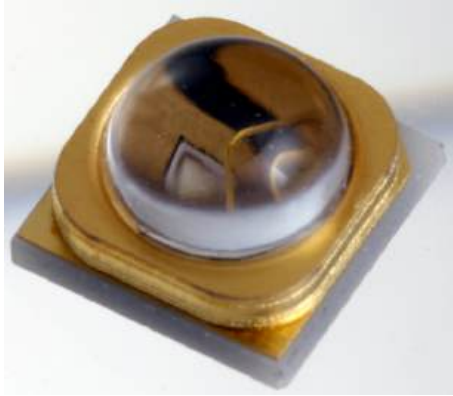




TH-UV405T3WA-3535H-60



APPLICATIONS

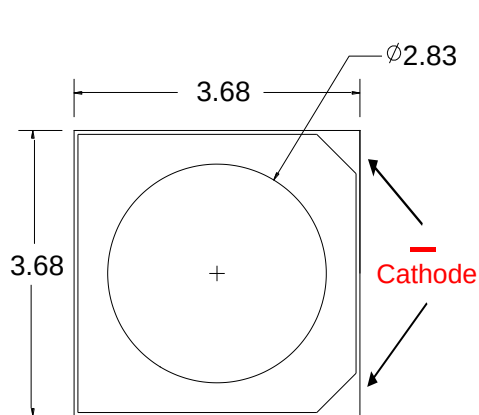
UV Curing
UV Inspection
Industrial Machine Vision
Photolithography
Photocatalysis

CAUTION

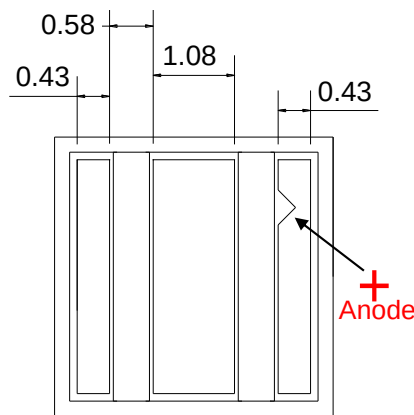
Observe Precautions
For Handling
Electrostatic
Discharge
Sensitive
Devices



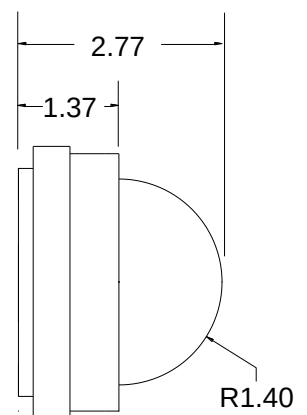
Mechanical Dimensions



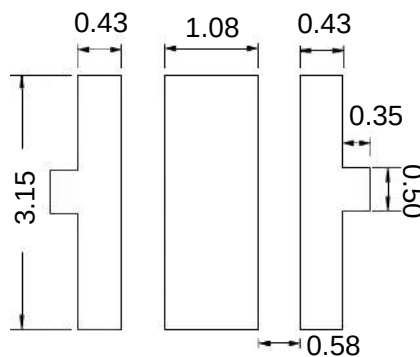
Front Side



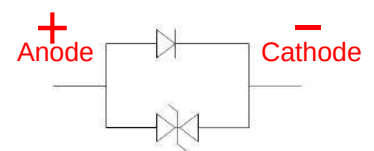
Back Side



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 at 700mA

(T_a=25℃, RH=30%)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Current	I _F			700		mA
Forward Voltage ^[4]	V _F	I _F = 700mA	3.2	3.5	3.9	V
Radiant Flux ^[2]	Φ _e ^[3]	I _F = 700mA	1000	-	1300	mW
Peak Wavelength ^[1]	λ _p	I _F = 700mA	400	-	410	nm
Viewing Angle	2 θ _½	I _F = 700mA		60		deg.
Spectrum Half Width	Δ λ	I _F = 700mA		12		nm
Thermal Resistance	R _{θj-b} ^[5]	I _F = 700mA		4.5		°C /W

Absolute Maximum Ratings

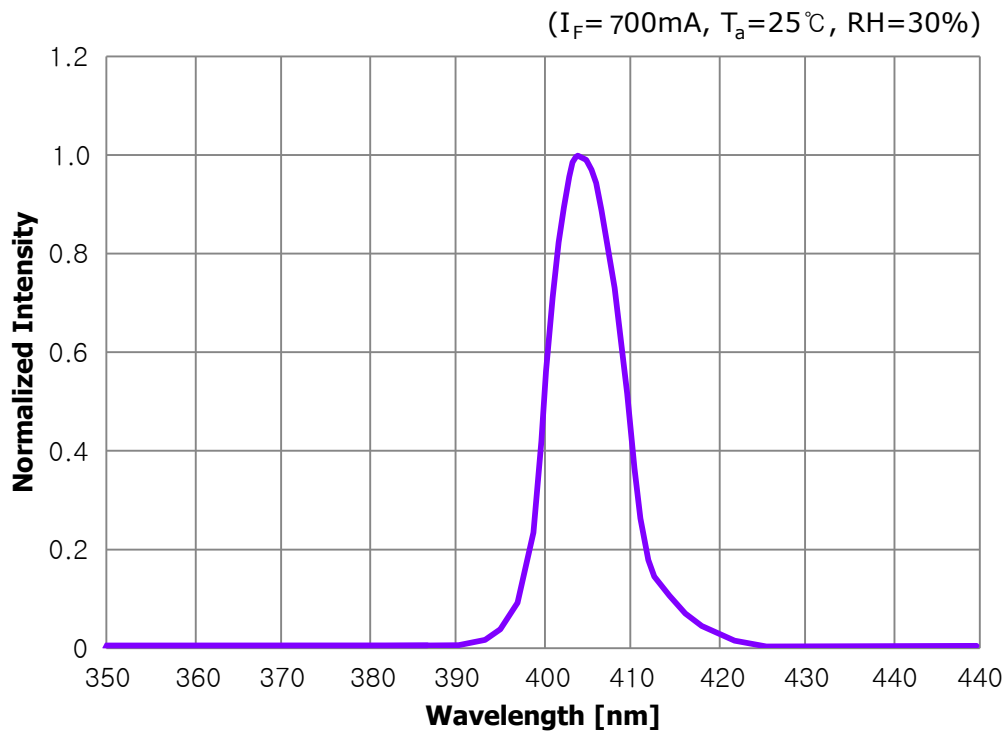
Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	900	mA
Power Dissipation	P _D	3500	mW
Operating Temperature	T _{opr}	-30 ~ +60	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C

Notes :

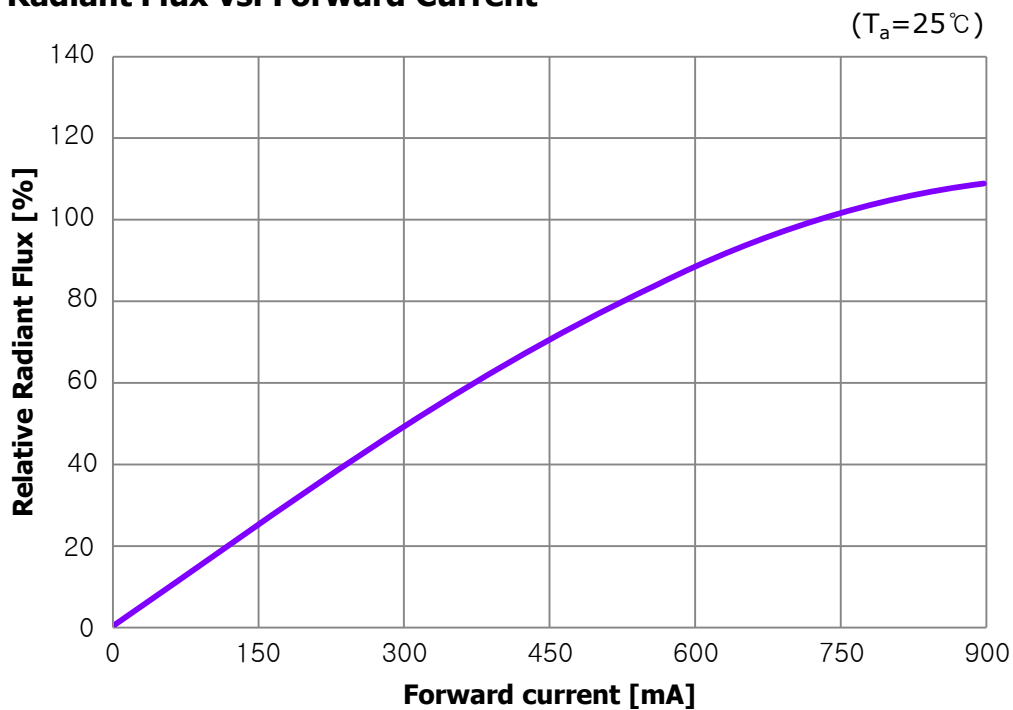
1. Peak Wavelength Measurement tolerance : ±3nm
2. Radiant Flux Measurement tolerance : ± 10%
3. Φ_e is the Total Radiant Flux as measured with an integrated sphere.
4. Forward Voltage Measurement tolerance : ±3%



Spectral Power Distribution

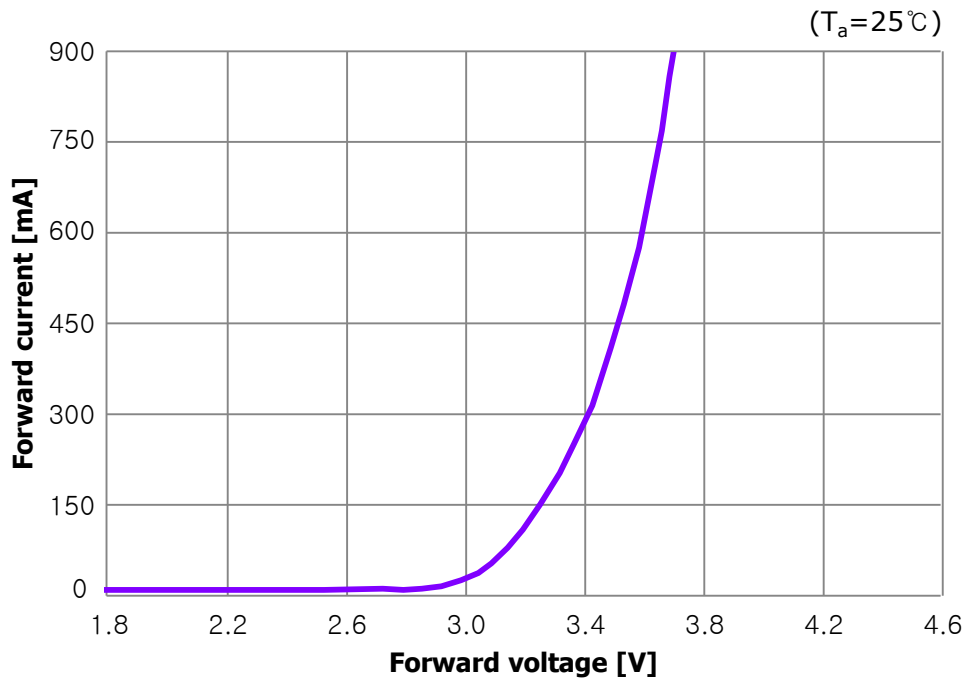


Relative Radiant Flux vs. Forward Current

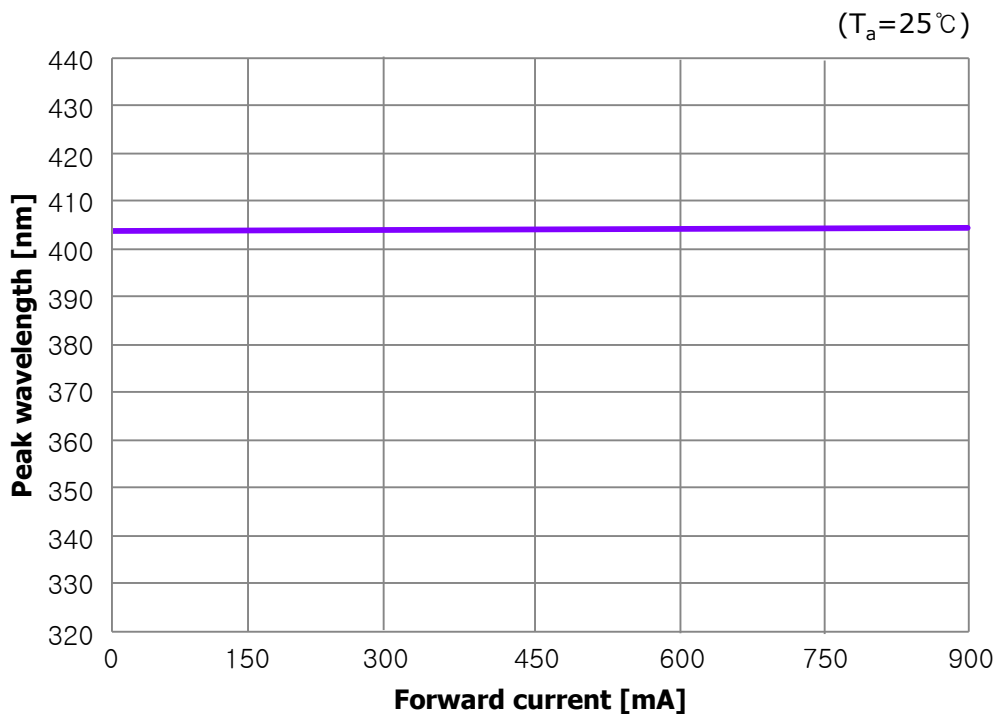




Forward current vs. Forward Voltage

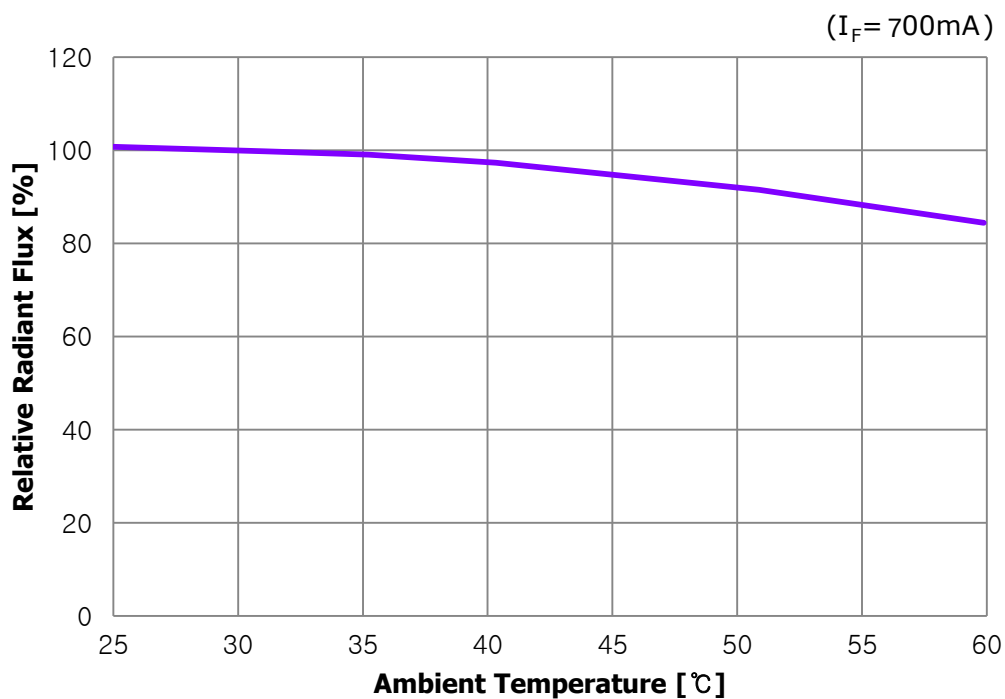


Peak Wavelength vs. Forward current

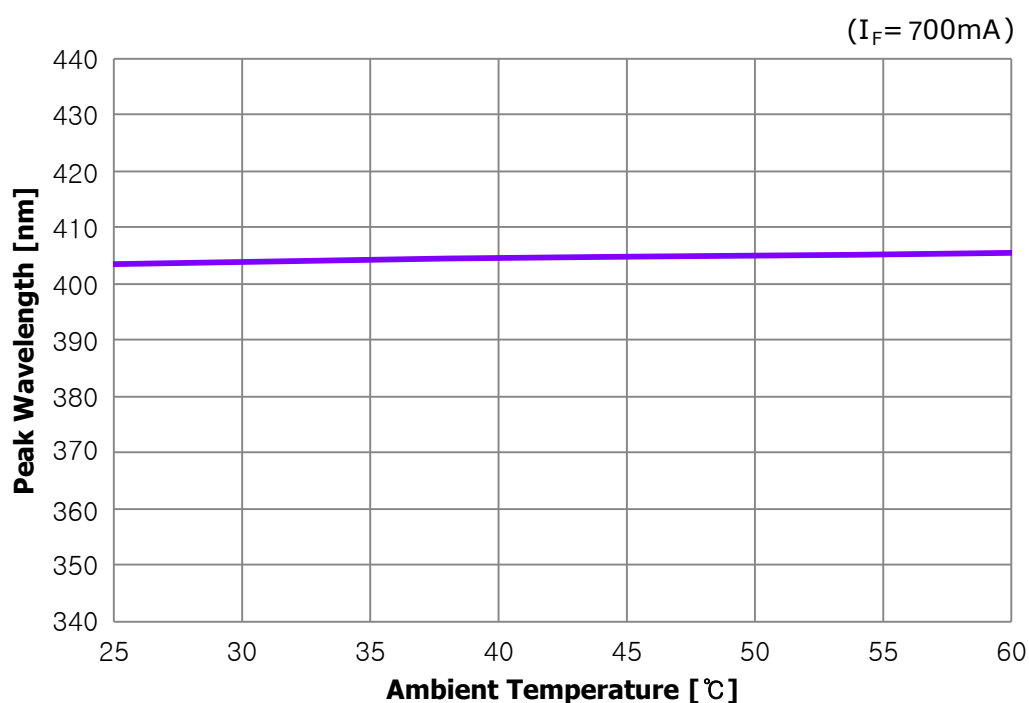




Relative Radiant Flux vs. Ambient Temperature

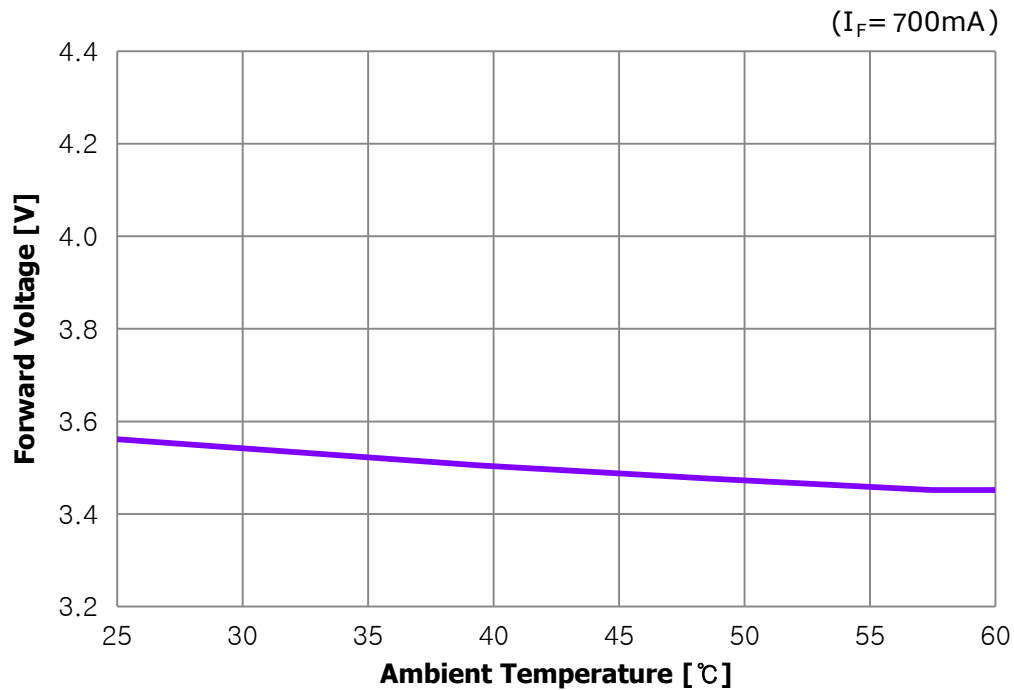


Peak Wavelength vs. Ambient Temperature

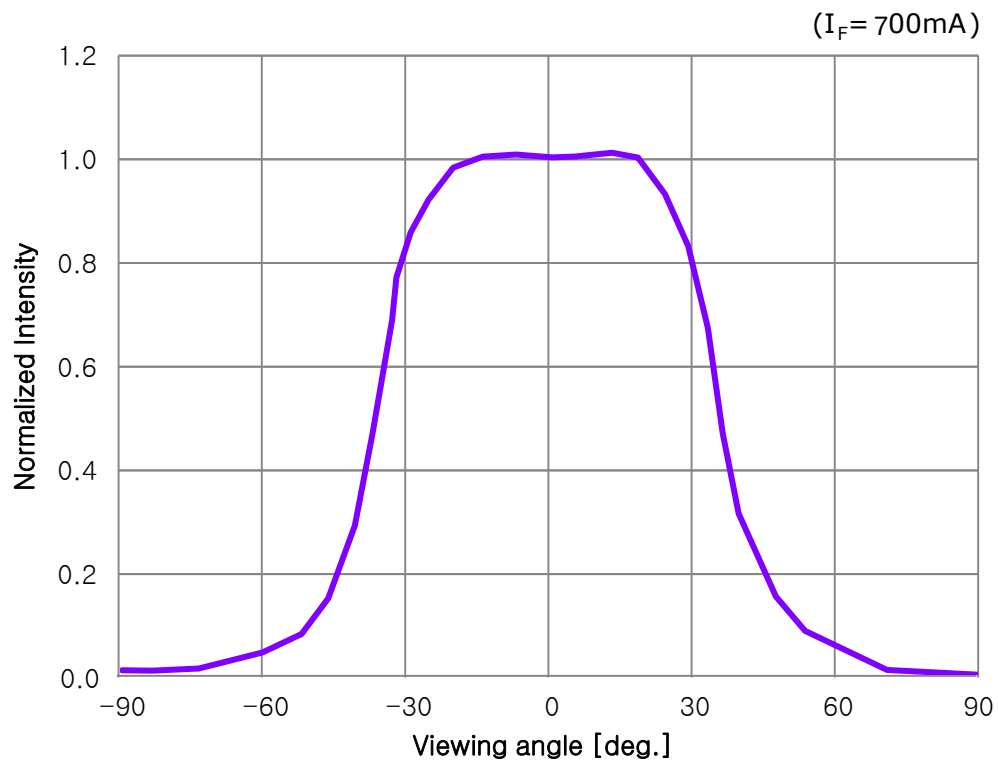


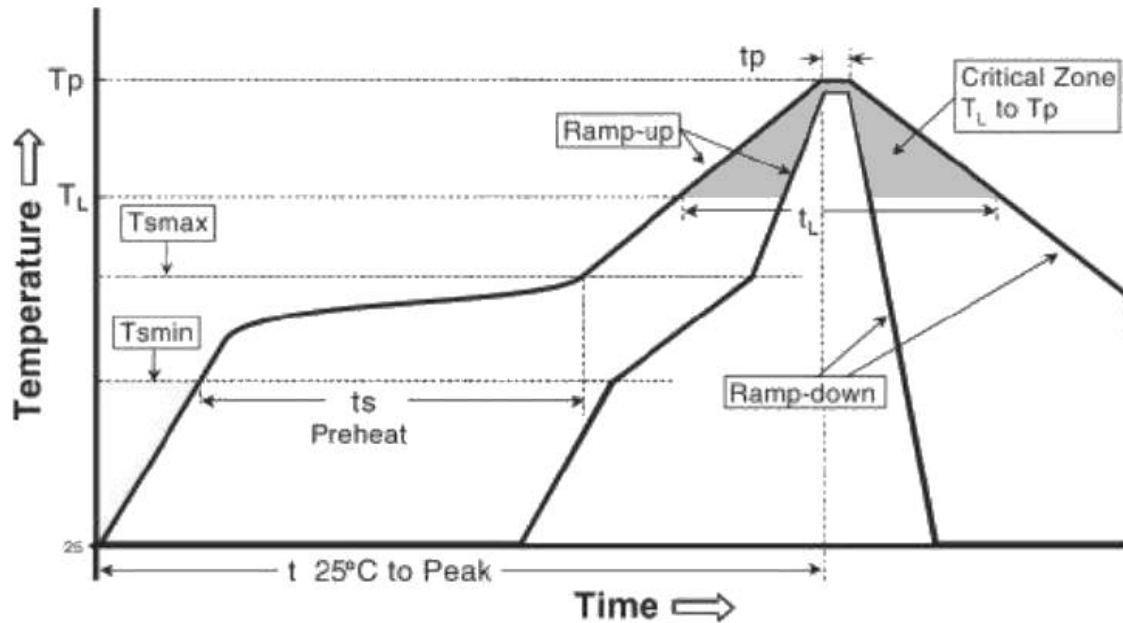


Forward Voltage vs. Ambient Temperature



Radiant Pattern





Profile Feature	Sn-Pb Eutectic Assembly
Average ramp-up rate (T_{s_max} to T_p)	3 °C/second max.
Preheat - Temperature Min (T_{s_min}) - Temperature Max (T_{s_max}) - Time (T_{s_min} to T_{s_max}) (t_s)	100 °C 140 °C 60-120 seconds
Time maintained above: - Temperature (T_L) - Time (t_L)	180 °C 20-50 seconds
Peak Temperature (T_p)	214°C
Time within 5°C of actual Peak Temperature (t_p)	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.