

# TH-UV340T1WPS-3535H-30

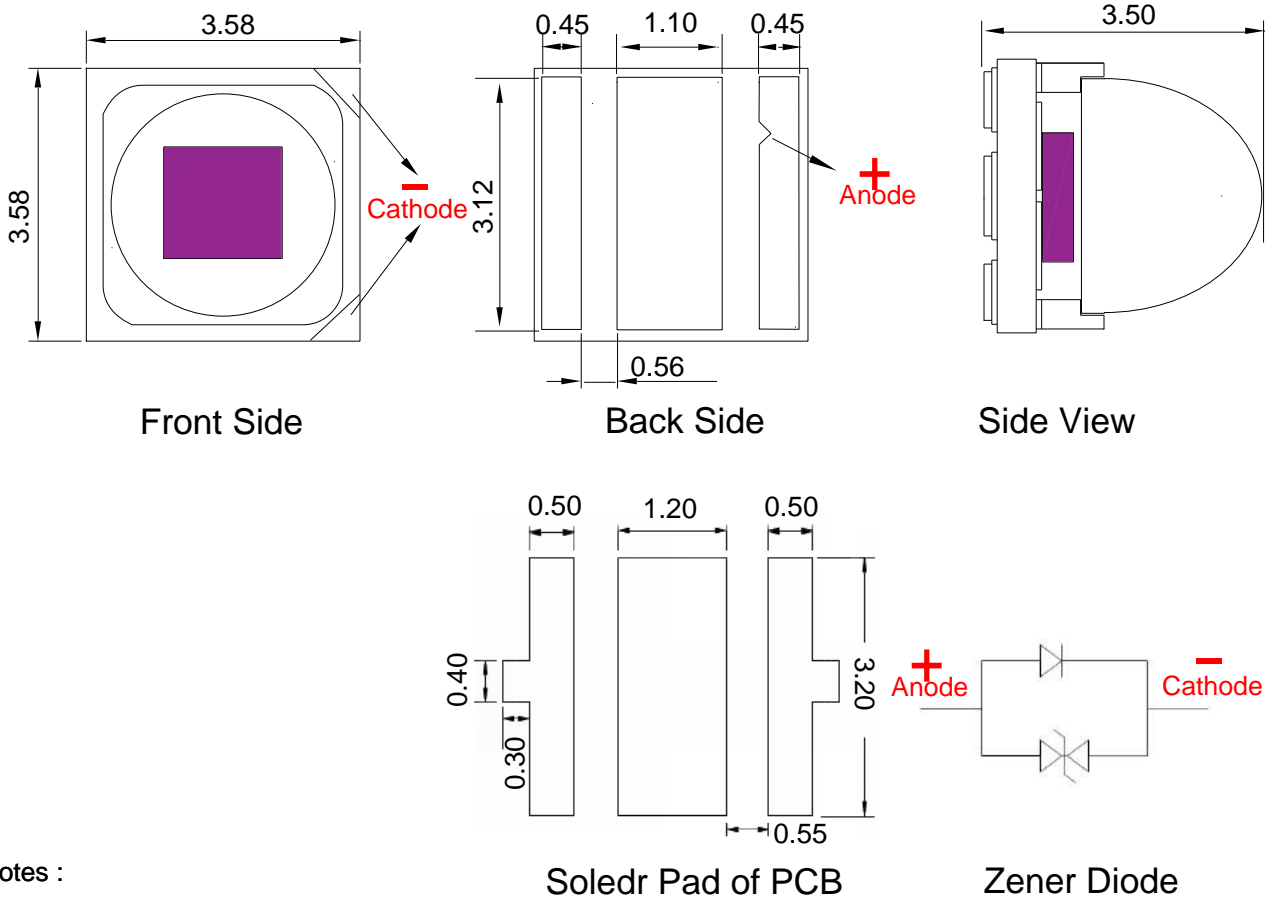


**CAUTION**

OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



## Mechanical Dimensions



**Notes :**

- [1] All dimensions are in millimeters.
- [2] Scale : none
- [3] Undefined tolerance is  $\pm 0.3\text{mm}$



## Performance Characteristics

Table 1 Electro - Optical characteristic at 350mA

(T<sub>s</sub>=25°C, RH=30%)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Current	I <sub>F</sub>			350	--	mA
Forward Voltage <sup>[4]</sup>	V <sub>F</sub>	I <sub>F</sub> =350 mA	3.4	4.3	5.0	V
Radiant Flux <sup>[2]</sup>	Φ <sub>e</sub> <sup>[3]</sup>	I <sub>F</sub> =350 mA	20	-	60	mW
Peak Wavelength <sup>[1]</sup>	λ <sub>p</sub>	I <sub>F</sub> =350 mA	335	340	350	nm
Viewing Angle	2 θ <sub>1/2</sub>	I <sub>F</sub> =350 mA		30		deg.
Spectrum Half Width	Δ λ	I <sub>F</sub> =350 mA		12		nm
Thermal Resistance	R <sub>θj-b</sub> <sup>[5]</sup>	I <sub>F</sub> =350 mA		14.5		°C /W

Table 2. Absolute Maximum Rating

Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I <sub>F</sub>	500	mA
Power Dissipation	P <sub>D</sub>	2400	mW
Operating Temperature	T <sub>opr</sub>	-30 ~ +60	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C

Notes :

1. Peak Wavelength Measurement tolerance : ±3nm
2. Radiant Flux Measurement tolerance : ± 10%
3. Φ<sub>e</sub> is the Total Radiant Flux as measured with an integrated sphere.
4. Forward Voltage Measurement tolerance : ±3%
5. R<sub>θj-b</sub> 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 3.5mm

### Characteristics Graph

Fig 1. Spectrum,  $T_s=25^{\circ}\text{C}$ ,  $I_F=350\text{mA}$

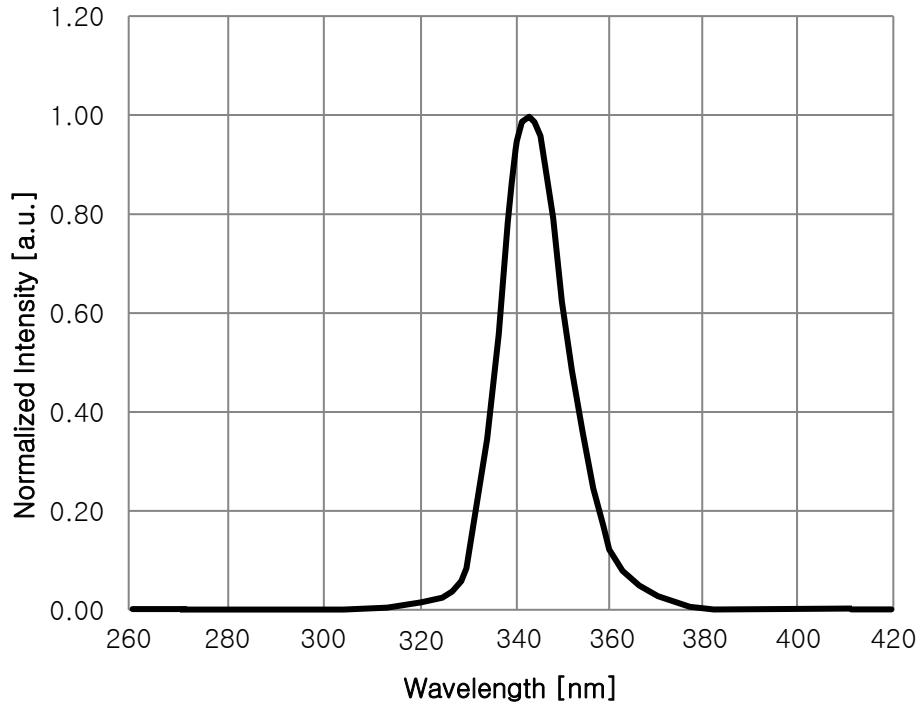
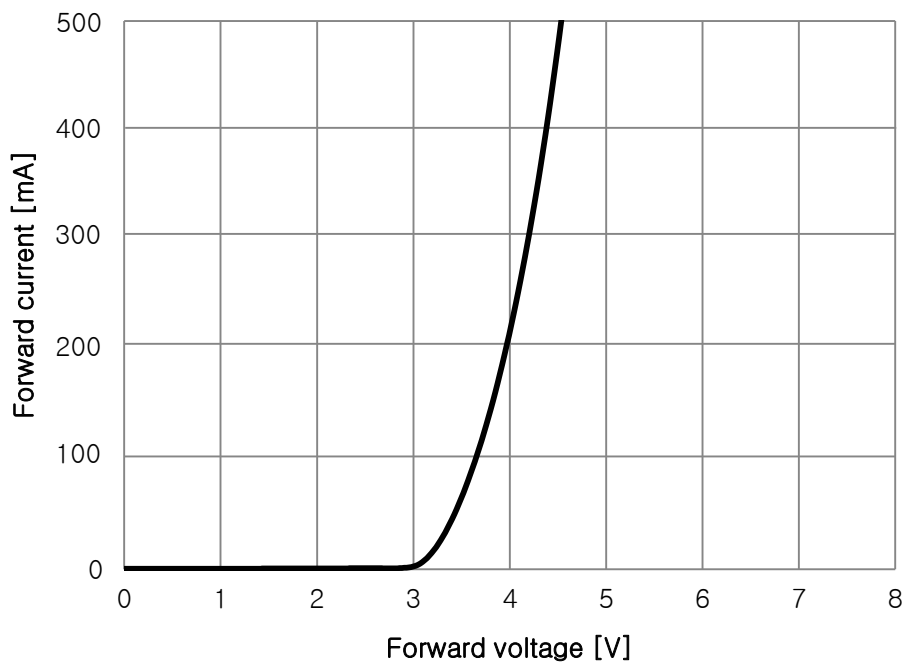


Fig 2. Forward Voltage vs. Forward Current,  $T_s=25^{\circ}\text{C}$



### Characteristics Graph

Fig 3. Forward Current vs. Relative Radiant Flux,  $T_s=25^{\circ}\text{C}$

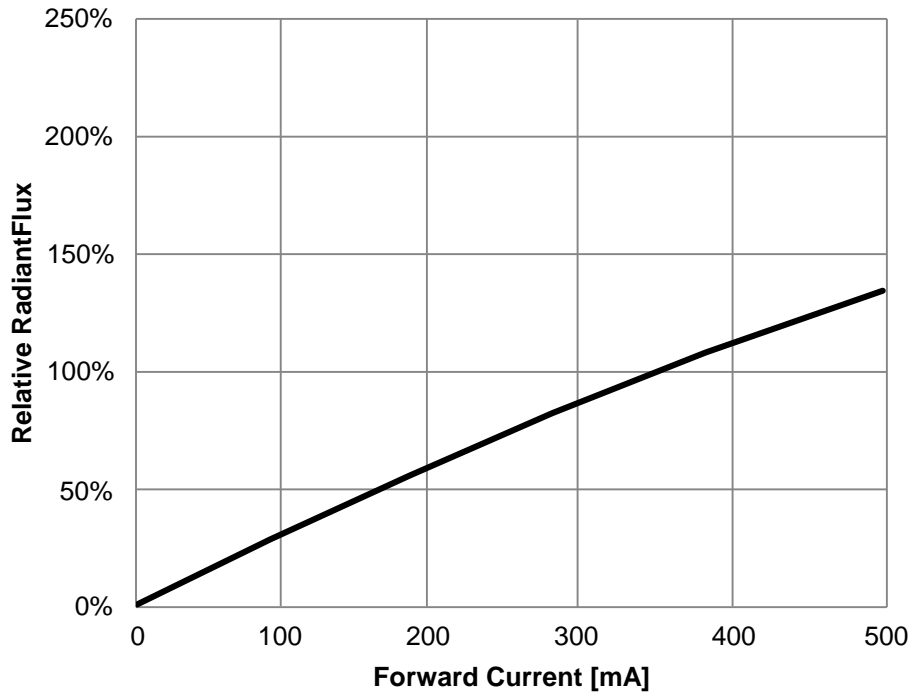
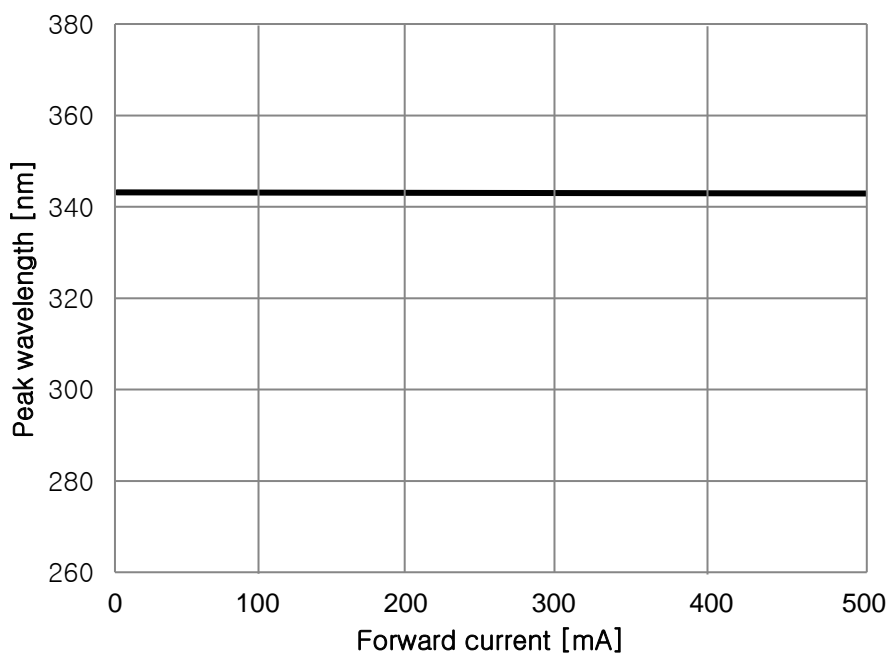


Fig 4. Forward Current vs. Peak Wavelength,  $T_s=25^{\circ}\text{C}$



## Characteristics Graph

Fig 5. Surface Temperature vs. Relative Radiant Flux,  $I_F=350\text{mA}$

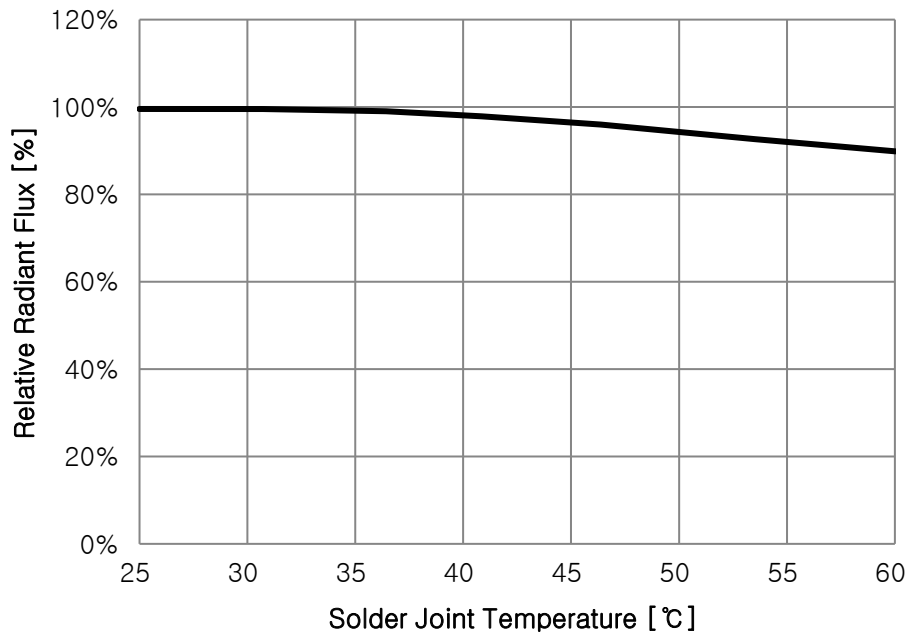
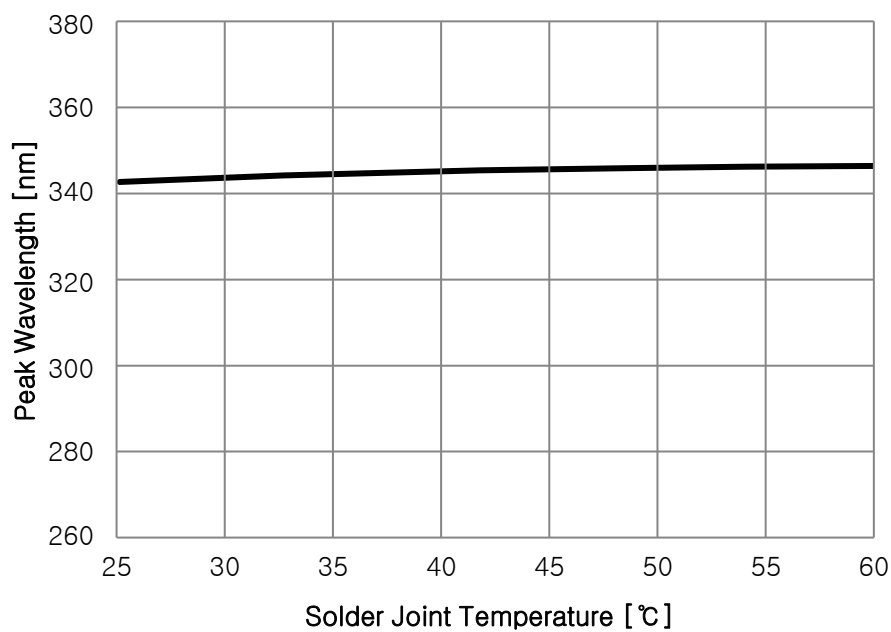


Fig 6. Surface Temperature vs. Peak Wavelength,  $I_F=350\text{mA}$



### Characteristics Graph

Fig 7. Surface Temperature vs. Forward Voltage,  $I_F=350\text{mA}$

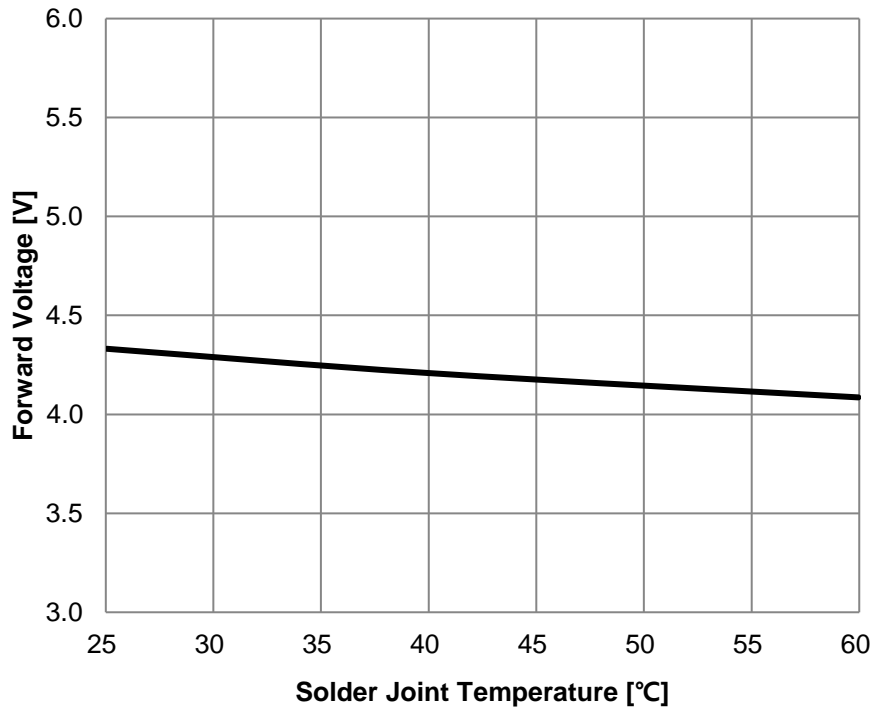
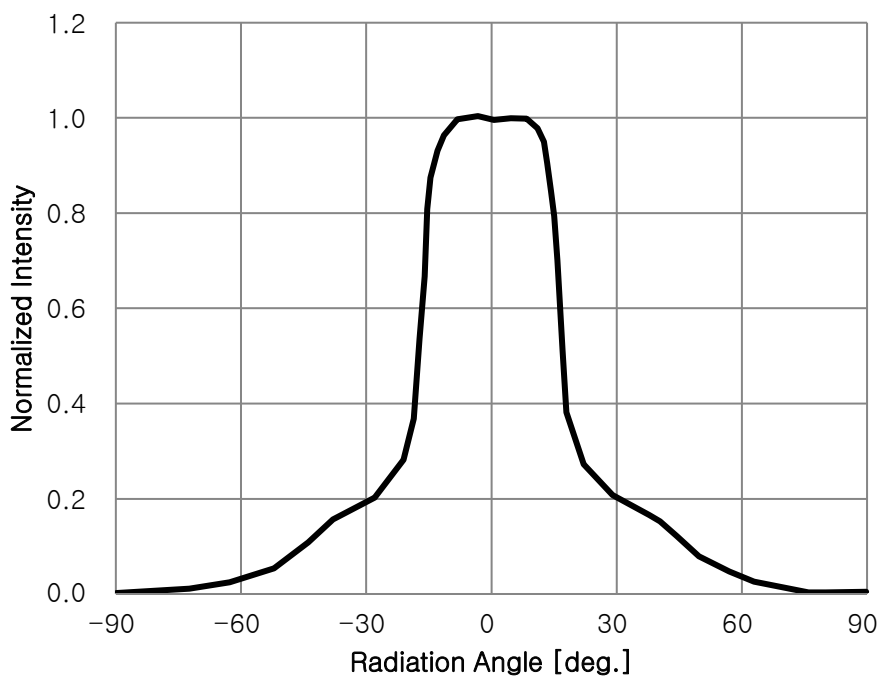
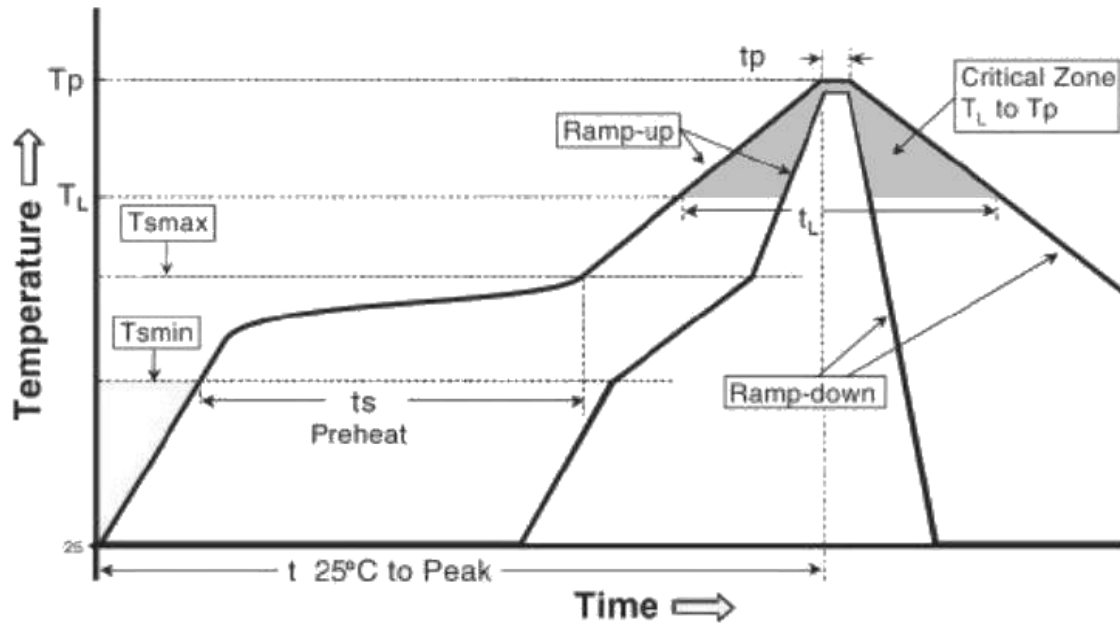


Fig 8. Typical Spatial Distribution,  $I_F=350\text{mA}$



## Reflow Soldering Characteristics



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)	130 °C 180 °C 60-100 seconds
Time maintained above: - Temperature (TL) - Time (tL)	205 °C 20-50 seconds
Peak Temperature (Tp)	220°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 7 ~ 8 zones.