

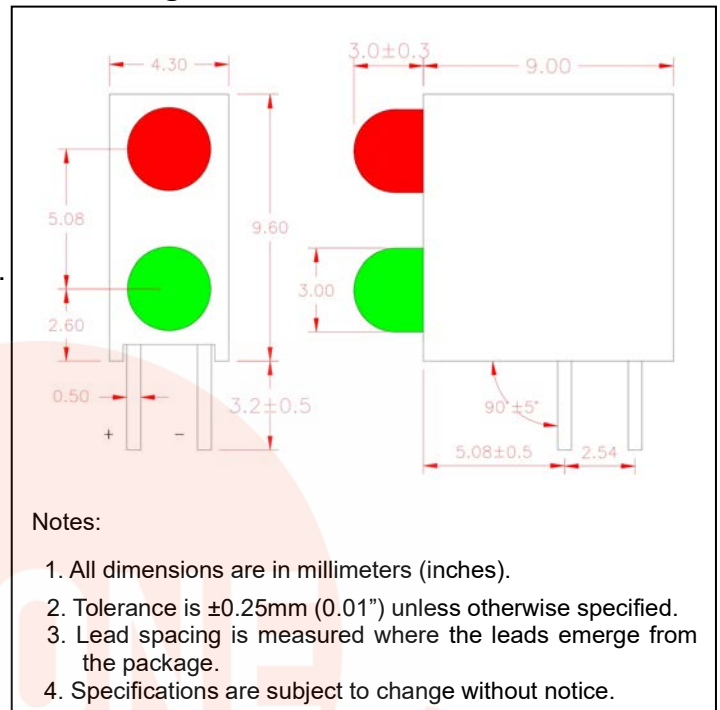
● **Features:**

1. Chip material: GaPGaP (Red)  
and GaPGaP (Green)
2. Emitted color : Red and Green
3. Lens Appearance : Red Diffused  
and Green 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. 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(Ta=25°C)**

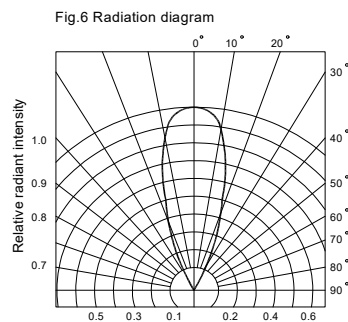
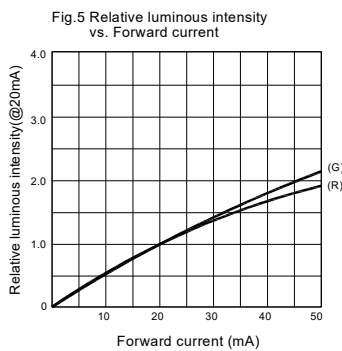
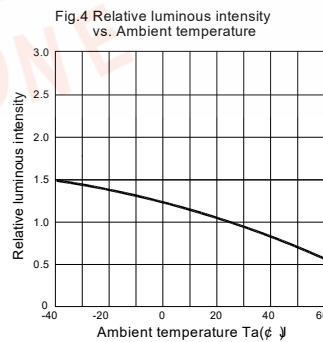
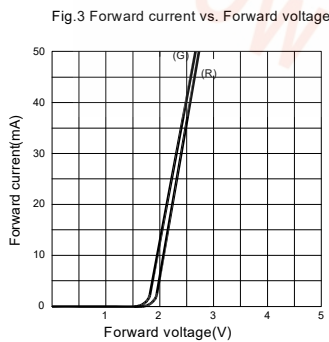
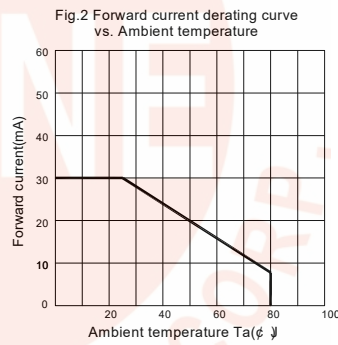
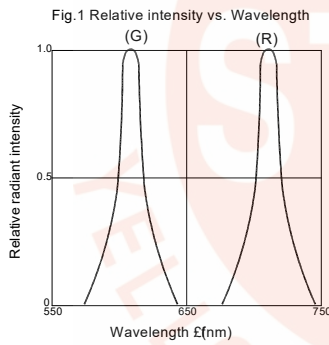
Parameter	Symbol	Green	Red	Unit
Power Dissipation	Pd	80	80	mW
Forward Current	I <sub>F</sub>	30	30	mA
Peak Forward Current*1	I <sub>FP</sub>	150	150	mA
Reverse Voltage	V <sub>R</sub>	5		V
Operating Temperature	Topr	-40°C~85°C		
Storage Temperature	Tstg	-40°C~100°C		
Soldering Temperature	Tsol	260°Cmax(for 5 seconds)		
Hand Soldering Temperature	Tsol	350°Cmax(for 3 seconds )		

\*1Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width.

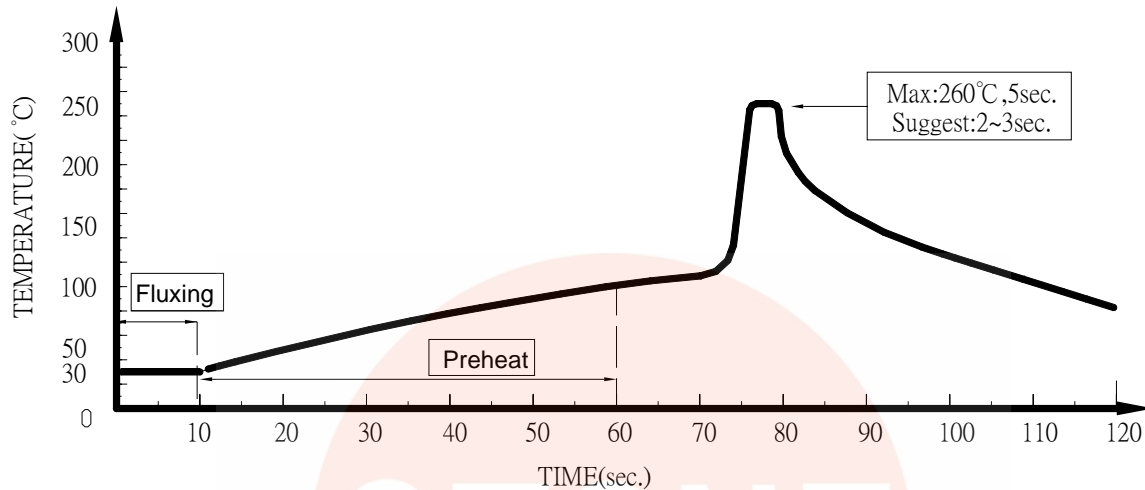
● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20mA$	Green	1.8	-	2.6	V
			Red	1.8	-	2.4	
Luminous Intensity	$I_v$	$I_F=20mA$	Green	40	-	80	mcd
			Red	1.0	-	10	
Reverse Current	$I_R$	$V_R=5V$	Green	-	-	100	$\mu A$
			Red	-	-	100	
Peak Wave Length	$\lambda_p$	$I_F=20mA$	Green	-	570	-	nm
			Red	-	700	-	
Dominant Wave Length	$\lambda_d$	$I_F=20mA$	Green	565	-	575	nm
			Red	630	-	650	
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	Green	-	30	-	nm
			Red	-	35	-	
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	Green	-	35	-	deg
			Red	-	50	-	

● Typical electro-optical characteristics curves



● **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 : For 3mm LED without flange, if the LED epoxy lays flat on the PCB, the welding condition is 350°C within 2 seconds, one time only.

