



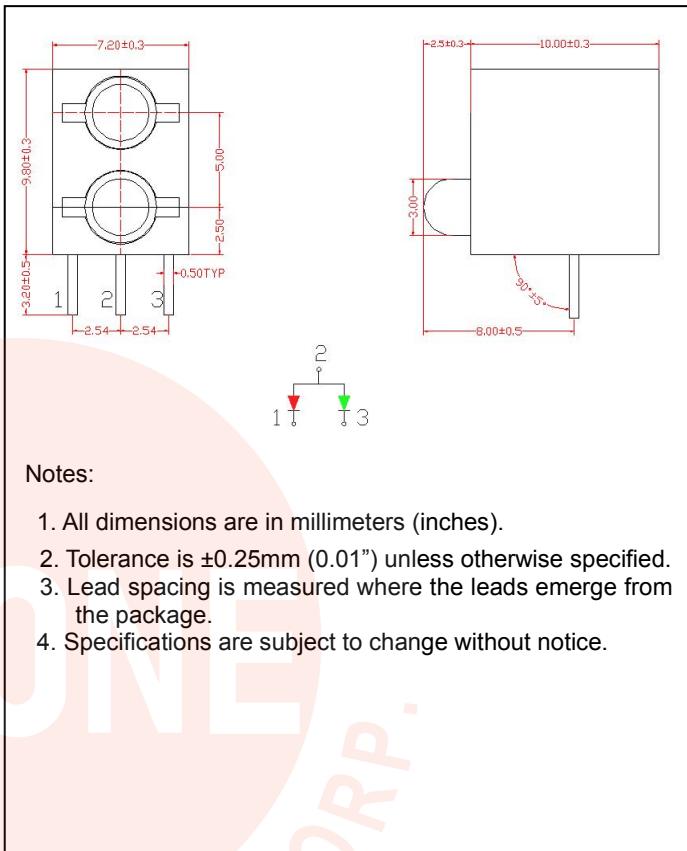
● Features:

1. Chip material: GaAsP/GaP(Red) and GaP(Green)
2. Emitted color : Red and Green
3. Lens Appearance : White 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	Green	Unit
Power Dissipation	Pd	80	80	mW
Forward Current	I _F	30	30	mA
Peak Forward Current* ¹	I _{FP}	100	100	mA
Reverse Voltage	V _R	5		
Operating Temperature	T _{opr}	$-40^\circ\text{C} \sim 80^\circ\text{C}$		
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.

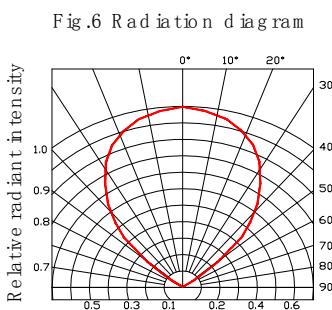
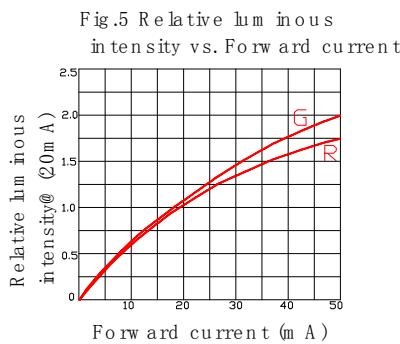
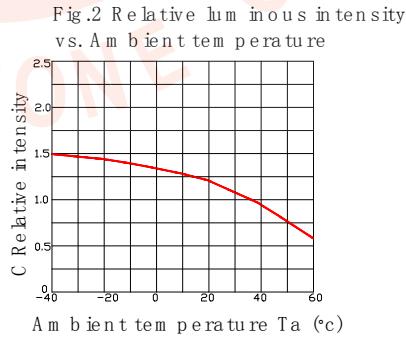
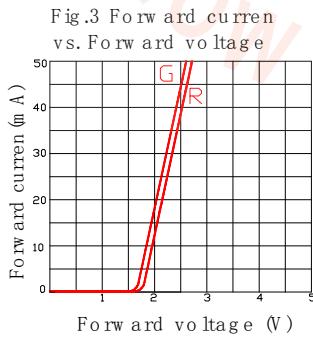
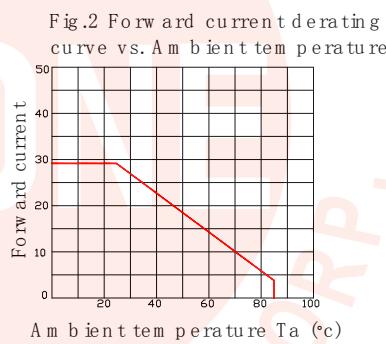
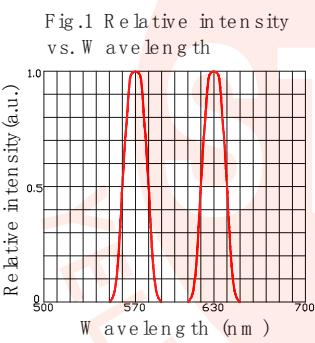


● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	Red	1.8	-	2.4	V
			Green	1.8	-	2.4	
Luminous Intensity	I _V	I _F =20mA	Red	20	-	60	mcd
			Green	60	-	100	
Reverse Current	I _R	V _R =5V	Red	-	-	10	μA
			Green	-	-	10	
Dominant Wave Length	λ d	I _F =20mA	Red	615	-	625	nm
			Green	565	-	575	
Spectral Line Half-width	Δ λ	I _F =20mA	Red	-	30	-	nm
			Green	-	30	-	
Viewing Angle	2θ _{1/2}	I _F =20mA	Red	-	60	-	deg
			Green	-	60	-	

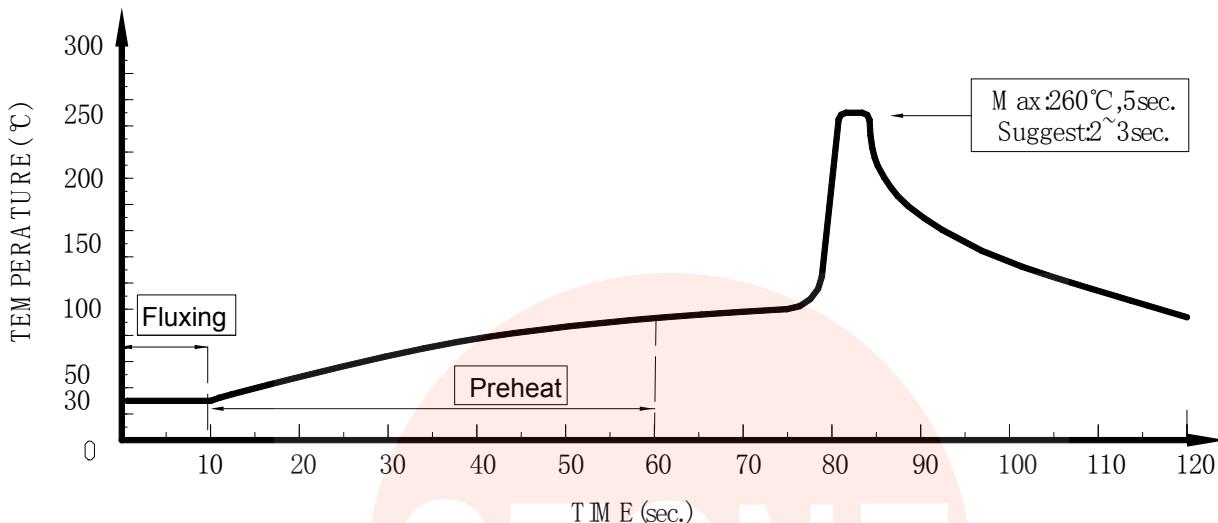
● Typical Electro-Optical Characteristics Curves

Red and Green





●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

