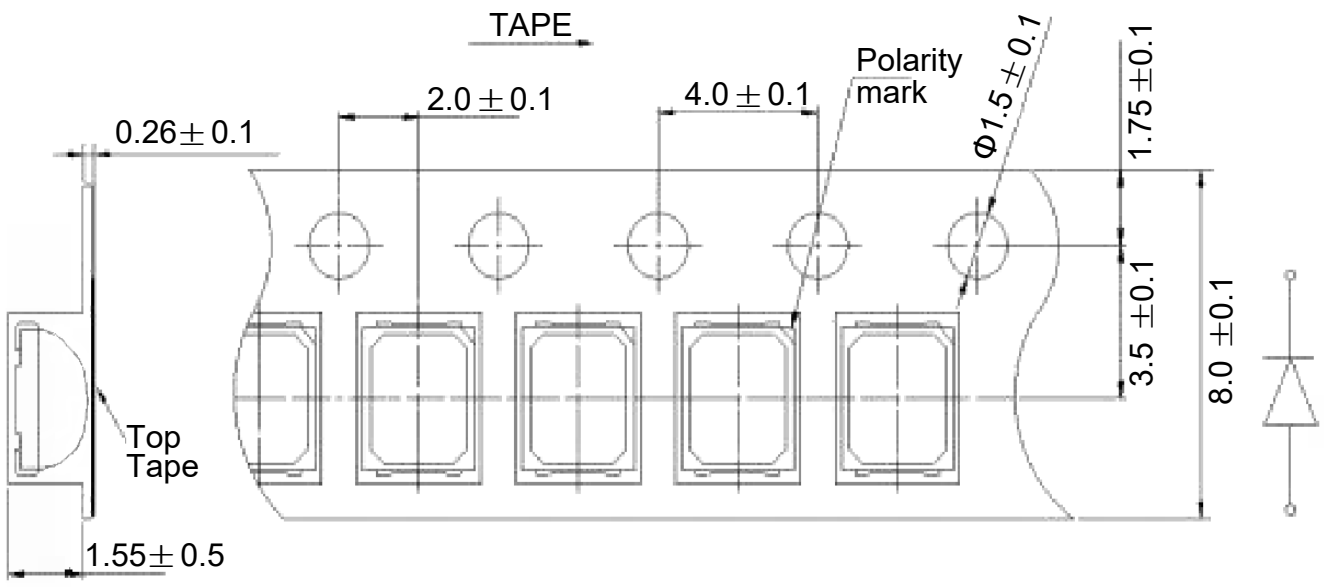
### Forward Voltage vs. Ambient Temperature



### Radiant Pattern



Tape Specifications(Units:mm)





## Precaution for Use

### 1.Storage

To avoid the moisture penetration, we recommend storing LEDs in a dry box (or a desiccator) with a desiccant. The recommended conditions are temperature 5 to 30 degrees Centigrade. Humidity 60% maximum.

### 2.Precaution after opening packing

2.1.Soldering should be done right after opening the package (within 24Hrs).

2.2.Keeping of a fraction

2.2.1 - Sealing

2.2.2 - Temperature : less than 30°C, Humidity : less than 30%

2.2.3 - If the package has been opened than 1 week or the color of desiccant changed Components, should be dried for 10-12 Hrs at 60±5 °C.

3.Any mechanical force or any excess vibration shall not be accepted to apply during cooling process to normal temperature after soldering.

4.Please avoid rapid cooling after soldering.

5.Components should not be mounted on warped direction of PCB.

6.This device should not be used in any fluid such as water, oil , organic solvent etc. When washing is required , Isopropyl Alcohol should be used.

7.Avoid touching Resin parts especially by sharp tools such as pincette.

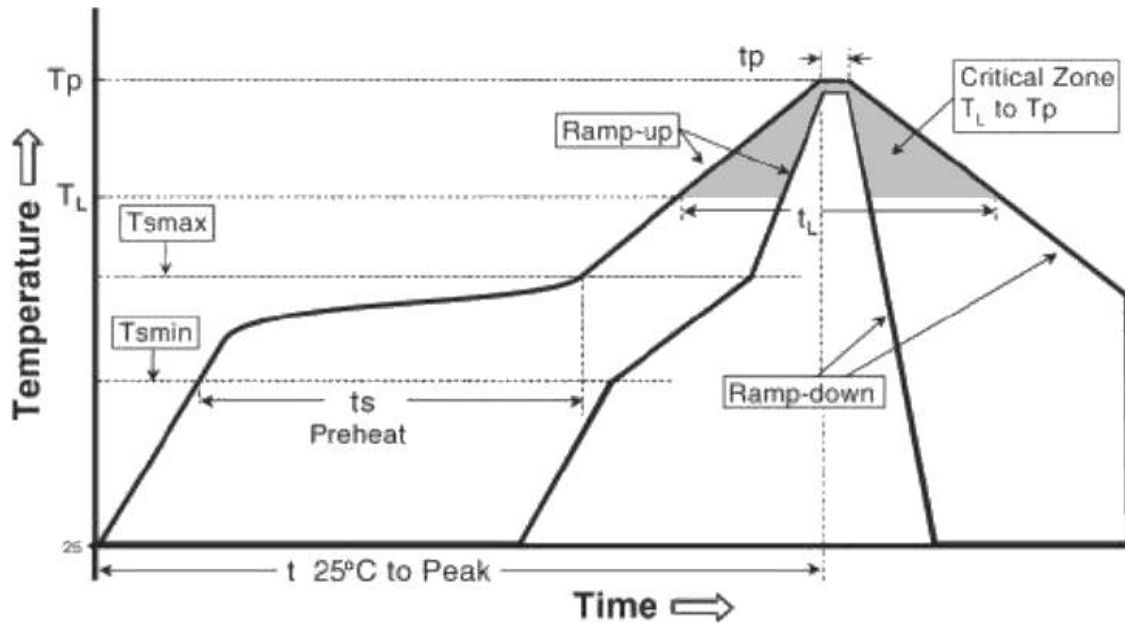
8.Please do not force over 1000g impact or pressure diagonally on the silicone resin. It will cause fatal damage on this product.

9.Please do not cover the silicone resin of the LEDs with other resin

10.Do not use metal suction nozzle, rubber or silica gel suction nozzle is recommended.

11.Do not stack PCBs or assemblies containing the LEDs so that anything rests on the LED resin. Force applied to the LED resin may result in the resin being knocked off. PCBs or assemblies containing the LEDs should be stacked in a way to allow at least 2 cm clearance above the LED resin.





Profile Feature	Sn-Pb Eutectic Assembly
Average ramp-up rate (Ts_max to Tp)	3 °C/second max.
Preheat - Temperature Min (Ts_min) - Temperature Max (Ts_max) - Time (Ts_min to Ts_max) (ts)	100 °C 140 °C 60-120 seconds
Time maintained above: - Temperature (TL) - Time (tL)	180 °C 20-50 seconds
Peak Temperature (Tp)	200°C
Time within 5°C of actual Peak Temperature (tp)	10-30 seconds
Ramp-down Rate	6 °C/second max.
Time 25°C to Peak Temperature	6 minutes max.

**\* Caution**

1. Reflow soldering should not be done more than one time.
2. Repairs should not be done after the LEDs have been soldered. When repair is unavoidable, suitable tools must be used.
3. Die slug is to be soldered.
4. When soldering, do not put stress on the LEDs during heating.
5. After soldering, do not warp the circuit board.
6. Recommend to use a convection type reflow machine with 6 ~ 8 zones.