

TH-UVxx5T1WFYT50-3535F

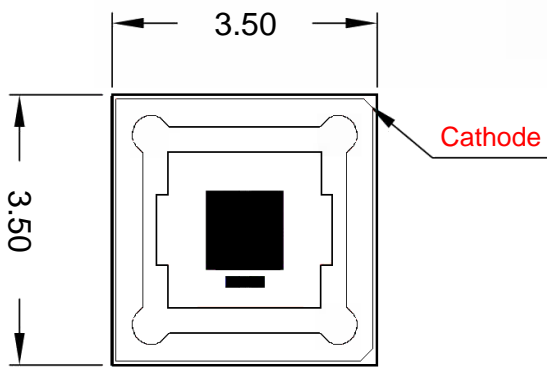


CAUTION

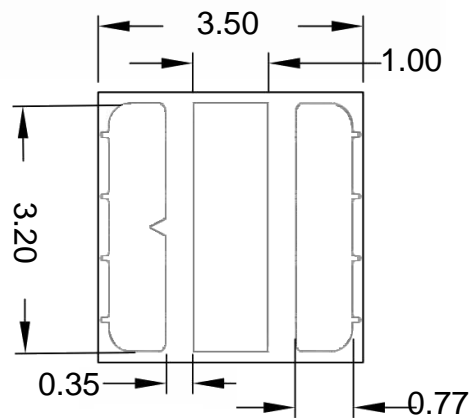
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



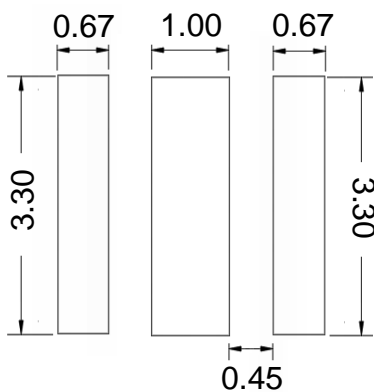
Mechanical Dimensions



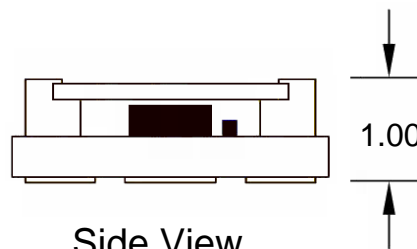
Front Side



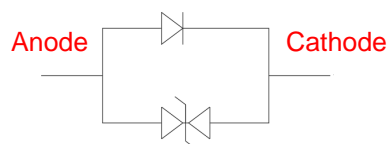
Back Side



Solder Pad of PCB



Side View



Zener Diode

Notes :

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



Electro-Optical characteristics at 350mA

(T_a=25℃, RH=30%)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Current	I _F			350		mA
Forward Voltage ^[4]	V _F	I _F = 350mA	4.8	-	7.0	V
Radiant Flux ^[2]	Φ _e ^[3]	I _F = 350mA	45	-	80	mW
Peak Wavelength ^[1] TH-UV255T1WFYT50-3535F:255nm TH-UV265T1WFYT50-3535F:265nm TH-UV275T1WFYT50-3535F:275nm TH-UV285T1WFYT50-3535F:285nm TH-UV295T1WFYT50-3535F:295nm TH-UV305T1WFYT50-3535F:305nm TH-UV315T1WFYT50-3535F:315nm	λ _p	I _F = 350mA	250	255	260	nm
			260	265	270	
			270	275	280	
			280	285	290	
			290	295	300	
			300	305	310	
			310	315	320	
Viewing Angle	2 θ _{1/2}	I _F = 350mA		120		deg.
Spectrum Half Width	Δ λ	I _F = 350mA		10		nm
Thermal Resistance	R _{θj-b}	I _F = 350mA		25.2		°C /W

Absolute Maximum Ratings

Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	500	mA
Power Dissipation	P _D	3000	mW
Operating Temperature	T _{opr}	-30 ~ +60	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C

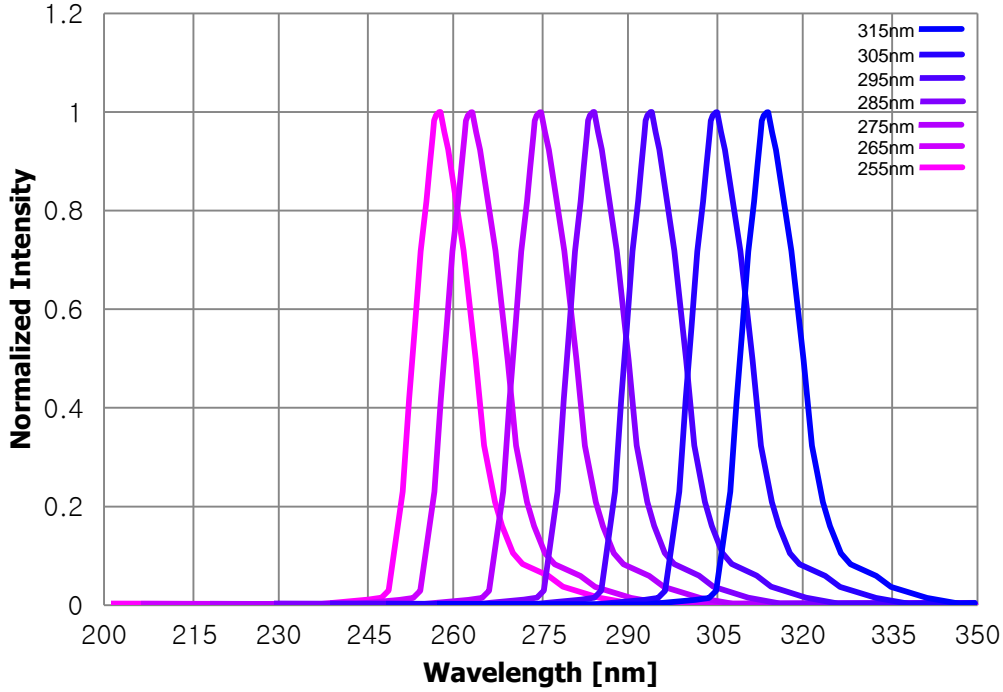
Notes :

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%



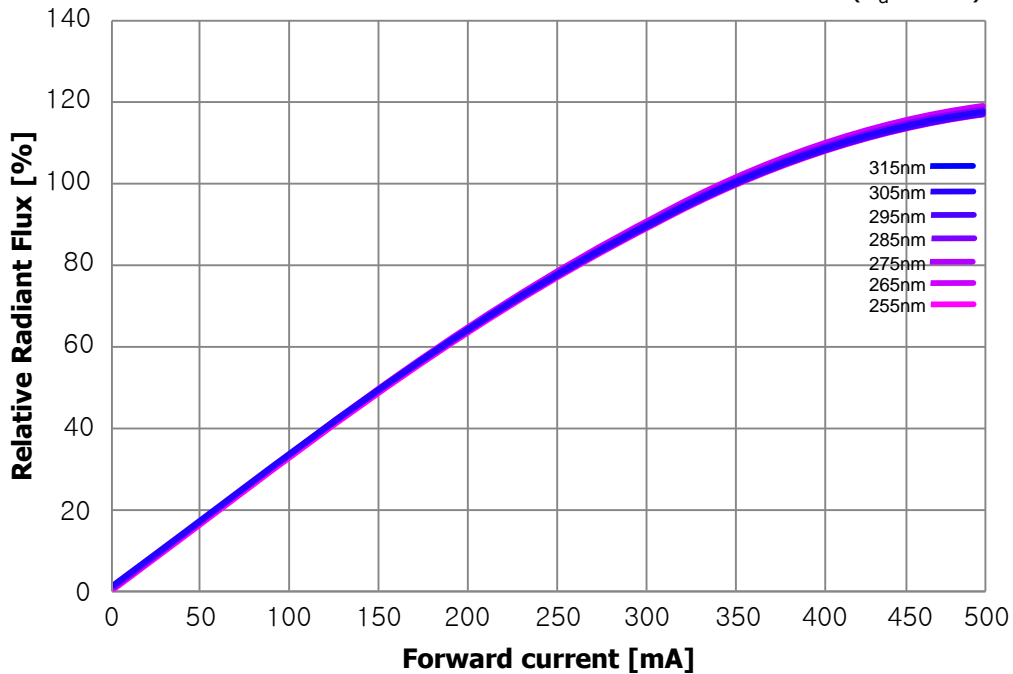
Spectral Power Distribution

($I_F=350\text{mA}$, $T_a=25^\circ\text{C}$, $\text{RH}=30\%$)



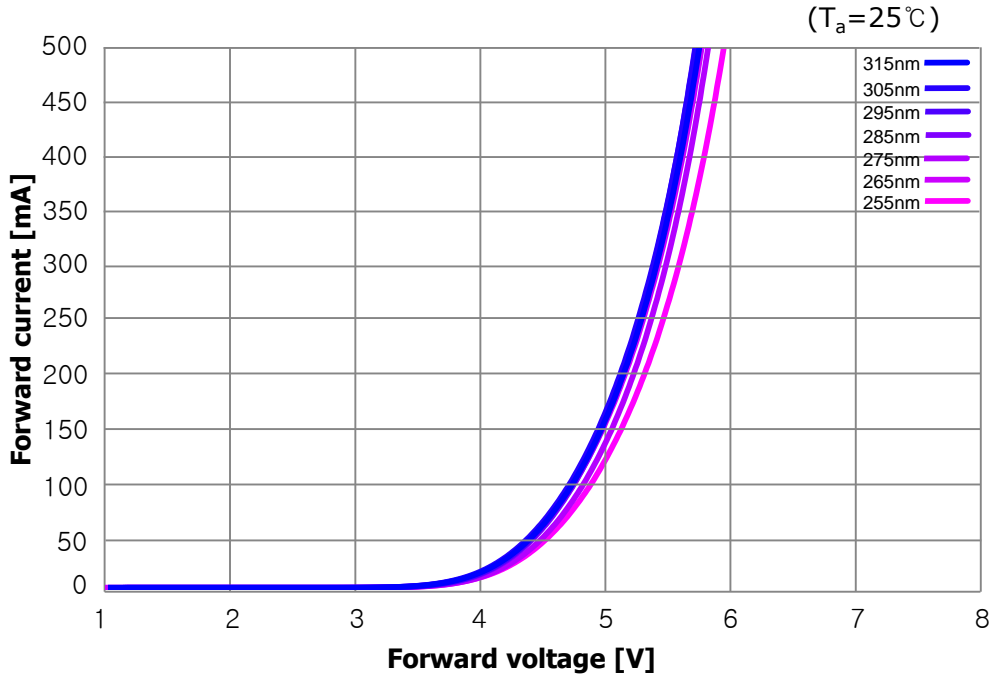
Relative Radiant Flux vs. Forward Current

($T_a=25^\circ\text{C}$)

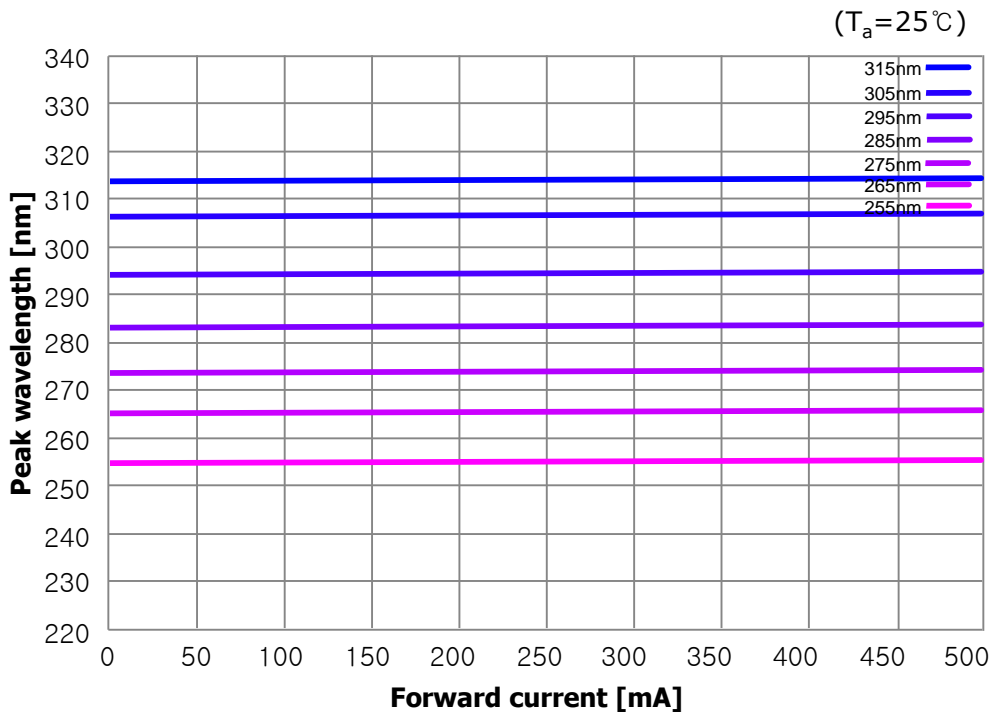




Forward current vs. Forward Voltage

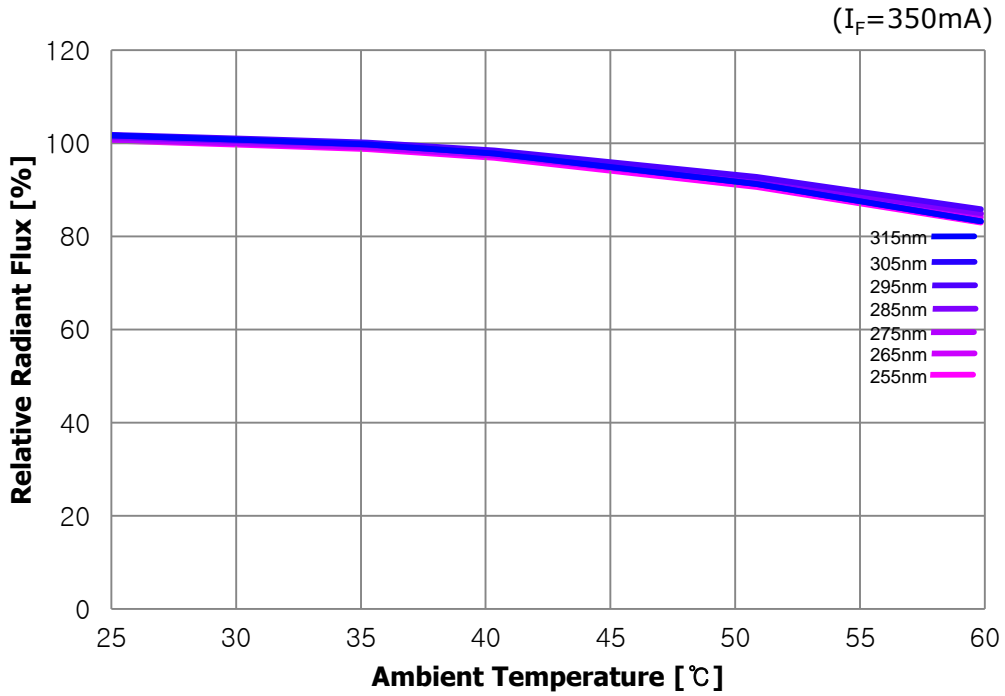


Peak Wavelength vs. Forward current

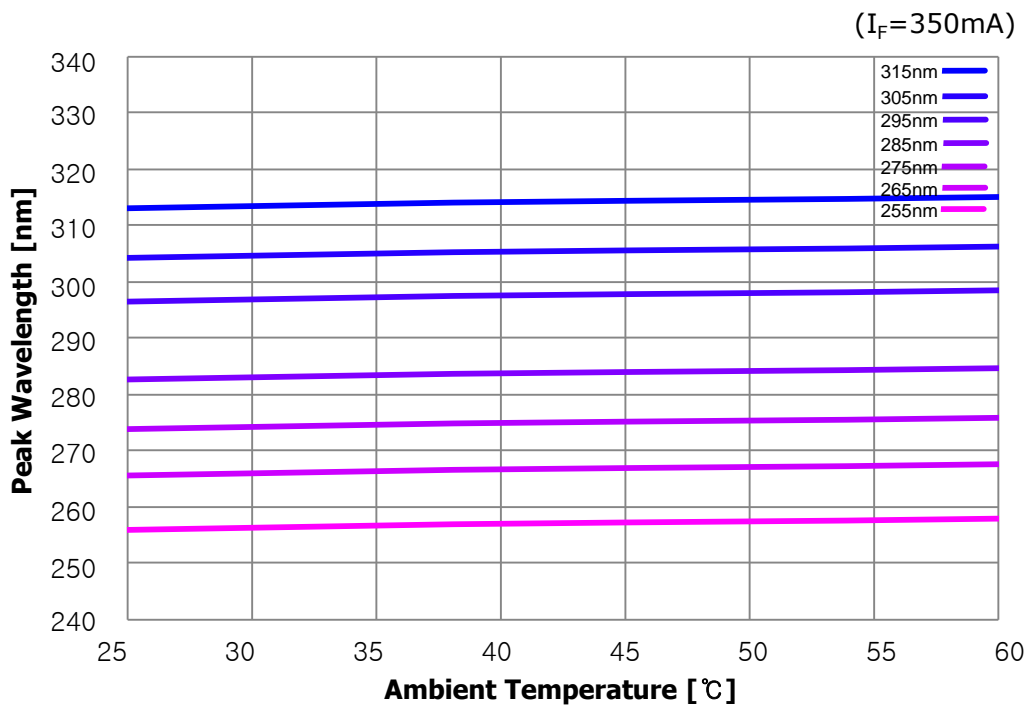




Relative Radiant Flux vs. Ambient Temperature

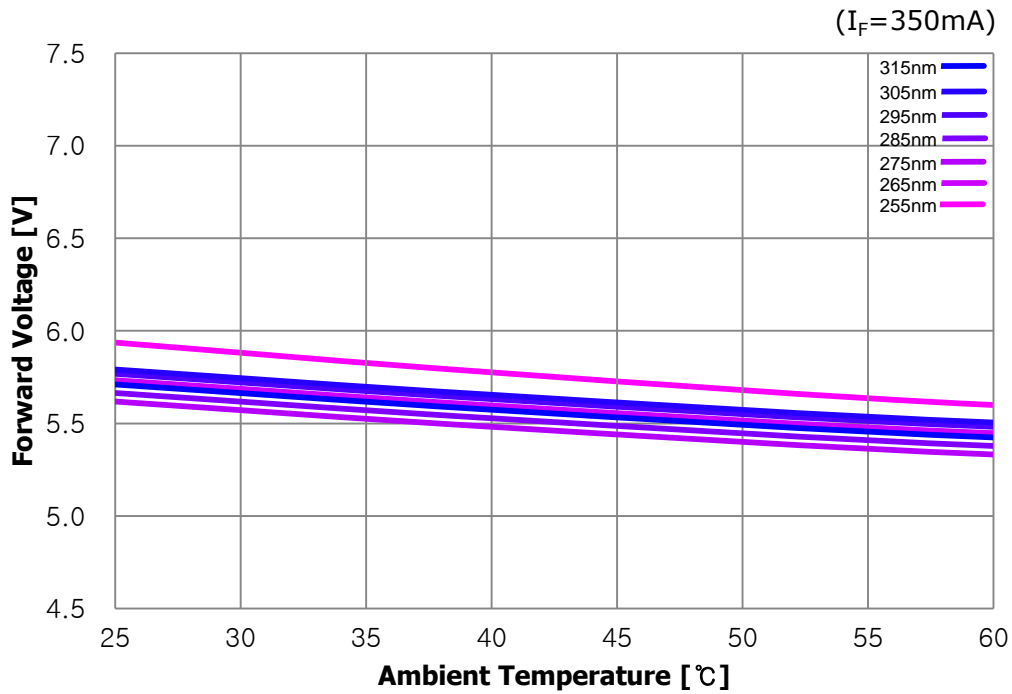


Peak Wavelength vs. Ambient Temperature

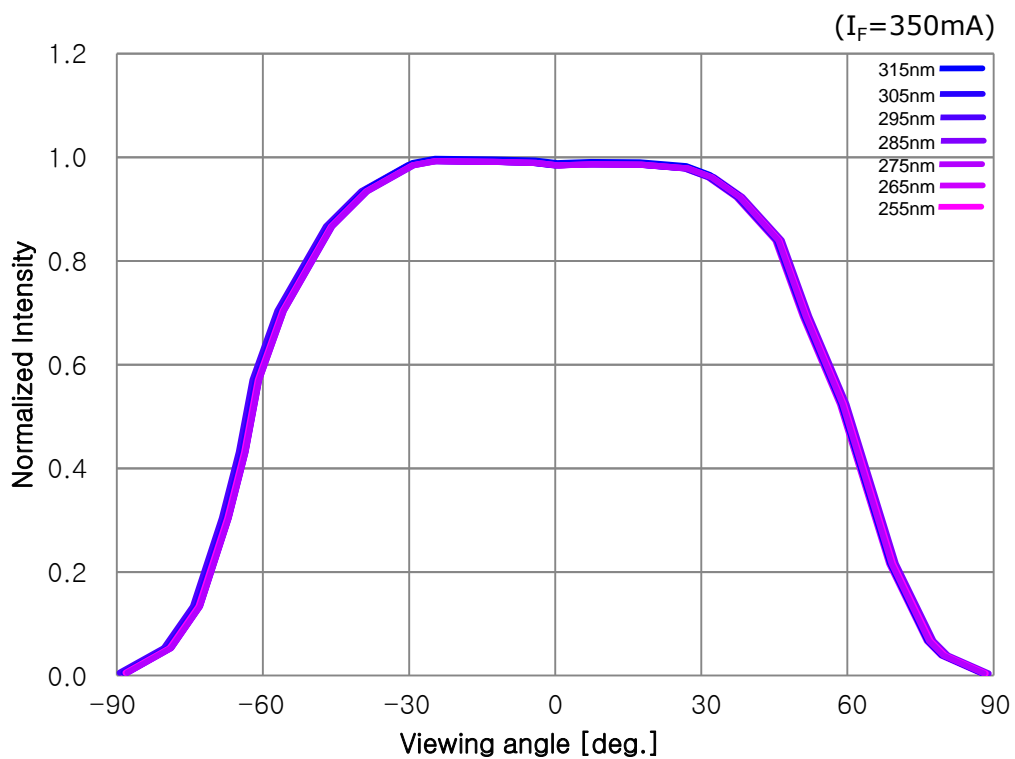


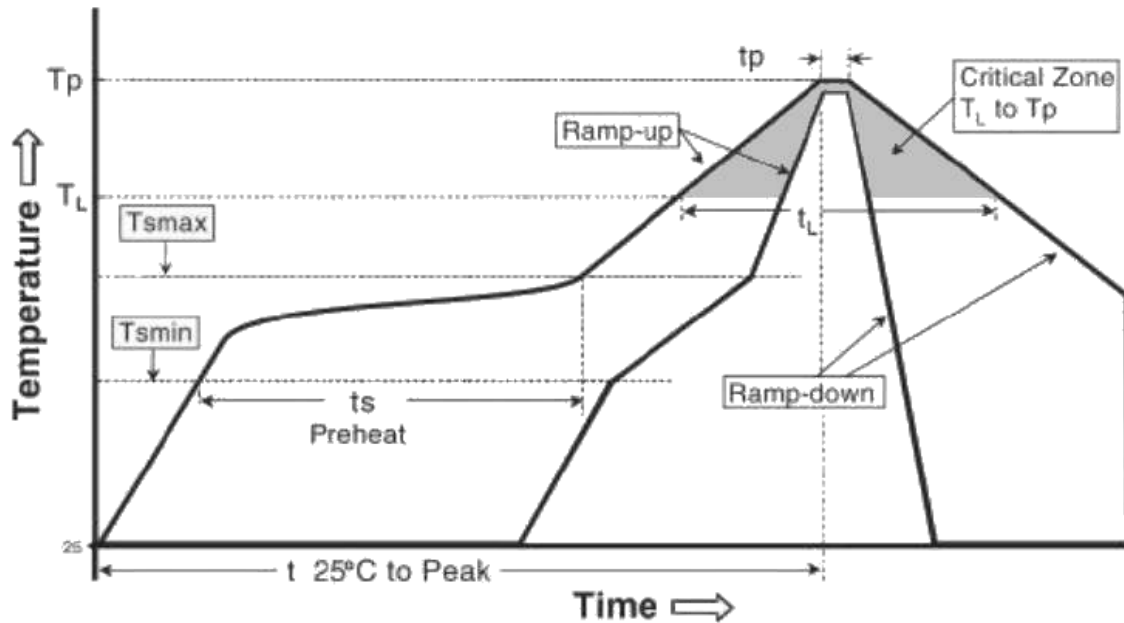


Forward Voltage vs. Ambient Temperature



Radiant Pattern





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)	214 °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.