

PLT-UV365XS0.5W-2-2525 **$I_F = 100 \text{ mA}$** **CAUTION**

- Observe Precautions
- For Handling
- Electrostatic
- Discharge
- Sensitive
- Devices

Applications

- Nail Lamp
- Curing Light
- Mosquito Lamp
- Mone yDetector
- The Sterilization Lamp
- The Stage Lights
- Clothing Lights
- The Scorpion Lamp

Electro-Optical characteristics

 (T_a=25°C, RH=30%)

Items	Symbol	Condition	Bin	Min	Typ	Max	Unit
Forward Current	I _F				100		mA
Forward Voltage	V _F	I _F = 100 mA	V33	3.3	-	3.4	V
			V34	3.4	-	3.5	
			V35	3.5	-	3.6	
			V36	3.6	-	3.7	
Radiant Flux	Φ _e	I _F = 100 mA	P100	100	-	120	mW
			P120	120	-	140	
Peak Wavelength	λ _p	I _F = 100 mA	U36	365	-	375	nm
Viewing Angle	2 ½	I _F = 100 mA			120		deg.
Spectrum Half Width	Δλ	I _F = 100 mA			10		nm
Electrostatic Grade	ESD	Contact type (Human Body Model)			8000		V

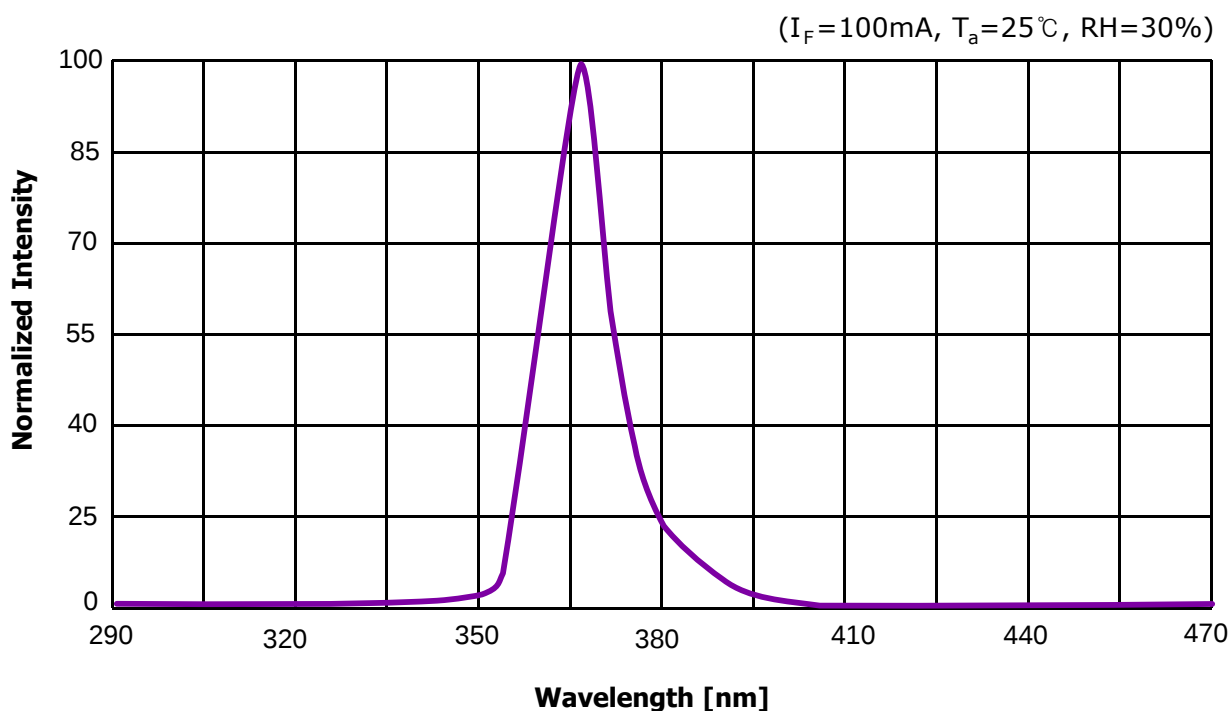
Absolute Maximum Ratings

Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	150	mA
Power Dissipation	P _D	550	mW
Operating Temperature	T _{opr}	-20~+85	°C
Storage Temperature	T _{stg}	-40~+100	°C

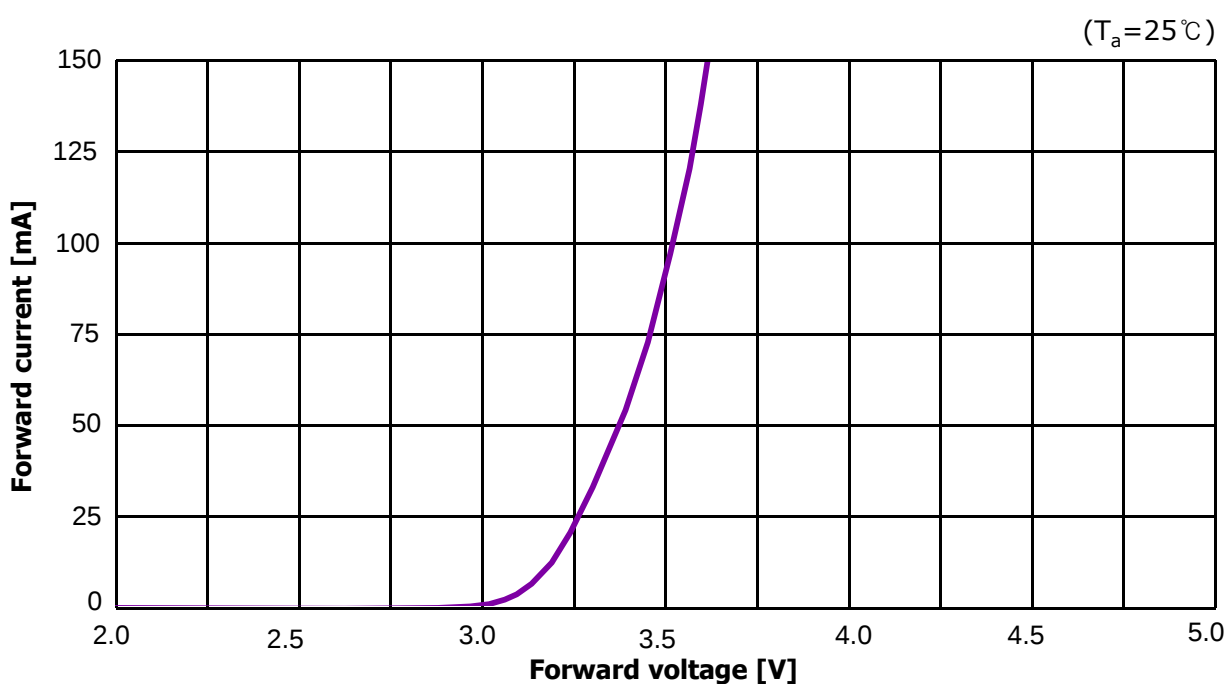
Notes :

1. Peak Wavelength Measurement tolerance : ±3nm
2. Radiant Flux Measurement tolerance : ± 10%
3. Φ_e is the Total Radiant Flux as measured with an integrated sphere.
4. Forward Voltage Measurement tolerance : ±3%

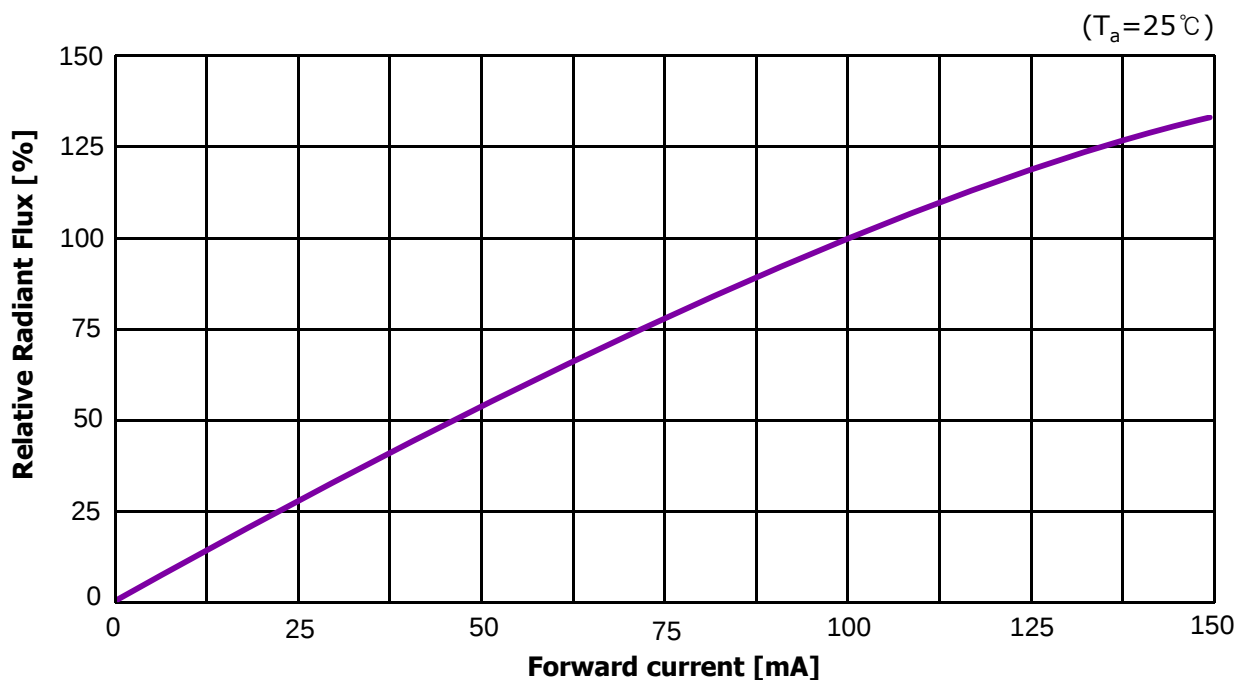
Spectral Power Distribution



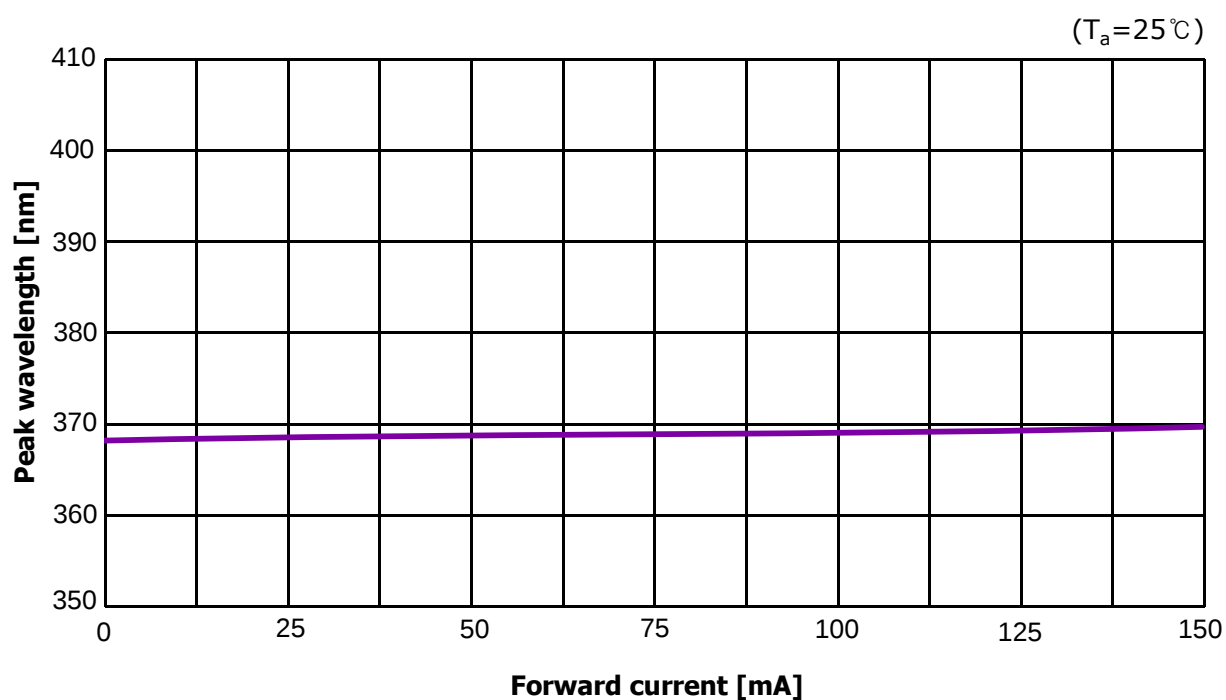
Forward current vs. Forward Voltage



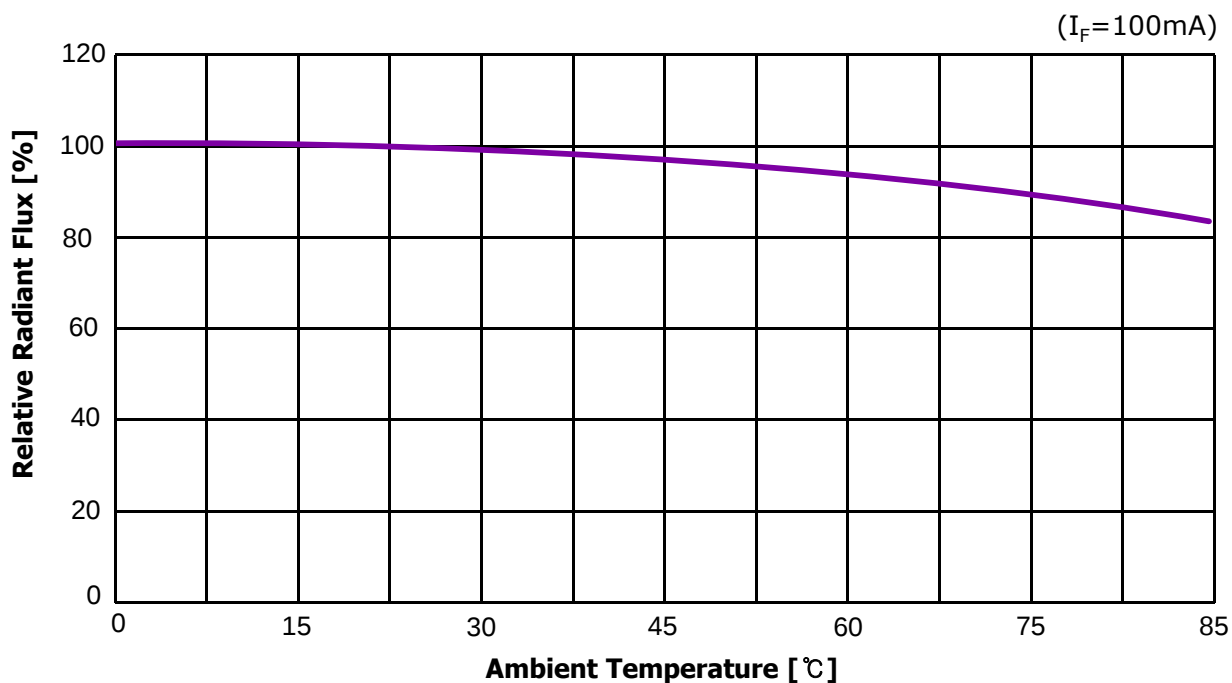
Relative Radiant Flux vs. Forward Current



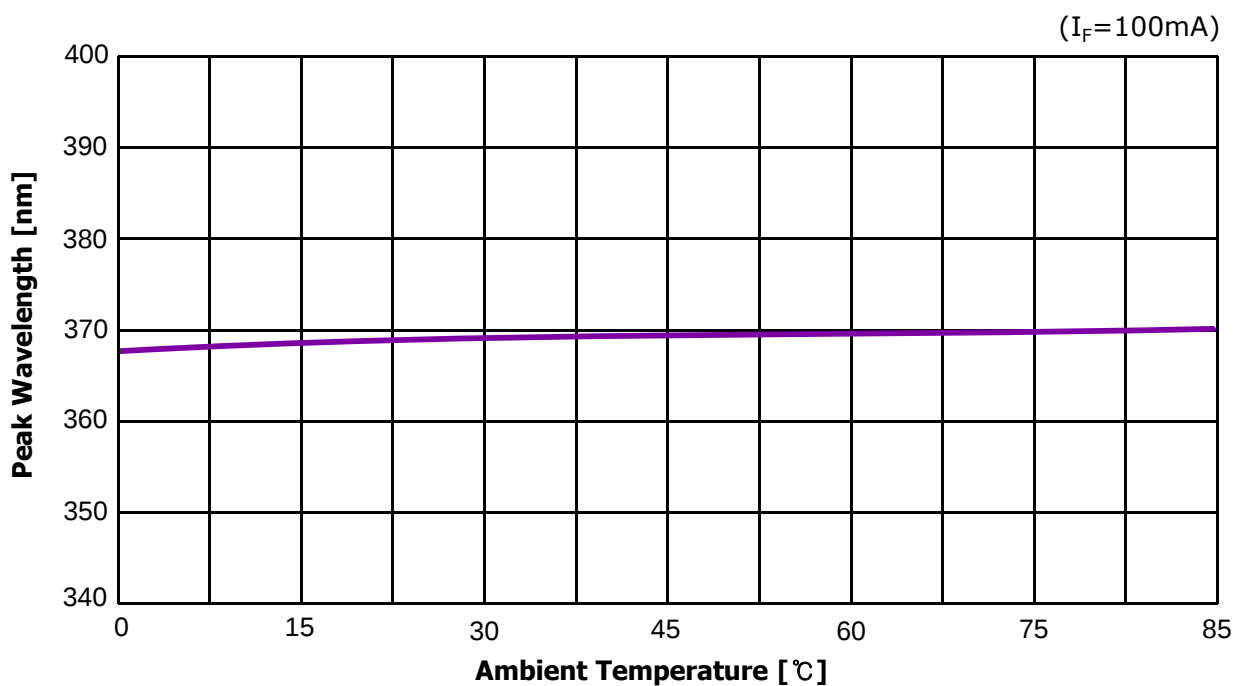
Peak Wavelength vs. Forward current



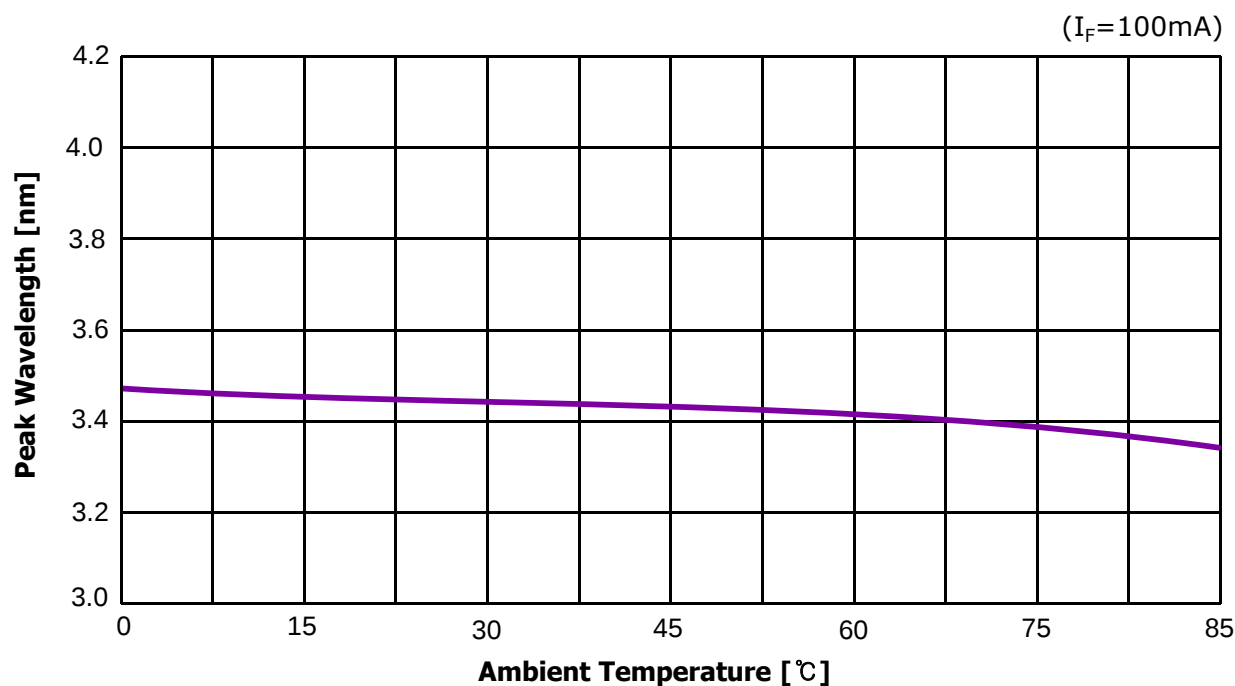
Relative Radiant Flux vs. Ambient Temperature



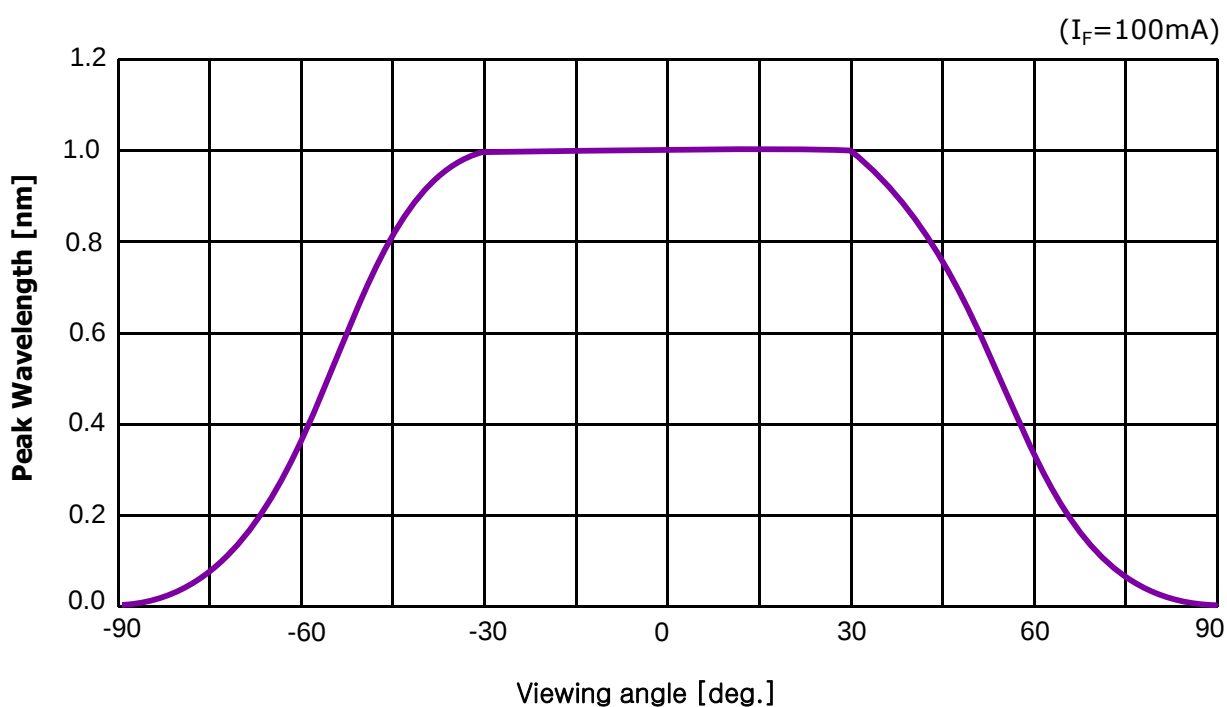
Peak Wavelength vs. Ambient Temperature



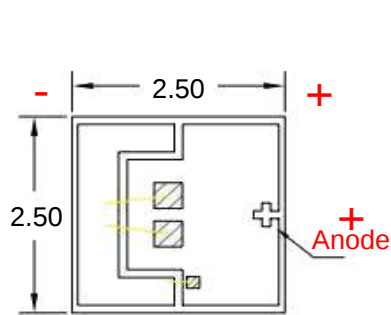
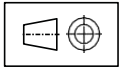
Forward Voltage vs. Ambient Temperature



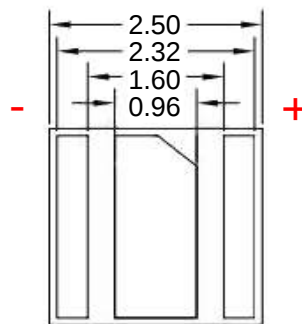
Radiant Pattern



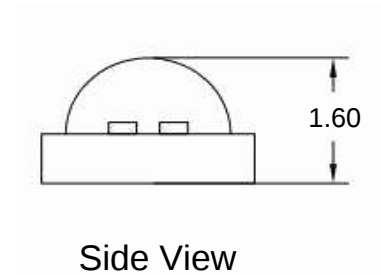
Dimensions (in mm)



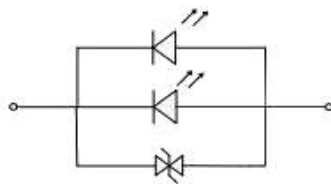
Front Side



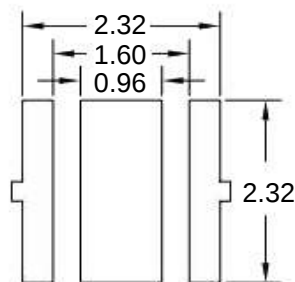
Back Side



Side View



Zener Diode

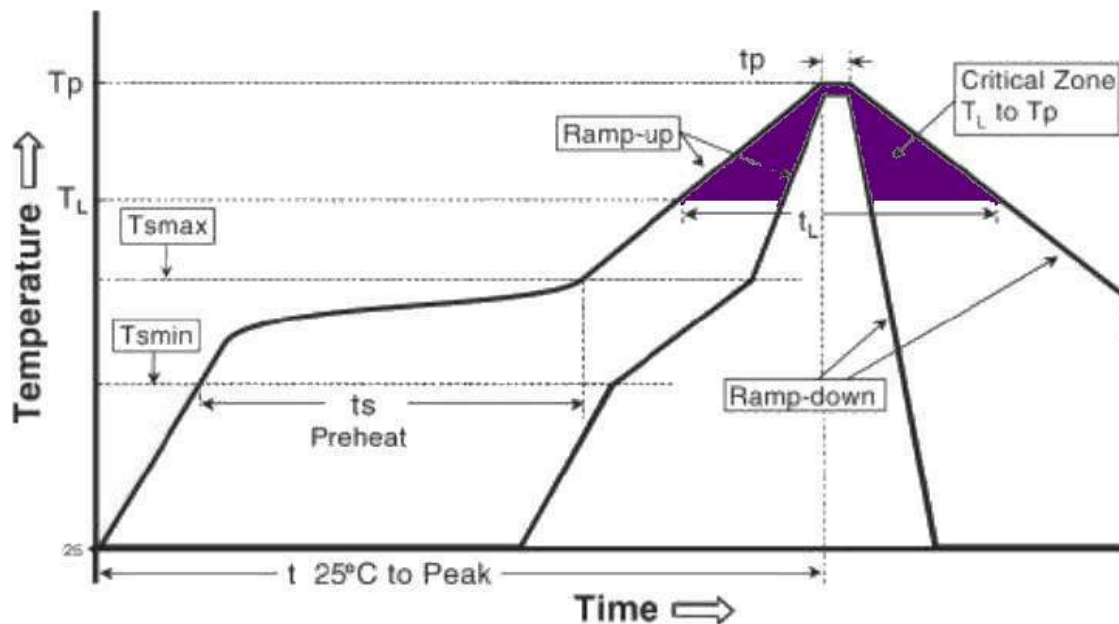


Solder Pad of PCB

Notes :

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

Reflow Soldering Characteristics



Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Average ramp-up rate (T_{smax} to T_p)	3°C/second max.	3°C/second max.
Preheat - Temperature Min (T_{smin}) - Temperature Max (T_{smax}) - Time (T_{smin} to T_{smax}) (t_s)	100 °C 150 °C 60-120 seconds	150 °C 200 °C 60-180 seconds
Time maintained above: - Temperature (T_L) - Time (t_L)	183 °C 60-150 seconds	217 °C 60-150 seconds
Peak Temperature (T_p)	215 °C	260 °C
Time within 5°C of actual Peak Temperature (t_p)	10-30 seconds	20-40 seconds
Ramp-down Rate	6 °C/second max.	6 °C/second max.
Time 25°C to Peak Temperature	6 minutes max.	8 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.