

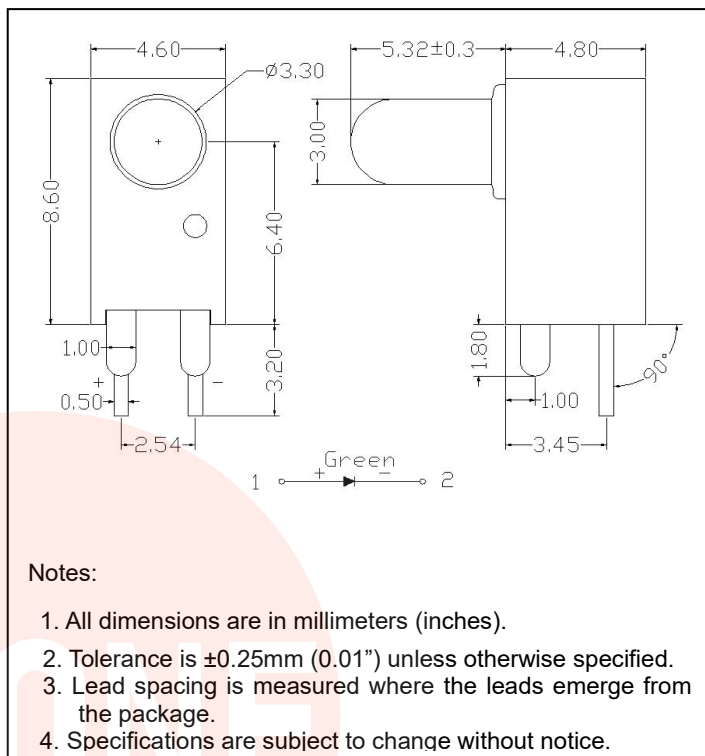
### ● Features:

1. Chip material: InGaN
2. Emitted color : Green
3. Lens Appearance : White Diffused
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 3mm diameter package
9. The product contains no restricted substances, and contains low halogen content, which is in line with the 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	Rating	Unit
Power Dissipation	$P_d$	110	mW
Forward Current	$I_F$	30	mA
Peak Forward Current* <sup>1</sup>	$I_{FP}$	100	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	$-40^\circ\text{C} \sim 85^\circ\text{C}$	
Storage Temperature	$T_{stg}$	$-40^\circ\text{C} \sim 100^\circ\text{C}$	
Soldering Temperature	$T_{sol}$	260°C max (for 5 seconds)	
Hand Soldering Temperature	$T_{sol}$	350°C max (for 3 seconds )	

\*<sup>1</sup>Condition for  $I_{FP}$  is pulse of 1/10 duty and 0.1msec width.

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$	2.8	3.1	3.8	V
Luminous Intensity	$I_v$	$I_F=20\text{mA}$	1300	2500	-	mcd
Reverse Current	$I_R$	$V_R=5\text{V}$	-	-	10	$\mu\text{A}$
Peak Wave Length	$\lambda_p$	$I_F=20\text{mA}$	-	530	-	nm
Dominant Wave Length	$\lambda_d$	$I_F=20\text{mA}$	520	-	535	nm
Spectral Line Half-width	$\Delta\lambda$	$I_F=20\text{mA}$	-	30	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	40	-	deg

● **Typical electro-optical characteristics curves**

Fig.1 Relative intensity vs. Wavelength

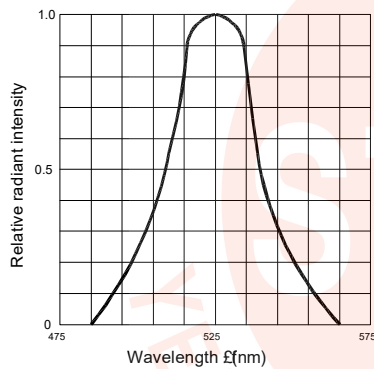


Fig.2 Forward current derating curve vs. Ambient temperature

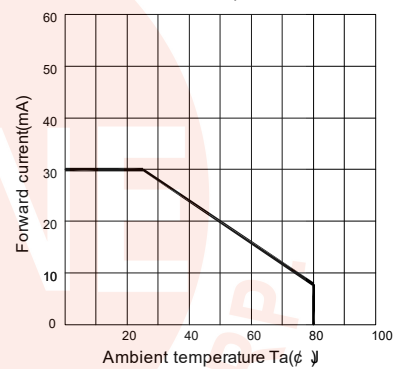


Fig.3 Forward current vs. Forward voltage

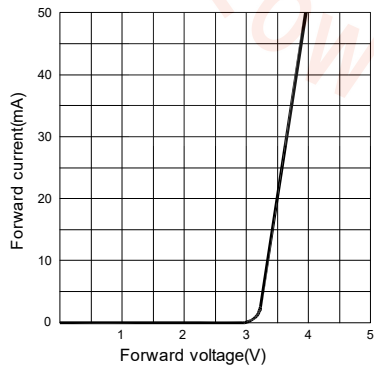


Fig.4 Relative luminous intensity vs. Ambient temperature

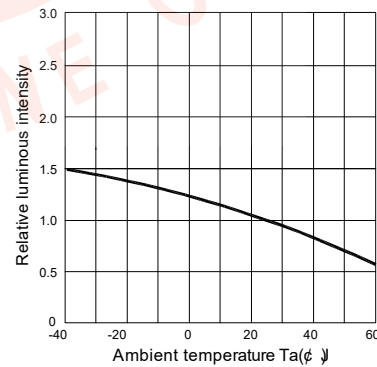


Fig.5 Relative luminous intensity vs. Forward current

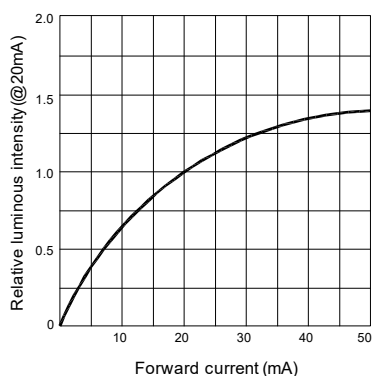
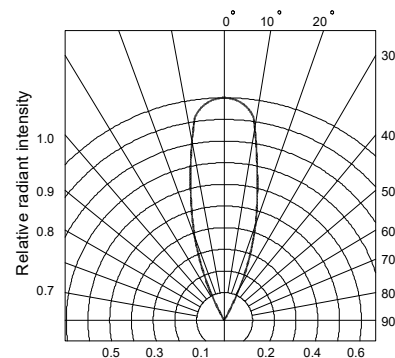
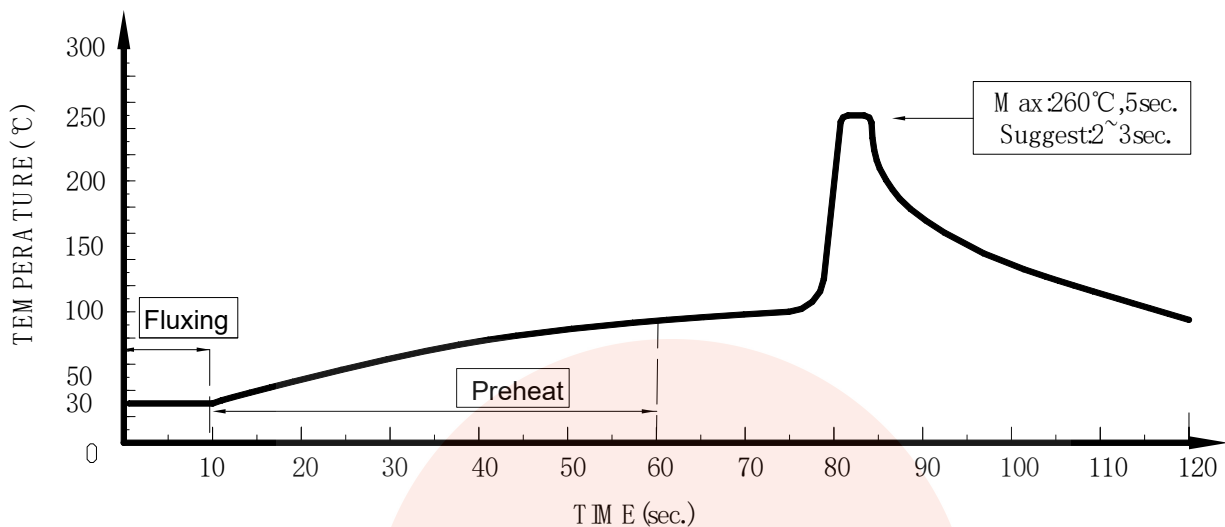


Fig.6 Radiation diagram



## ● 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

