

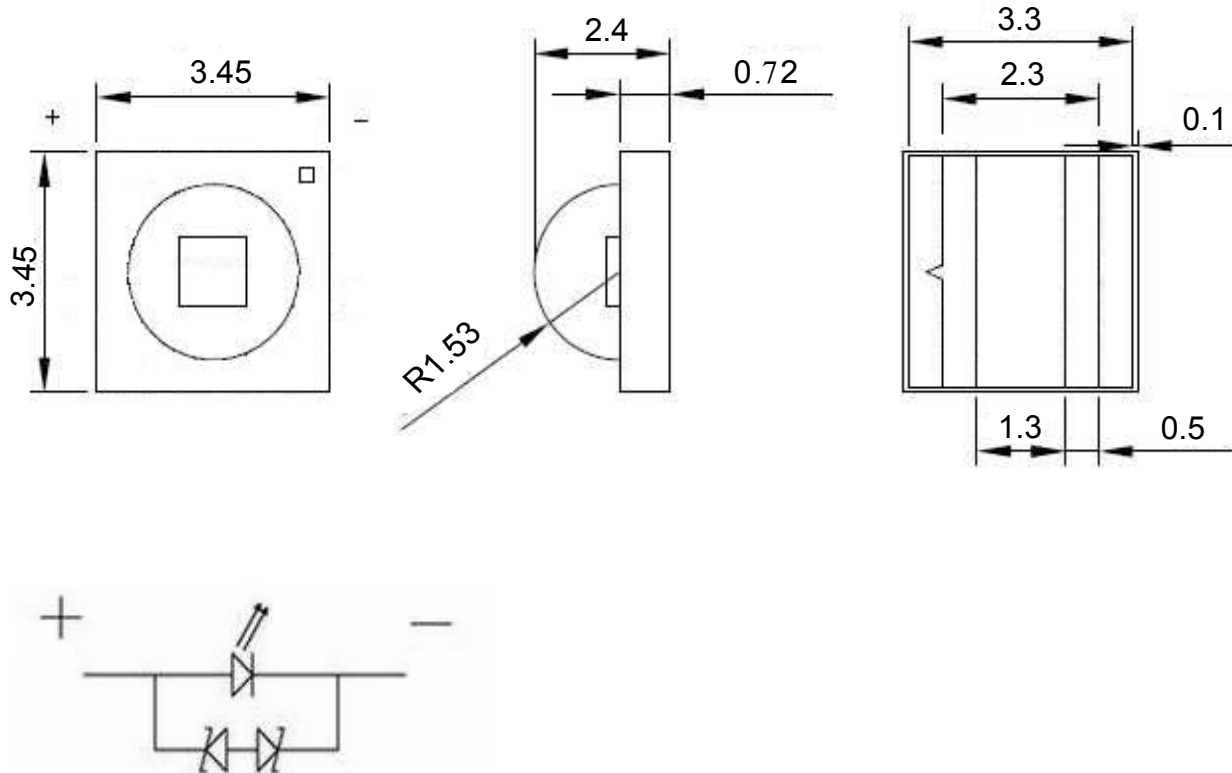


TH-UV365T1WL-3535



CAUTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Note: All dimensions in mm ,tolerance is $\pm 0.2\text{mm}$ unless otherwise noted.



Typical Electrical & Optical Characteristics (Ta = 25 °C)

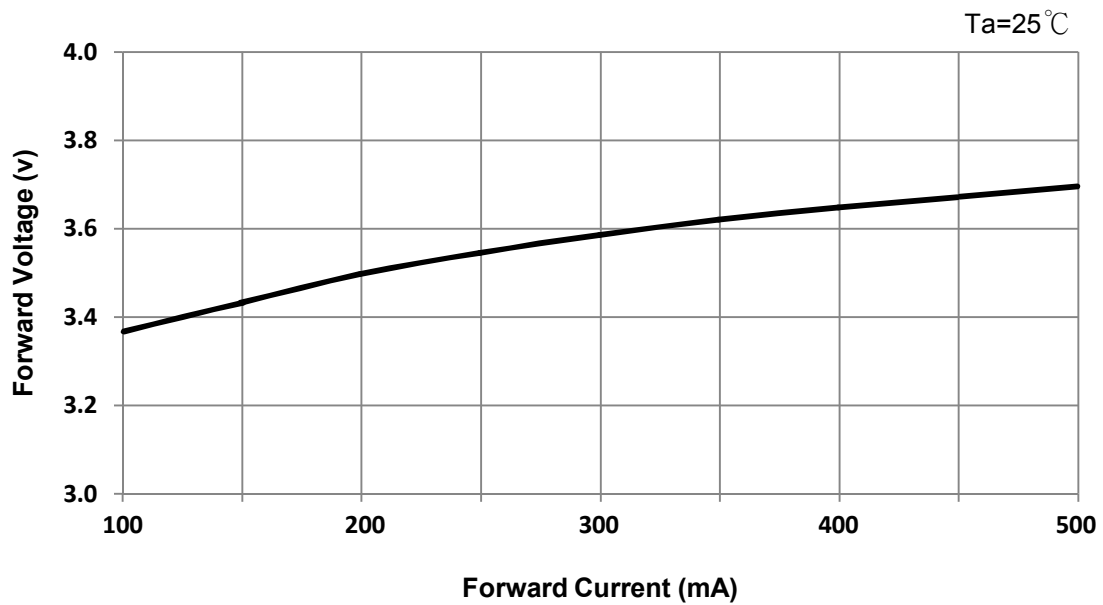
Item	Symbol	test condition	Value (mW)			unit
			Min.	Max.	Type.	
Forward Voltage	V _F	I _F =350mA	3.2	3.5	4.0	V
Optical Output Power	Φ _e	I _F =350mA	400	---	600	mW
Wavelength	λ _p	I _F =350mA	365	---	372.5	nm
Spectrum Radiation Bandwidth	Δ λ	I _F =350mA	---	---	12	nm
Viewing Angle	2 θ _{1/2}	I _F =350mA	---	120	---	Deg
Thermal resistance	R _{th(j-s)}	I _F =350mA	---	14.3	---	°C/W

Absolute Maximum Ratings (Ta = 25 °C)

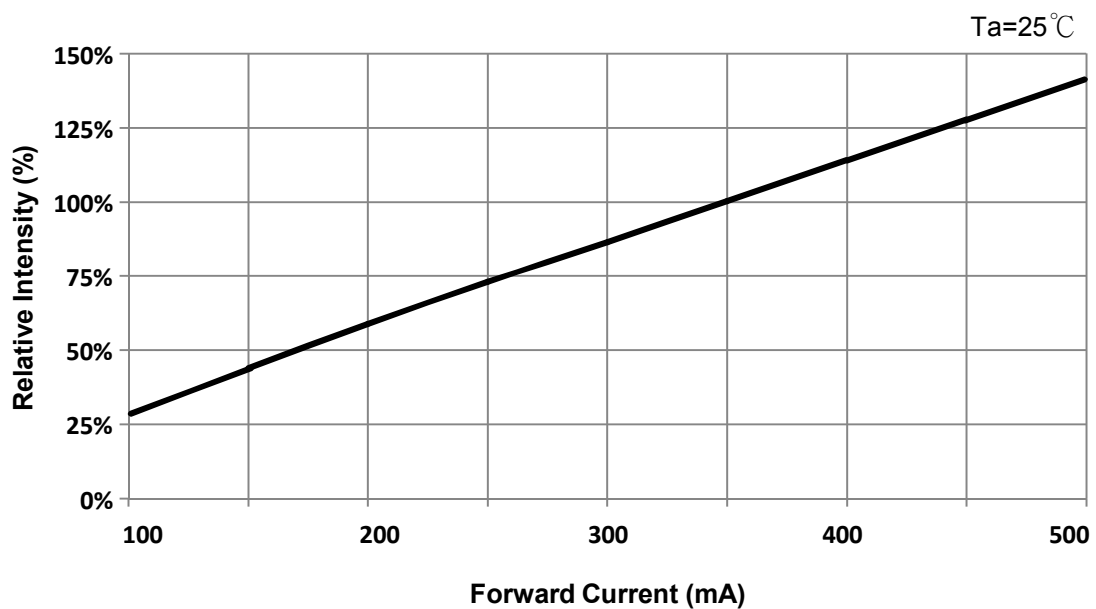
Parameter	Symbol	Rating	Units
Power Dissipation	P _d	2.0	W
Forward Current	I _F	350	mA
Peak Forward Current	I _{FP}	500	mA
Electrostatic Discharge	ESD	4000	V
Operating Temperature	T _{opr}	-30 ~ +80	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Junction temperature	T _j	100	°C



Forward Voltage Vs. Forward Current

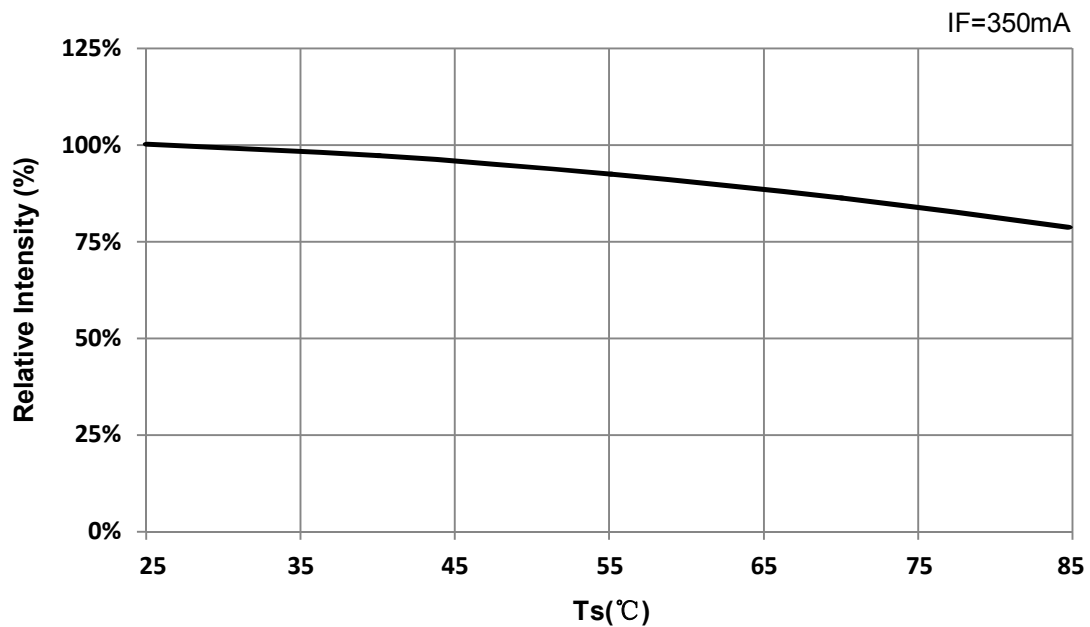


Forward Current Vs. Relative Intensity

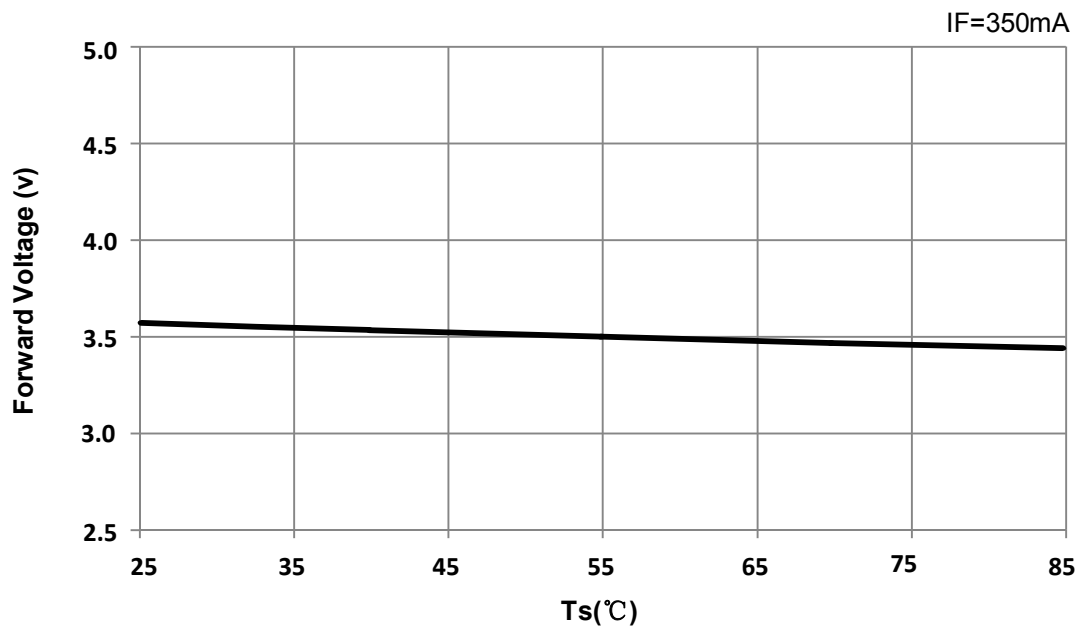




Solder Temperature Vs. Relative Intensity

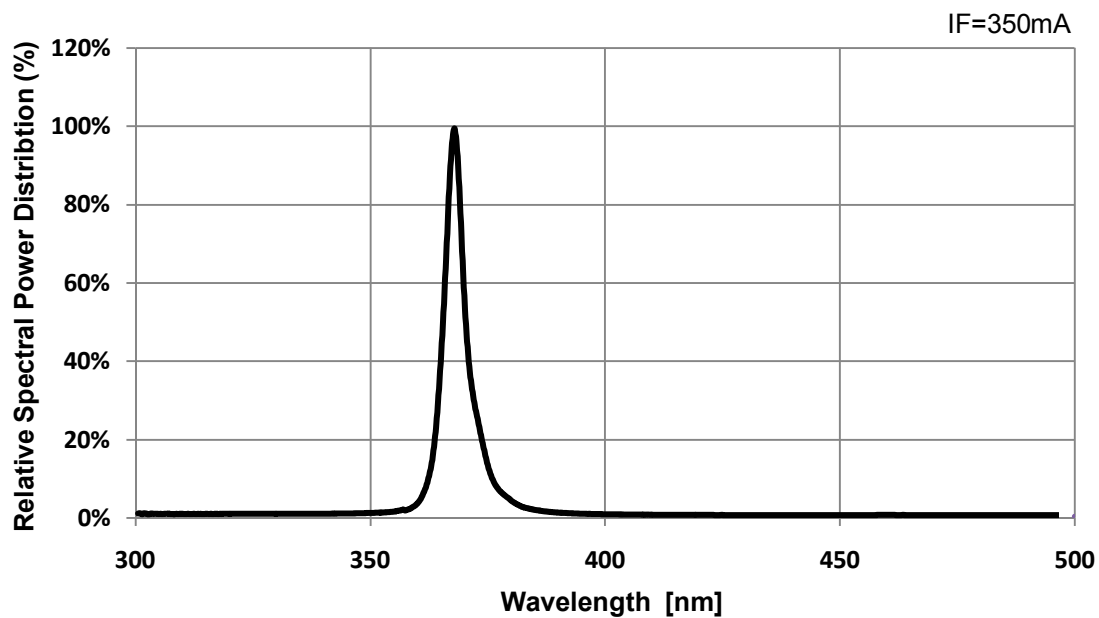


Solder Temperature Vs. Forward Voltage

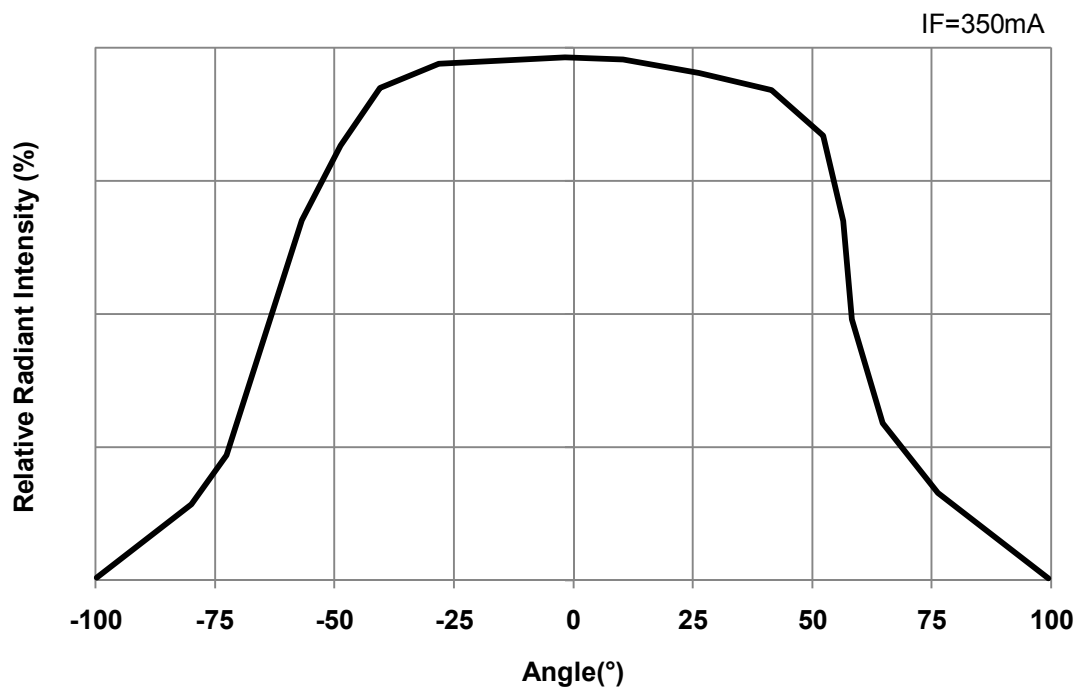




Spectrum Distribution

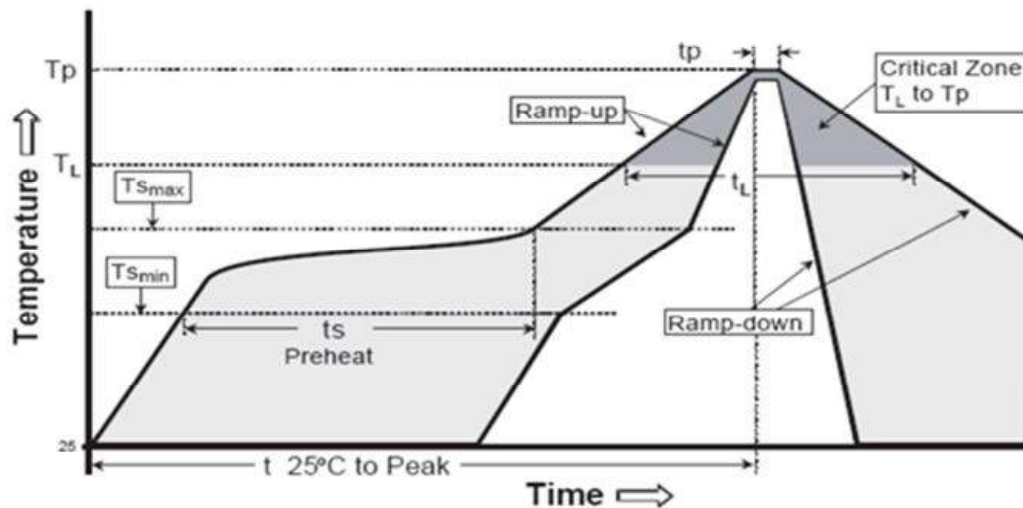


Radiation diagram



Guideline for Soldering

Reflow Soldering: Use the conditions shown in the under Figure of Pb-Free Reflow Soldering.



Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Average ramp-up rate (Ts_max to Tp)	3° C/second max.	3° C/second max.
Preheat - Temperature Min (Ts_min) - Temperature Max (Ts_max) - Time (Ts_min to Ts_max) (ts)	100 °C 145 °C 60-120 seconds	140 °C 185 °C 60-180 seconds
Time maintained above: - Temperature (TL) - Time (tL)	182 °C 60-150 seconds	215 °C 60-150 seconds
Peak Temperature (Tp)	215°C	250°C
Time within 5°C of actual Peak Temperature (tp)	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 7 ~ 8 zones.