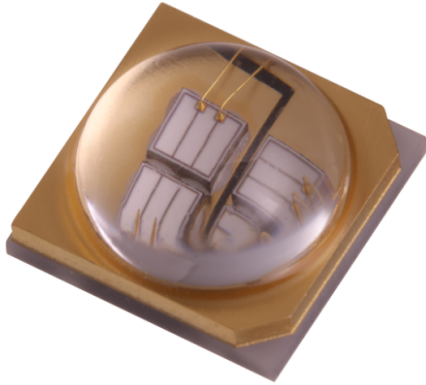




TH-UVxxxT15WA-6868H-80

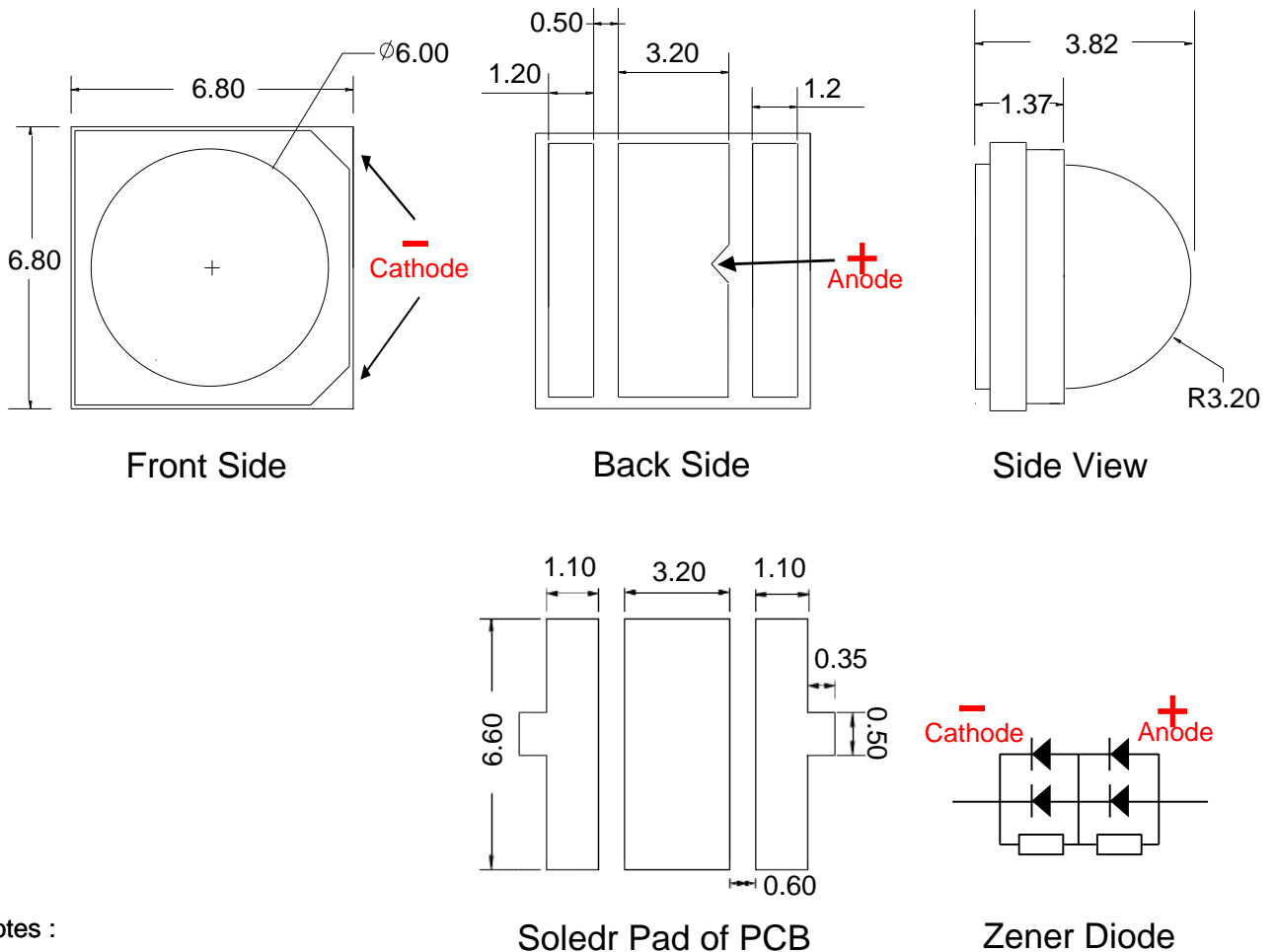


CAUTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Mechanical Dimensions



Notes :

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



Electro-Optical characteristics at 2000mA

(T_a=25℃, RH=30%)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Current	I _F			2000		mA
Forward Voltage ^[4]	V _F	I _F =2000mA	6.8	7.4	8.2	V
Radiant Flux ^[2]	Φ _e ^[3]	I _F =2000mA	4500	5900	7000	mW
Peak Wavelength ^[1] 365nm 385nm 395nm 405nm 415nm	λ _p	I _F =2000mA	360	-	370	nm
			380	-	390	
			390	-	400	
			400	-	410	
			410	-	425	
Viewing Angle	2 θ _{1/2}	I _F =2000mA		80		deg.
Spectrum Half Width	Δλ	I _F =2000mA		12		nm
Thermal Resistance	R _{θj-b}	I _F =2000mA		4.3		°C/W

Absolute Maximum Ratings

Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	2100	mA
Power Dissipation	P _D	16.2	W
Operating Temperature	T _{opr}	-30 ~ +60	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C

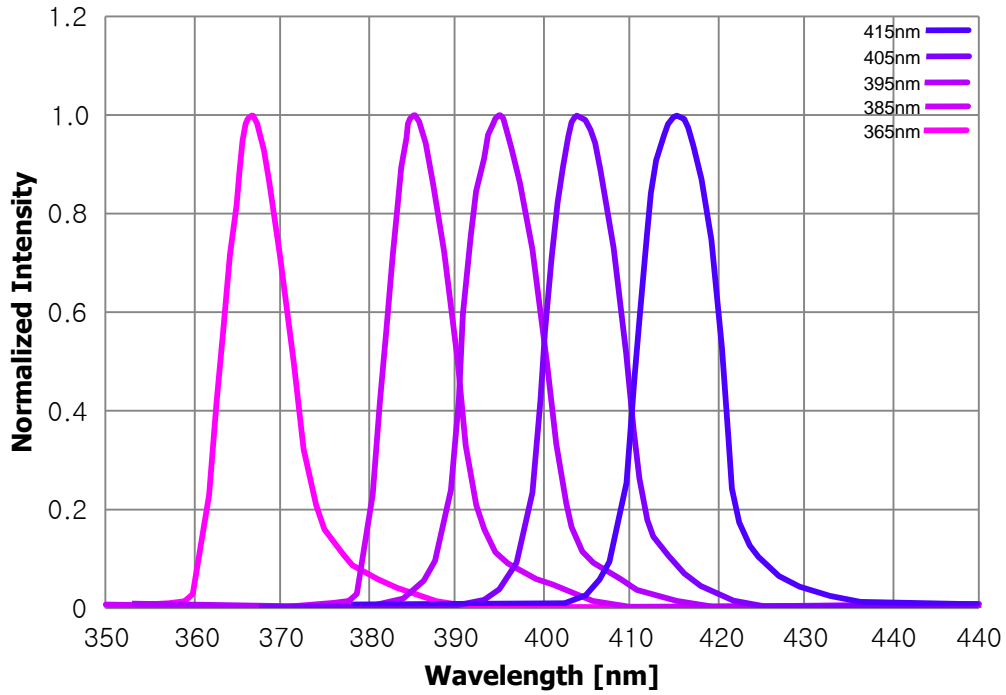
Notes :

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%



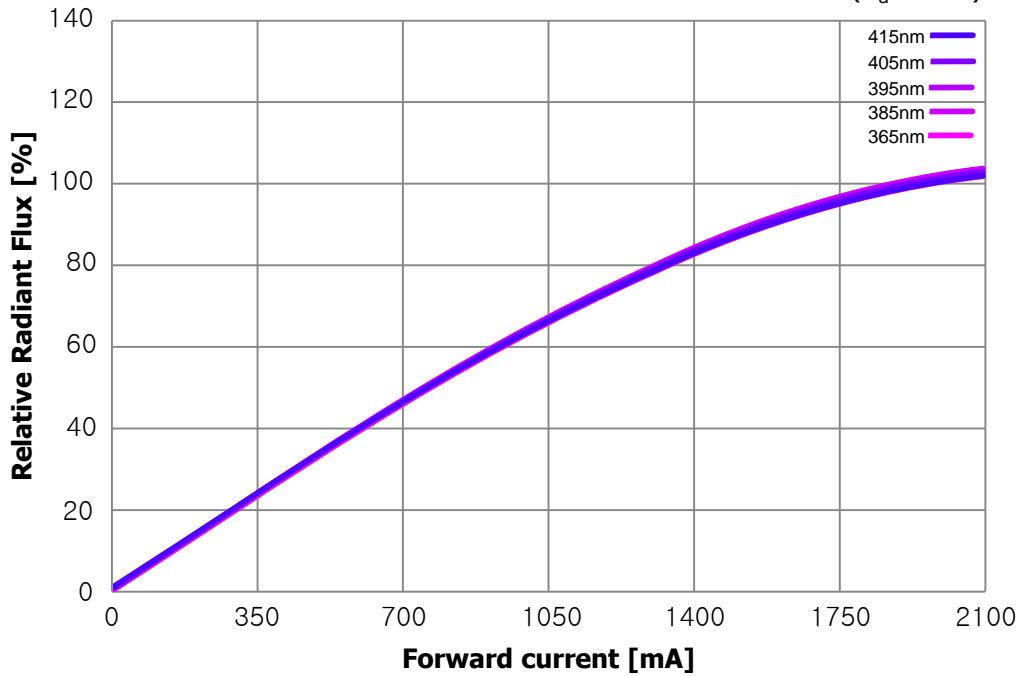
Spectral Power Distribution

($I_F = 2000\text{mA}$, $T_a = 25^\circ\text{C}$, $RH = 30\%$)



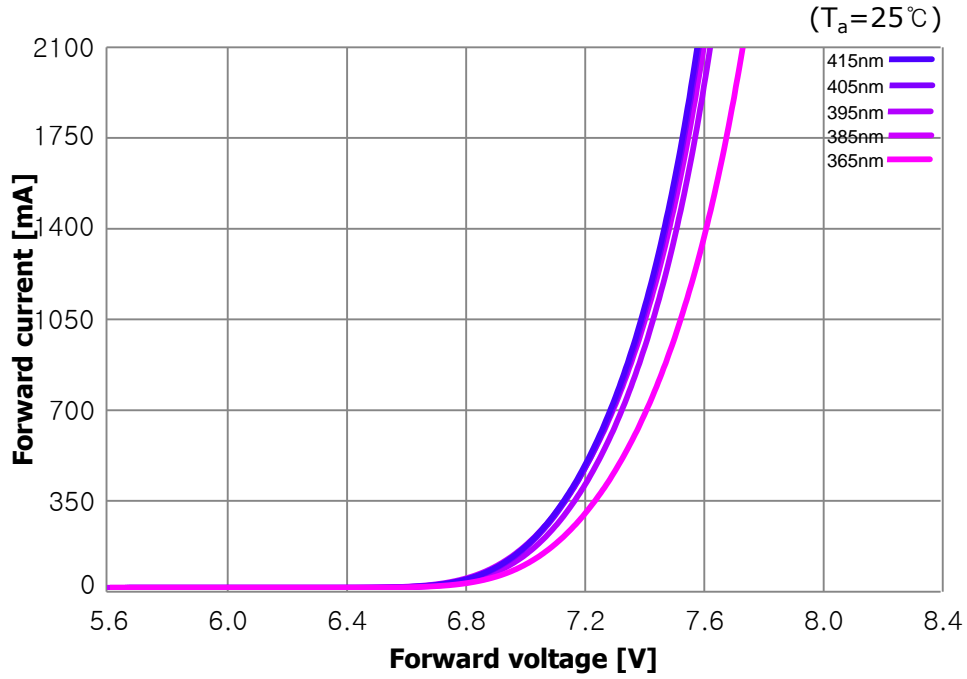
Relative Radiant Flux vs. Forward Current

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

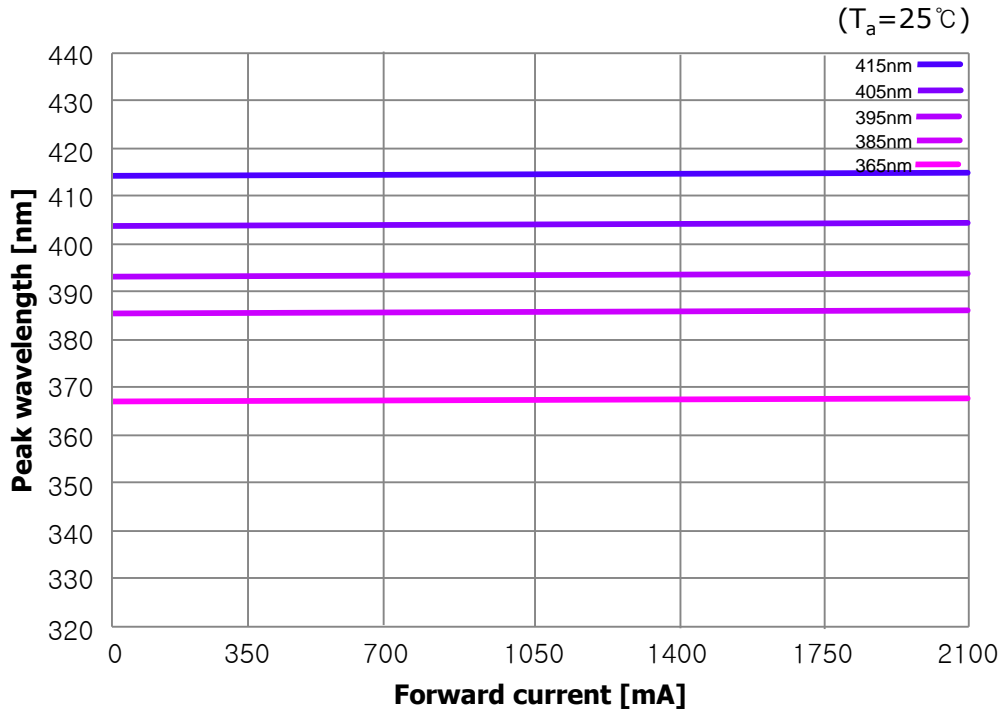




Forward current vs. Forward Voltage

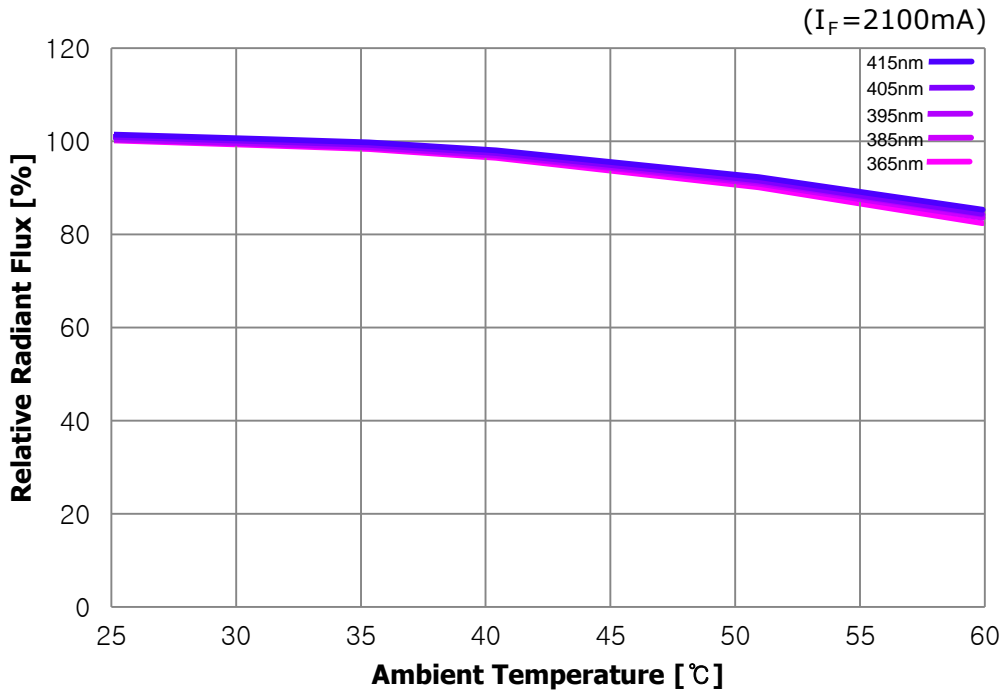


Peak Wavelength vs. Forward current

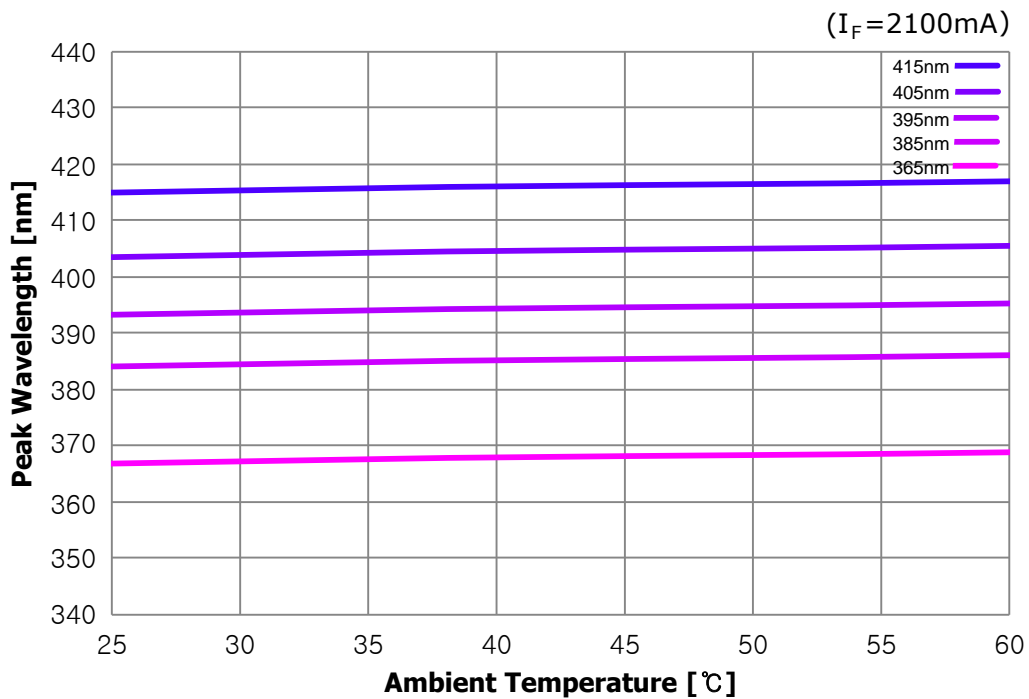




Relative Radiant Flux vs. Ambient Temperature

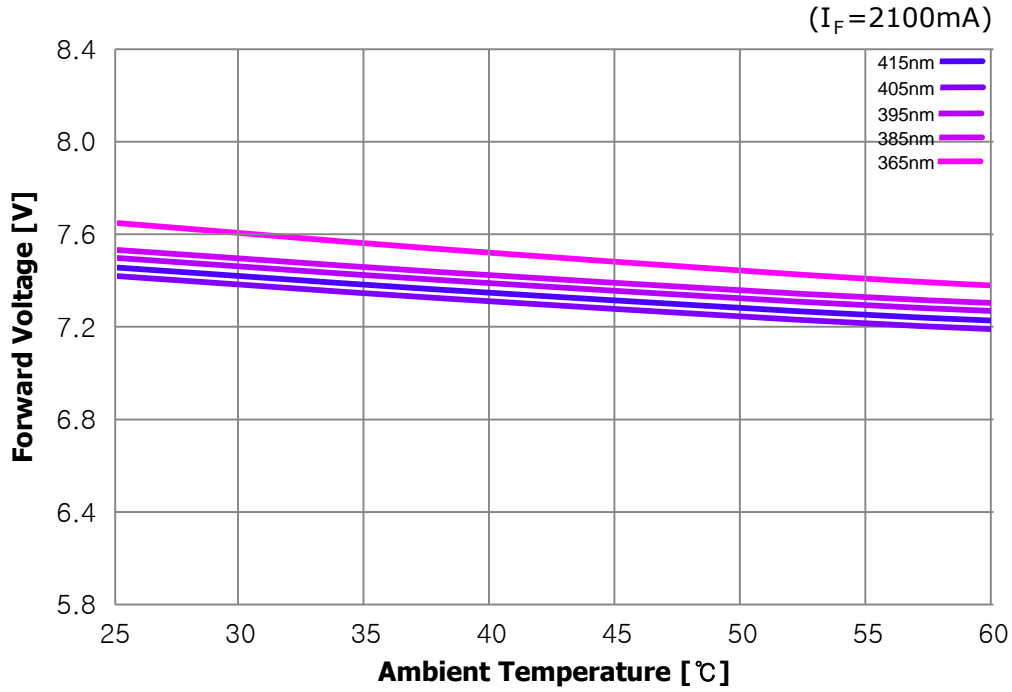


Peak Wavelength vs. Ambient Temperature

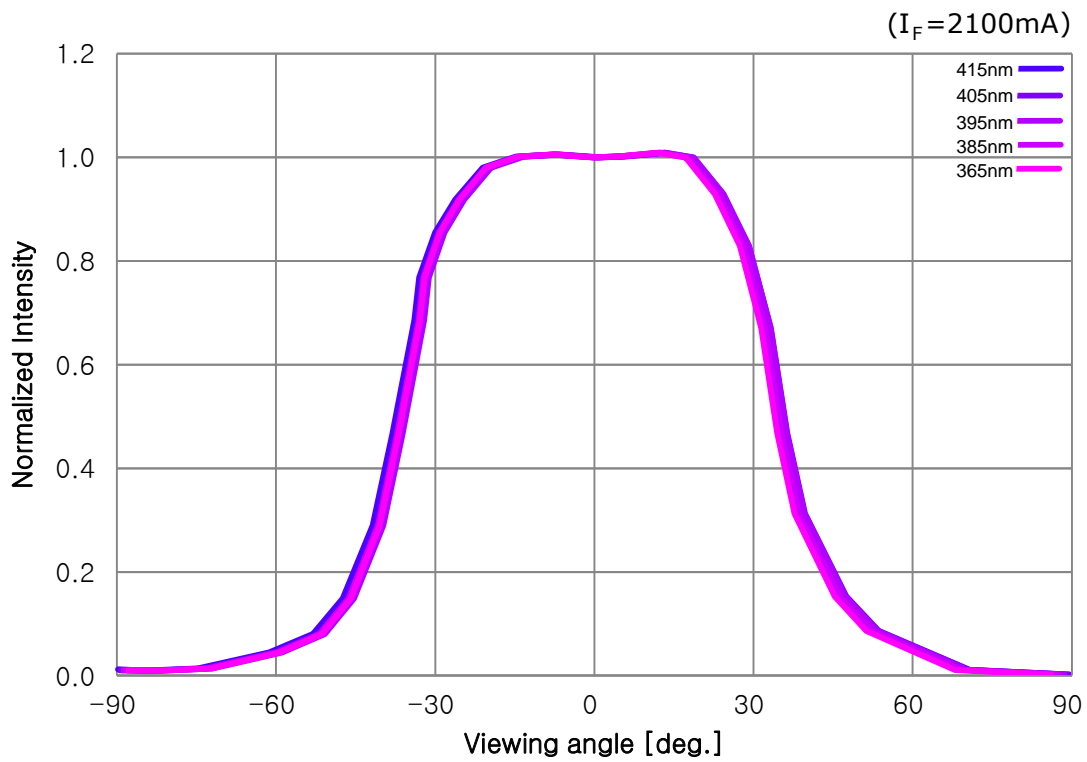


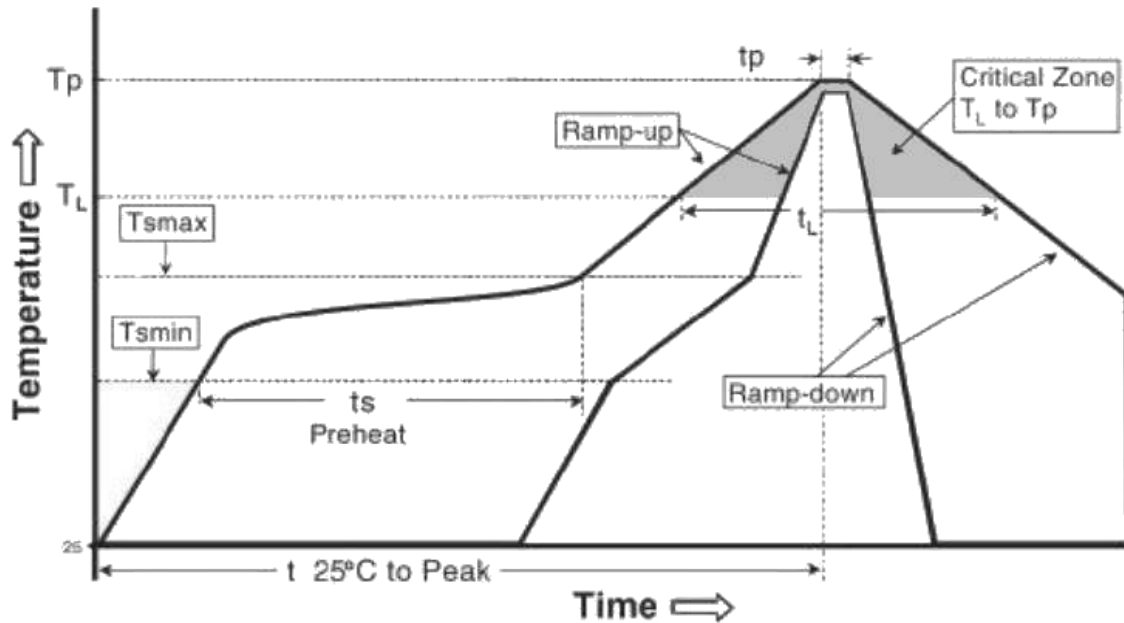


Forward Voltage vs. Ambient Temperature



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.