



TH-UVxxxT0.5WPS15-3535H-60

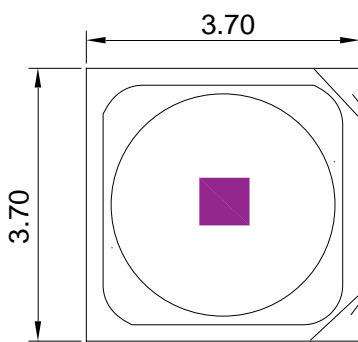


CAUTION

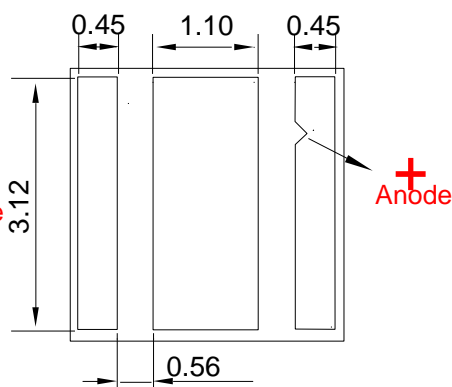
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



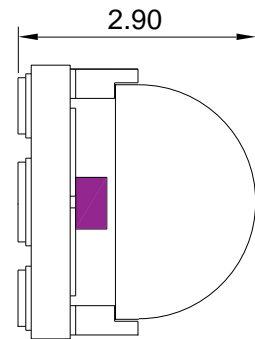
Mechanical Dimensions



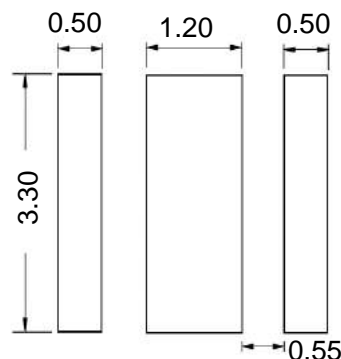
Front Side



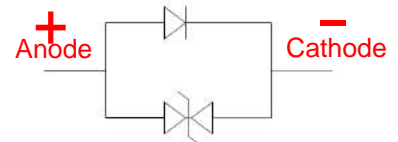
Back Side



Side View



Solder Pad of PCB



Zener Diode

Notes :

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



Electro-Optical characteristics at100mA

(T_a=25℃, RH=30%)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Current	I _F			100		mA
Forward Voltage ^[4]	V _F	I _F = 100mA	4.8		7.0	V
Radiant Flux ^[2]	Φ _e ^[3]	I _F = 100mA	10	15	25	mW
Peak Wavelength ^[1] 255nm:TH-UV255T0.5WPS15-3535H-60 265nm:TH-UV265T0.5WPS15-3535H-60 275nm:TH-UV275T0.5WPS15-3535H-60 285nm:TH-UV285T0.5WPS15-3535H-60 295nm:TH-UV295T0.5WPS15-3535H-60 305nm:TH-UV305T0.5WPS15-3535H-60 315nm:TH-UV315T0.5WPS15-3535H-60	λ _p	I _F = 100mA	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 = 100mA		60		deg.
Spectrum Half Width	Δ λ	I _F = 100mA		10		nm
Thermal Resistance	R _{θ_J-b}	I _F = 100mA		15.5		°C /W

Absolute Maximum Ratings

Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	150	mA
Power Dissipation	P _D	1050	mW
Operating Temperature	T _{opr}	-30 ~ +60	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C

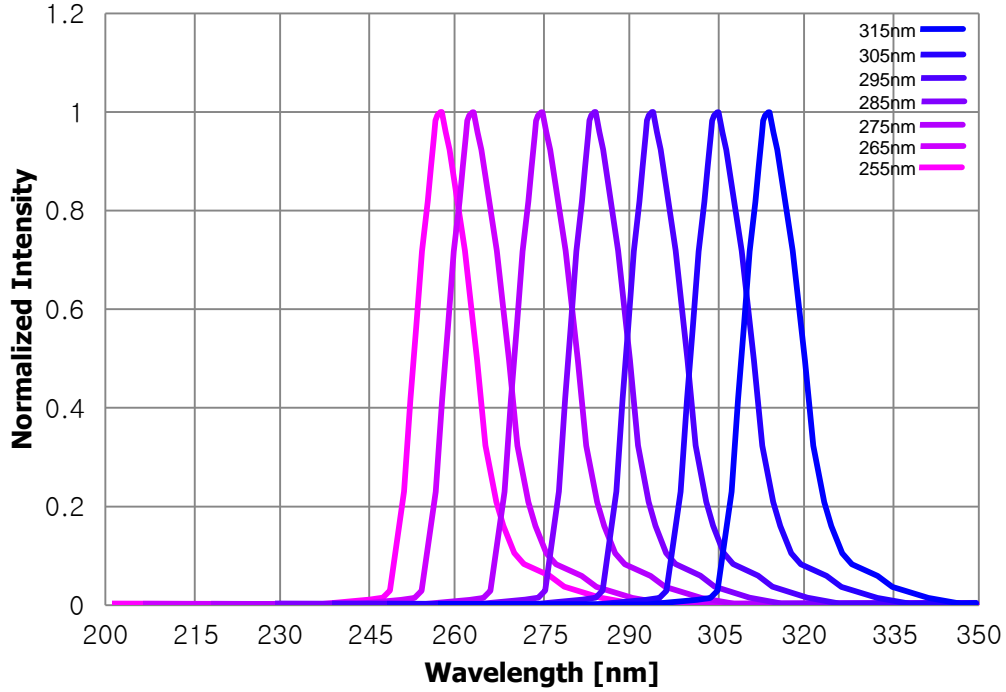
Notes :

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%



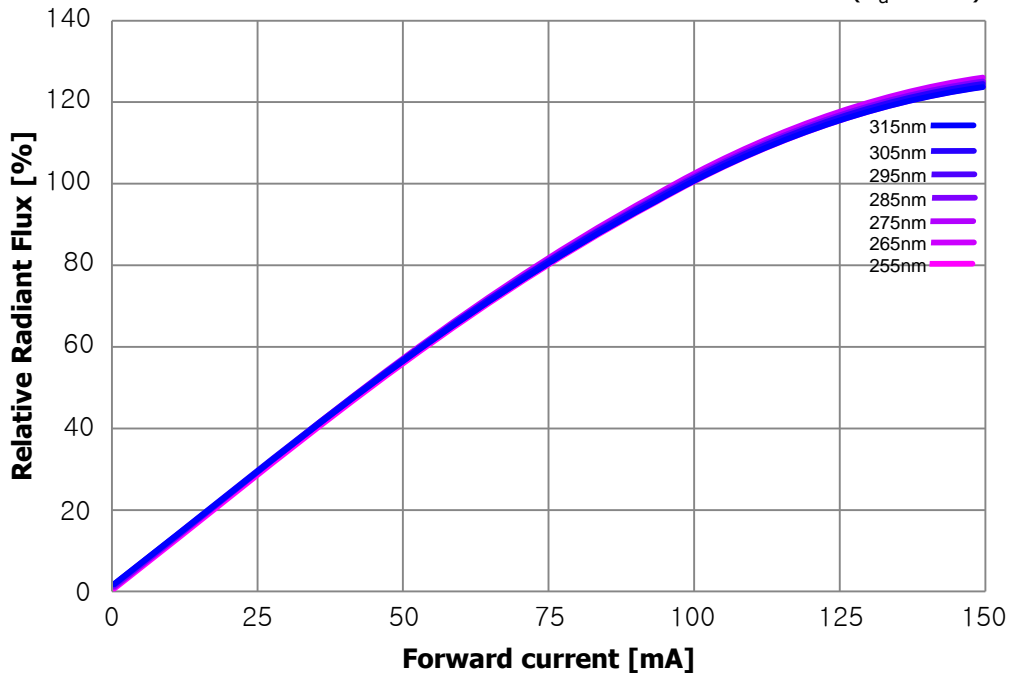
Spectral Power Distribution

($I_F=100\text{mA}$, $T_a=25^\circ\text{C}$, $\text{RH}=30\%$)



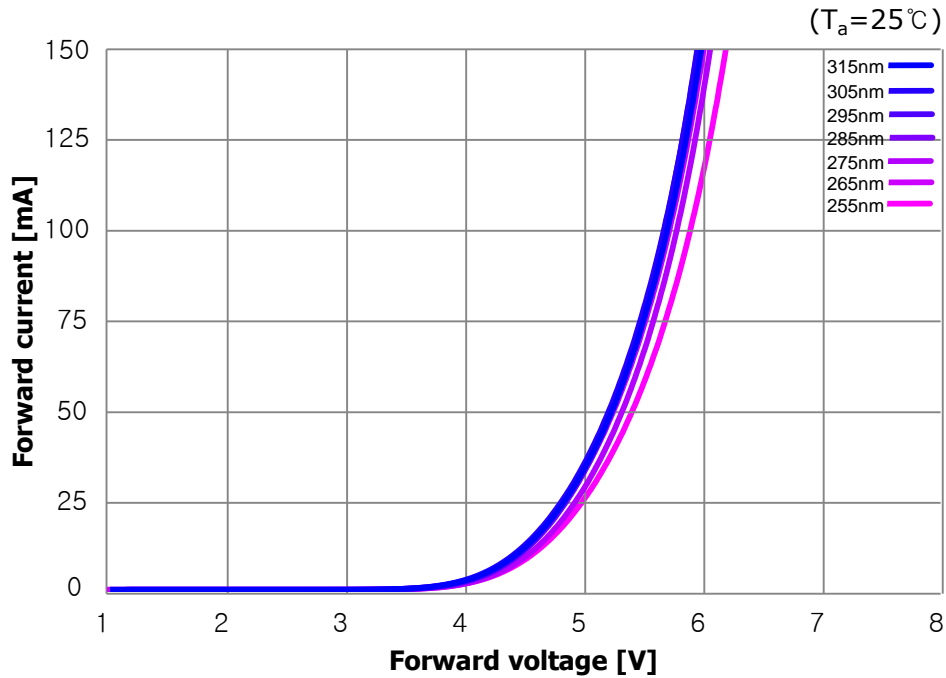
Relative Radiant Flux vs. Forward Current

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

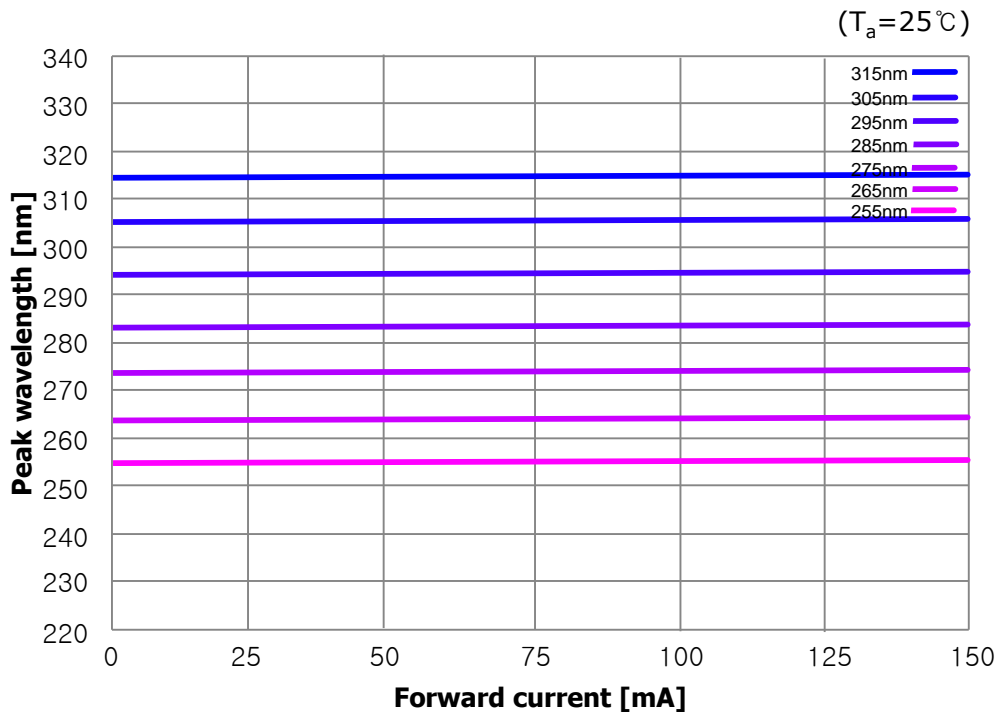




Forward current vs. Forward Voltage

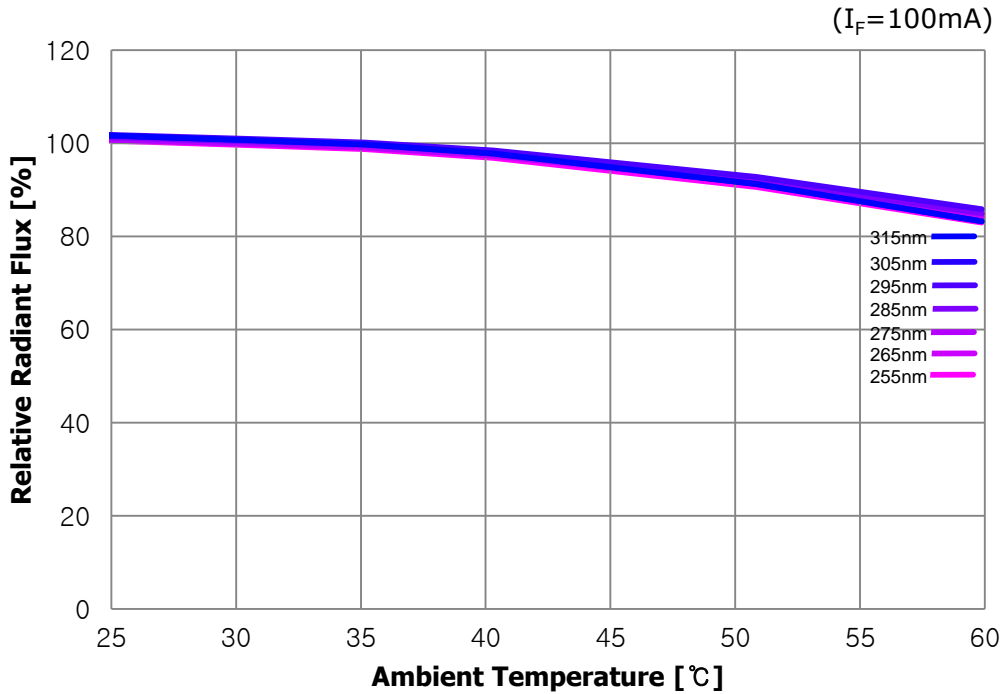


Peak Wavelength vs. Forward current

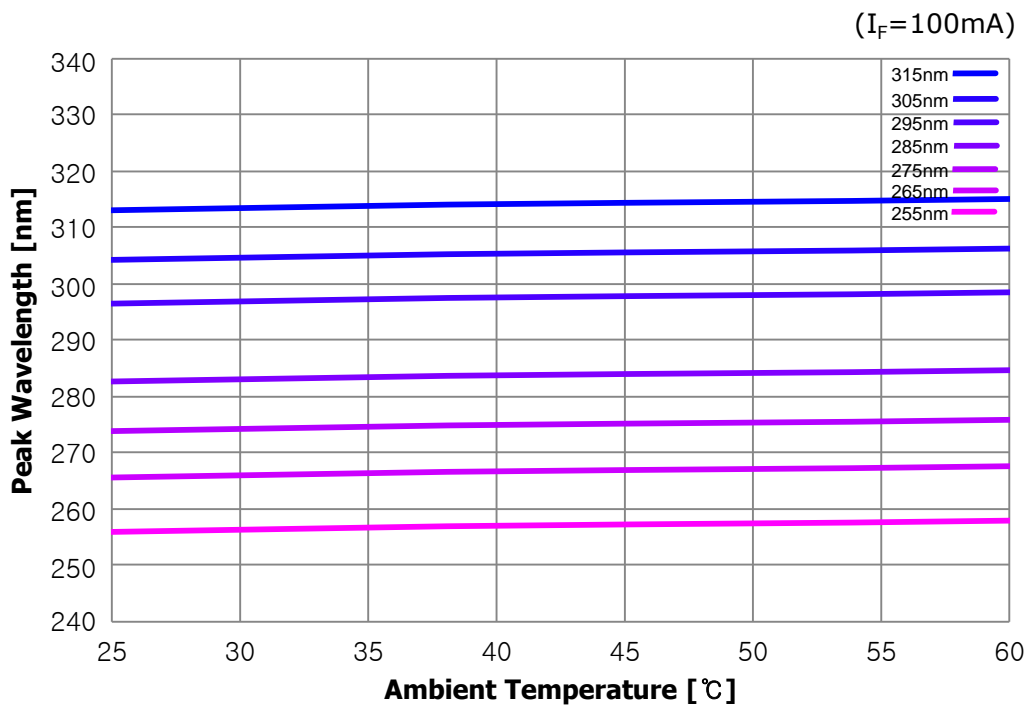




Relative Radiant Flux vs. Ambient Temperature

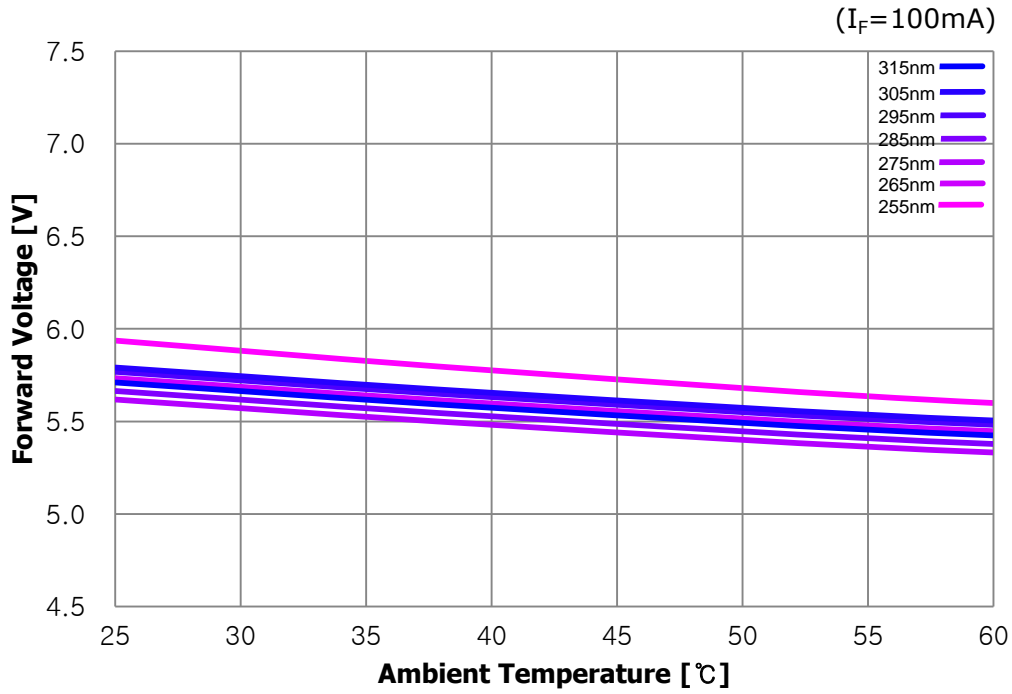


Peak Wavelength vs. Ambient Temperature

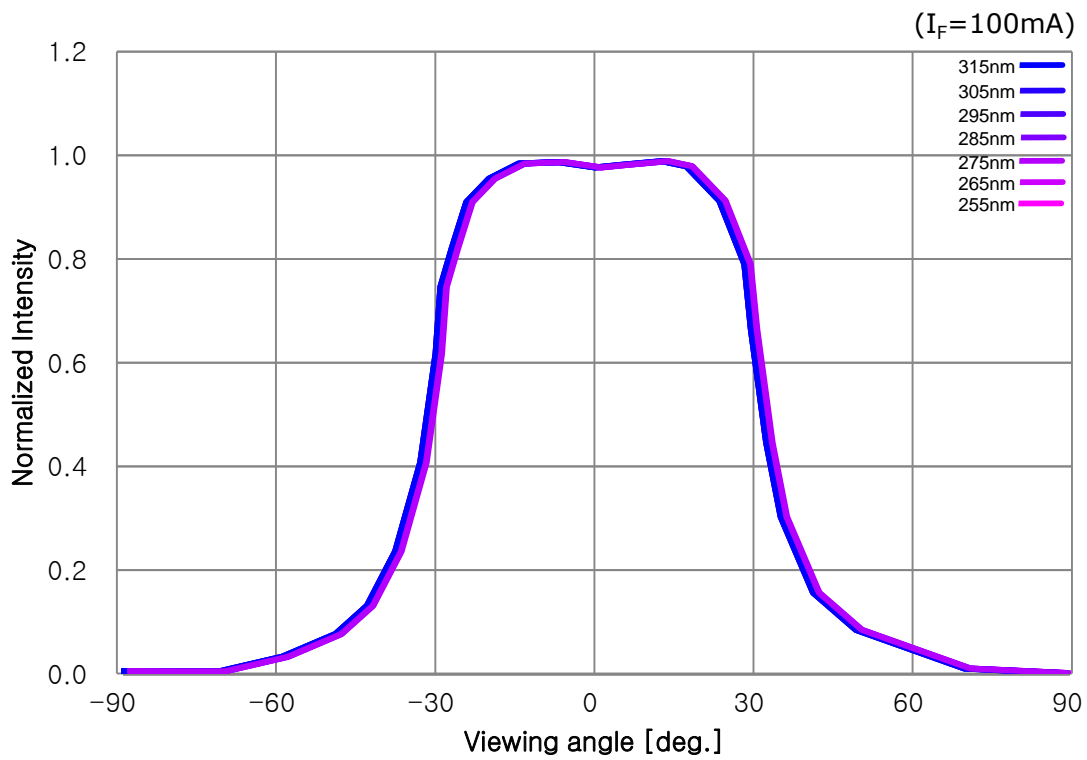


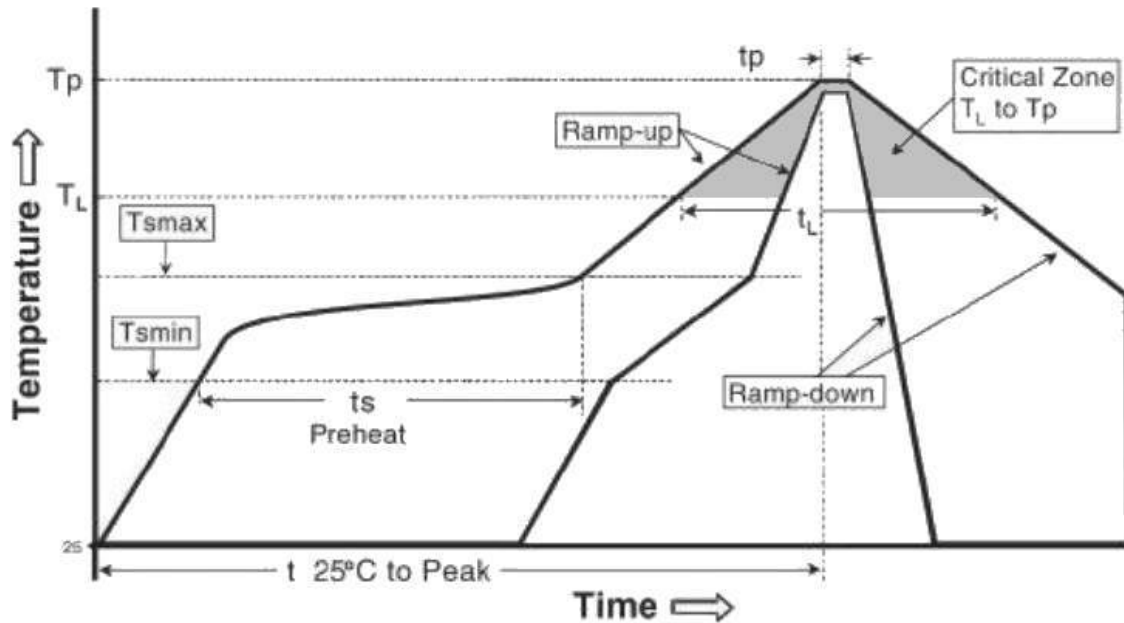


Forward Voltage vs. Ambient Temperature



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)	100 °C
- Temperature Max (Ts_max)	140 °C
- Time (Ts_min to Ts_max) (ts)	60-120 seconds
Time maintained above:	
- Temperature (TL)	180 °C
- Time (tL)	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.