

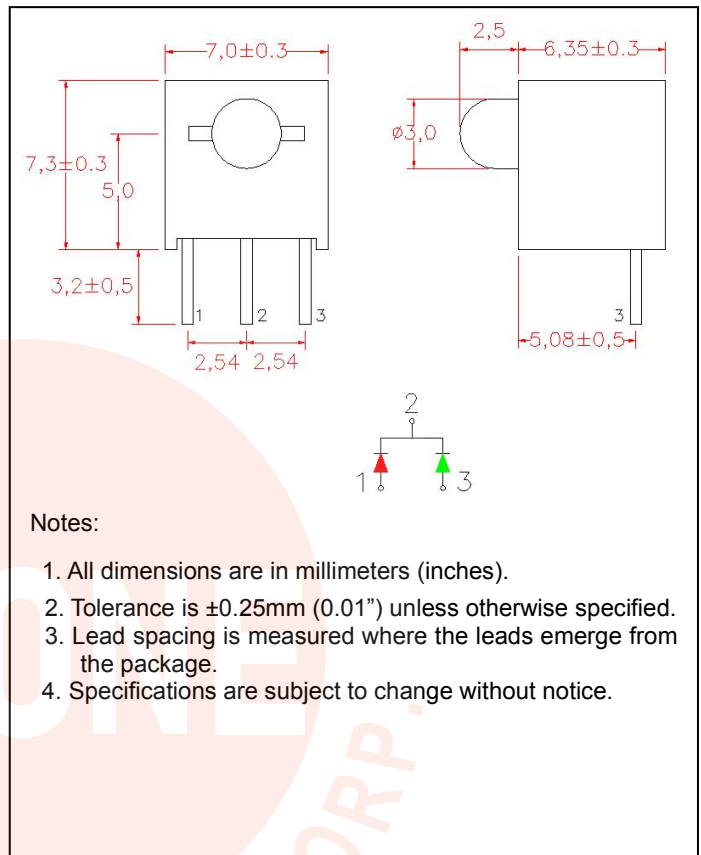
● Features:

1. Chip material:GaAsP(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	P_d	75	75	mW
Forward Current	I_F	30	30	mA
Peak Forward Current* ¹	I_{FP}	50	50	mA
Reverse Voltage	V_R	5		V
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)		

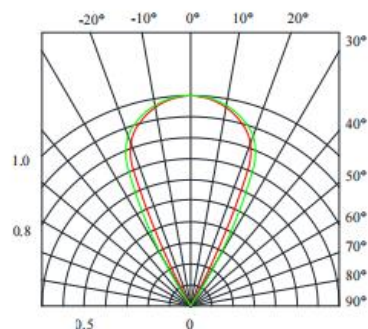
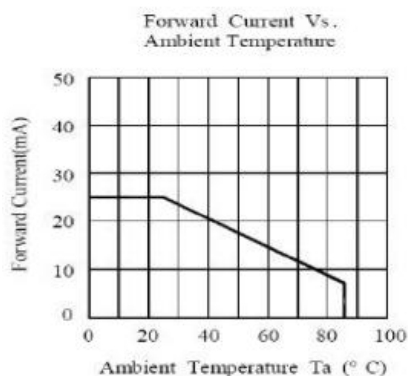
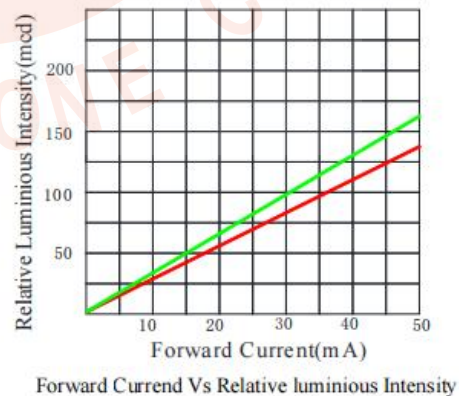
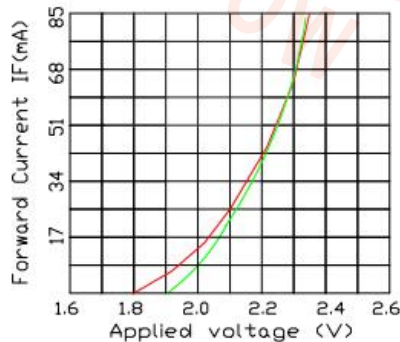
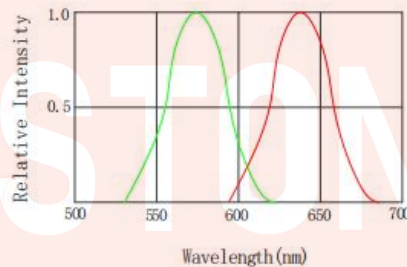
*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

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

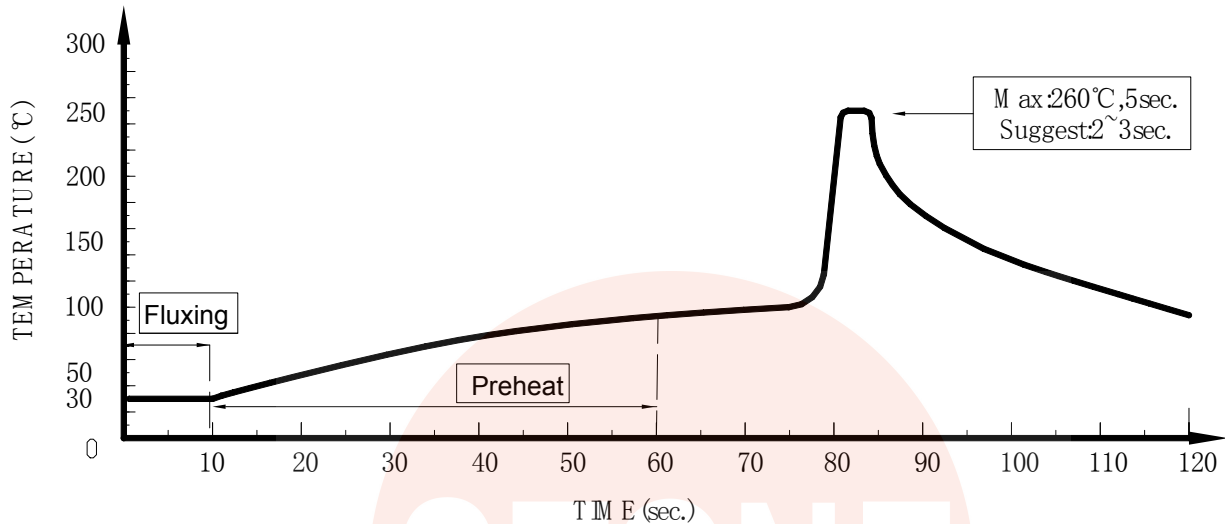
Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	Red Green	1.8 1.8	2.0 2.1	2.4 2.4	V
Luminous Intensity	I_v	$I_F=20\text{mA}$	Red Green	40 40	55 65	80 100	mcd
Reverse Current	I_R	$V_R=5\text{V}$	Red Green	- -	- -	10 10	μA
Dominant Wave Length	λ_d	$I_F=20\text{mA}$	Red Green	635 565	641 570	645 575	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	Red Green	- -	30 30	- -	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	Red Green	- -	55 55	- -	deg

● 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

