

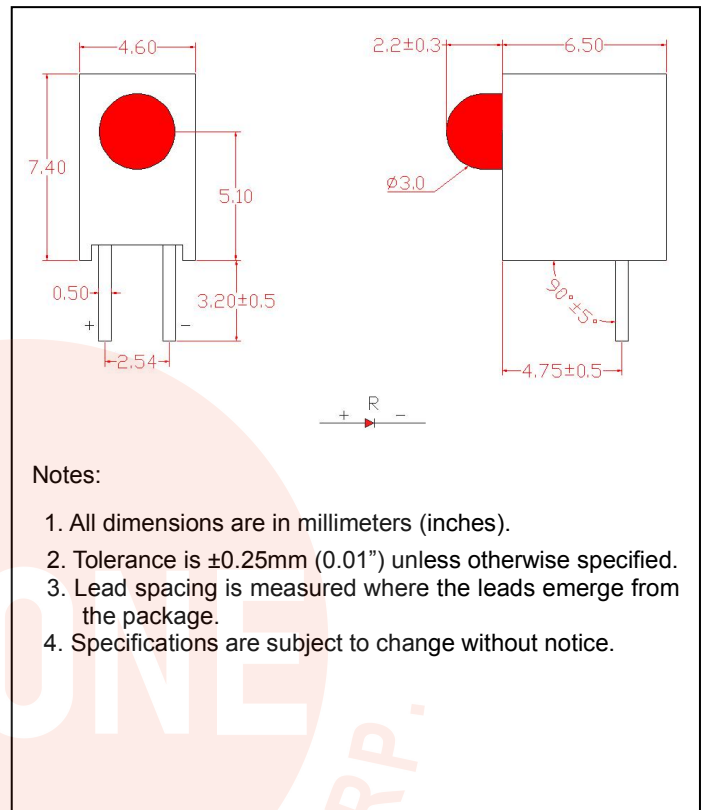
● Features:

1. Chip material: AlGaAs (Red)
2. Emitted color : Red
3. Lens Appearance : Red Diffused
4. Designed for ease in circuit board assembly.
5. Black case enhance contrast ratio.
6. Solid state light source.
7. Reliable and rugged.
8. 3mm diameter package.
9. This product don't contained restriction substance, compliance ROHS standard.

● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● Package dimensions



● Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Red	Unit
Power Dissipation	P_d	75	mW
Forward Current	I_F	30	mA
Peak Forward Current* ¹	I_{FP}	150	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	$-30^\circ\text{C} \sim 80^\circ\text{C}$	
Storage Temperature	T_{stg}	$-40^\circ\text{C} \sim 85^\circ\text{C}$	
Soldering Temperature	T_{sol}	260°C (for 5 seconds)	

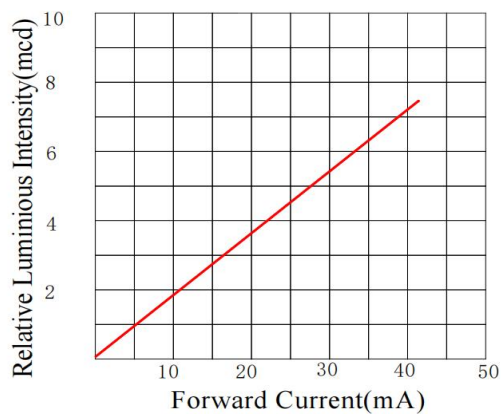
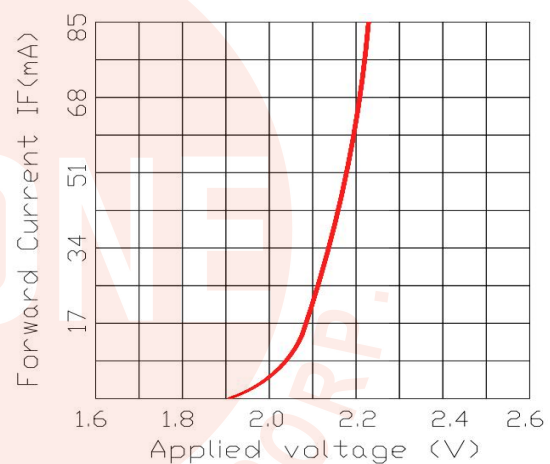
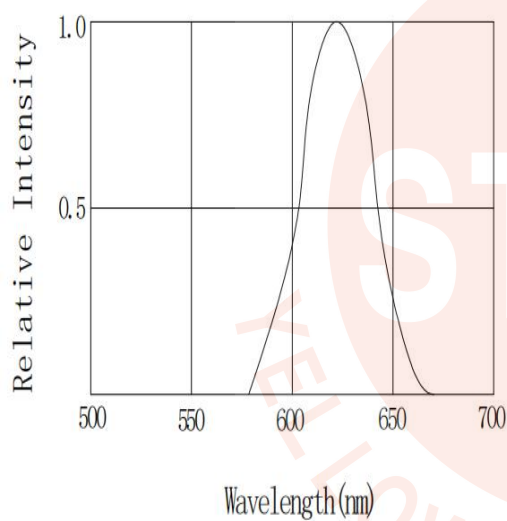
*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

● **Electrical and optical characteristics(Ta=25°C)**

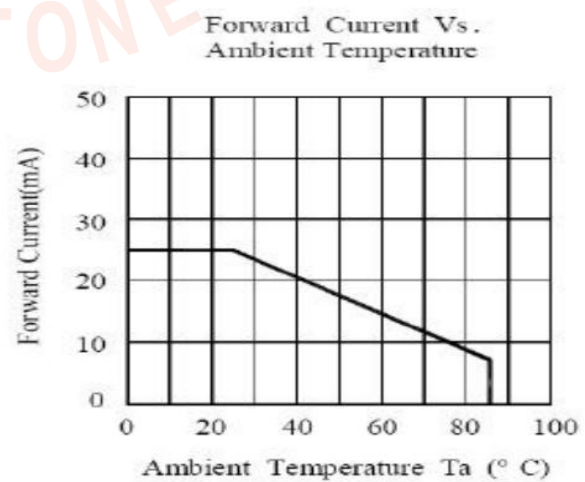
Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	Red	1.8	2.0	2.4	V
Luminous Intensity	I_v	$I_F=20\text{mA}$	Red	1		10	mcd
Reverse Current	I_R	$V_R=5\text{V}$	Red	-	-	10	μA
Peak Wave Length	λ_p	$I_F=20\text{mA}$	Red	-	-	-	nm
Dominant Wave Length	λ_d	$I_F=20\text{mA}$	Red	630	-	650	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	Red	-	30	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	Red	-	50	-	deg

● **Typical Electro-Optical Characteristics Curves**

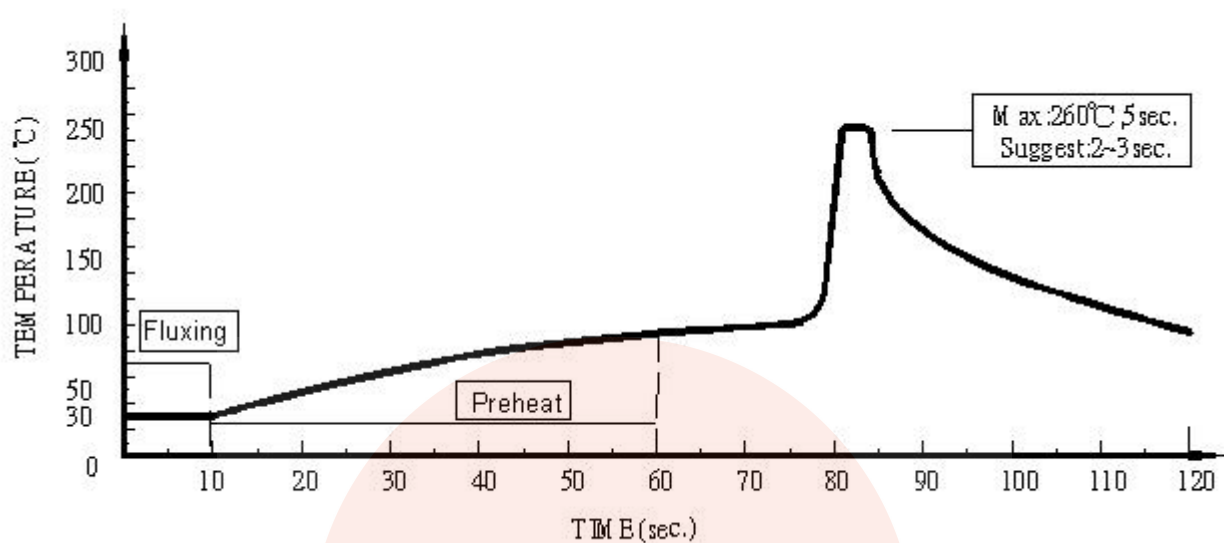
Red



Forward Current Vs Relative luminous Intensity



●Dip Soldering



1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

●IRON Soldering

A : Max : 350°C Within 3 sec. One time only.

B : The products of 3mm without flange, welding condition of flat plate PCB Max : 350°C Within 2 sec. One time only

