

UV Series

(YL-3535D-365nm)

Lead (Pb) Free Product – RoHS Compliant

1. Features

High Power 3Watt UV LED

Compact size

SMT soldering

Typical Applications

Defect detection

Medical treatment

Ink and adhesive curing

DNA Gel

2. Product Exterior



marking for negative(-)

Materials

Substrate	Ceramic
Encapsulating Resin	Silicone
Lens	Silicone/Quartz
Die attach	Silver gel

3. Electrical/Optical Characteristics

Parameters	Typical	Units
Radiation Power* @350mA	100 ~ 120	mW
Peak Wavelength**	368	nm
Forward voltage	3.3 ~ 3.8	Volt
Thermal resistance	2.4	°C/W
Viewing Angle(2θ)	100	Degree

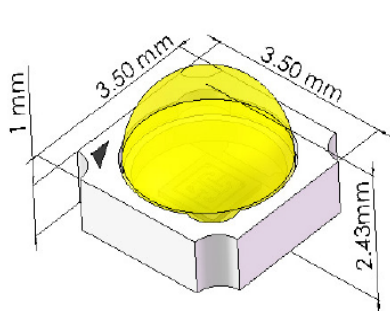
* Radiant Power Measurement allowance is $\pm 10\%$

** Peak Wavelength Measurement allowance is $\pm 5\text{nm}$

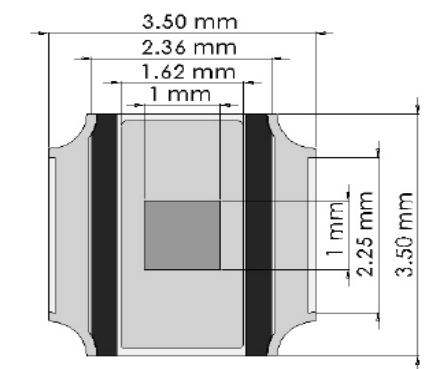
4. Maximum Ratings (Ta=25°C)

Parameters		Units
DC Forward Current	600	mA
Peak Pulsed Forward Current	900	mA
Storage Temperature	-30 ~ +80	°C
Junction Temperature	135	°C
ESD Classification	Class 2	
Soldering Temperature	260 for 5s	°C

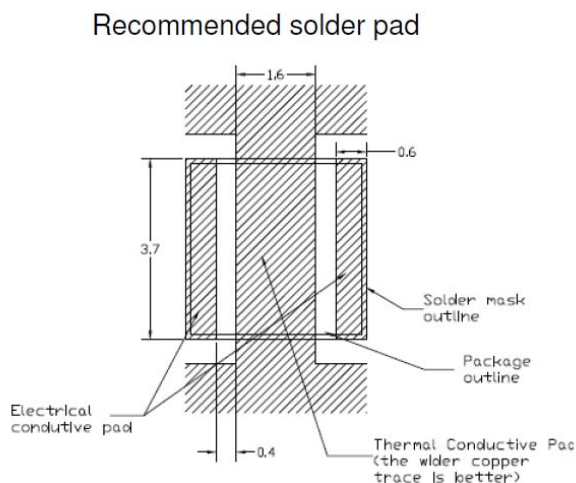
5. Mechanical Dimensions



Lens Type :DL (90°)

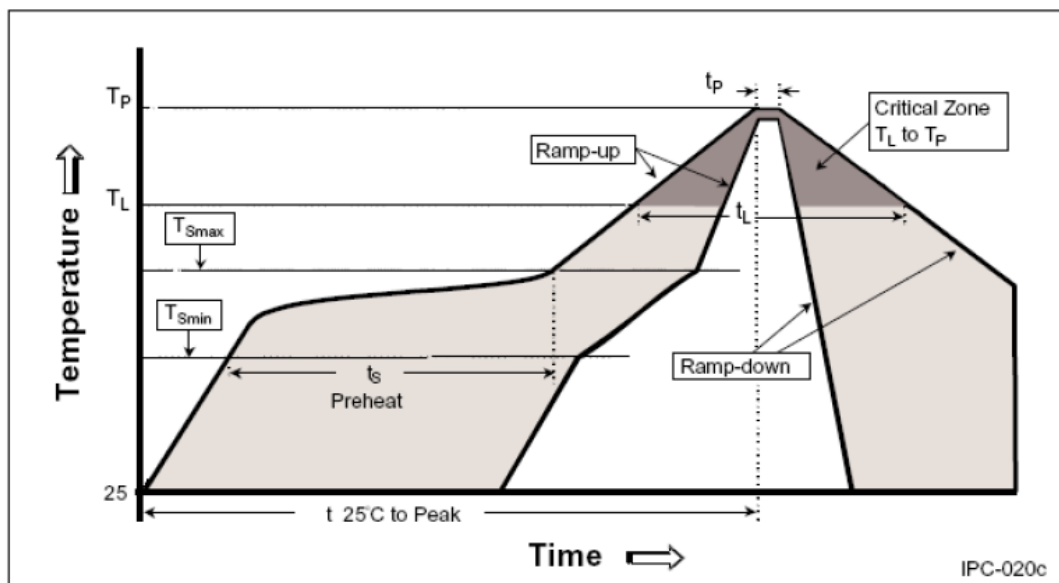


Recommended Solder Pad



6. Reflow Soldering Condition

Profile Feature	Sn-Pb Eutectic Assembly	Lead(Pb)- Free Assembly
Average Ramp-Up Rate (T Smax to Tp)	3°C/ second max	3°C/ second max.
Preheat		
- Temperature Min (T Smin)	100°C	150°C
- Temperature Max (T Smax)	150°C	200°C
- Time (t Smin to Smax)	60- 120 seconds	60- 180 seconds
Time maintained above:		
- Temperature (TL)	183°C	217°C
- Time (tL)	60- 150 seconds	60- 150 seconds
Peak/Classification Temperature (TP)	240°C	260°C
Time Within 5°C of Actual Peak Temperature (tP)	10- 30 seconds	20- 40 seconds
Ramp-Down Rate	6°C/seconds max.	6°C/seconds max.
Time 25°C to Peak Temperature	6 minutes max.	8 minutes max.



Notice : Soldering by using Hot Plate

- A. Be careful because damaging the product is usually caused during soldering.
- B. When using hot plate for soldering on MCPCB, please follow the instructions as below:
 - i.. Place the solder paste on MCPCB, and make sure all of the solder pads are covered uniformly.
 - ii. Put the package onto the MCPCB and check if the polarity is in accordance with the marks on the MCPCB.
 - iii. Keep the temperature of hot plate under 230 degree $^{\circ}\text{C}$ and then put MCPCB with LED on it. The process time MUST within 20 seconds. This could prevent the LED from possible damage.
 - iv. Take out the MCPCB from the hot plate and cool it down in room temperature. Using power supply to check the LED and ignite it.
- C. If the LEDs have exceeded the storage time, baking treatment should be performed according to the following conditions.
- D. Pre-curing treatment: $60\pm 5^{\circ}\text{C}$ for 24 hours with tape and reel.