

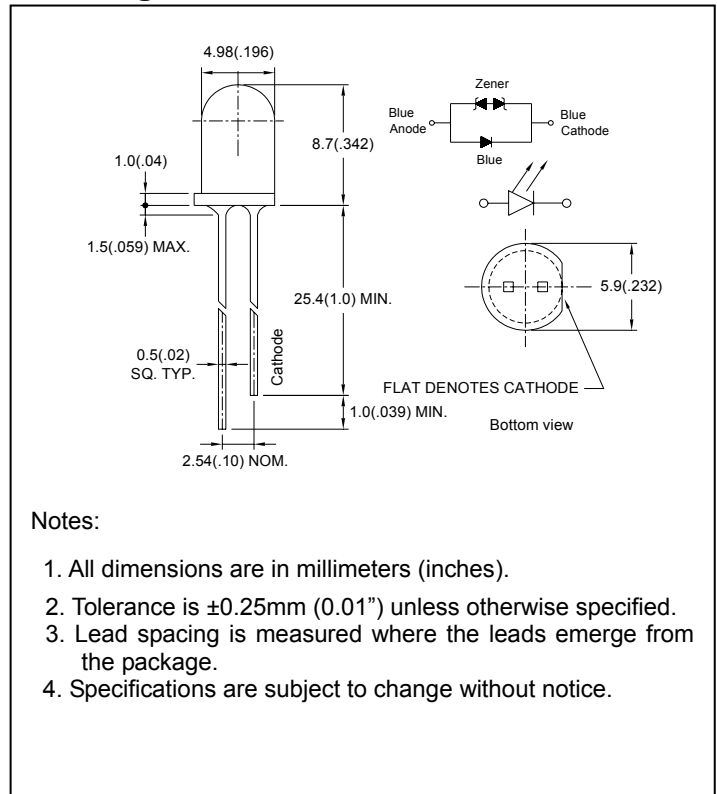
### ● Features:

1. Chip material: InGaN
2. Emitted color : Blue
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. 5mm 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:



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

### ● Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Rating	Unit
Power Dissipation	$P_d$	120	mW
Forward Current	$I_F$	30	mA
Peak Forward Current	$I_{FP}$	150	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)	

\*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	$V_F$	$I_F=20mA$	-	3.2	3.6	V
Luminous Intensity	$I_v$	$I_F=20mA$	-	600	-	mcd
Reverse Current	$I_R$	$V_R=5V$	-	-	100	$\mu A$
Peak Wave Length	$\lambda_p$	$I_F=20mA$	-	470	-	nm
Dominant Wave Length	$\lambda_d$	$I_F=20mA$	460	-	475	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	-	30	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	-	55	-	deg

## ● Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

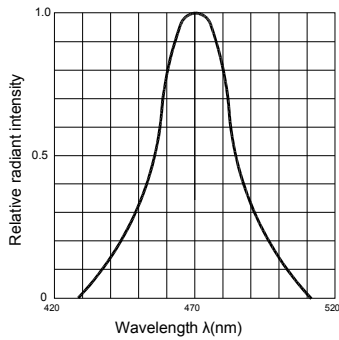


Fig.2 Forward current derating curve vs. Ambient temperature

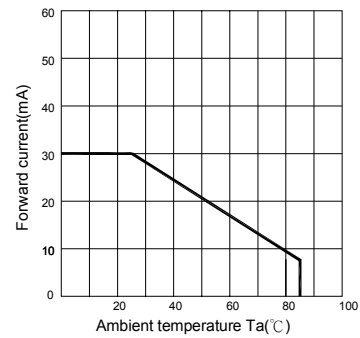


Fig.3 Forward current vs. Forward voltage

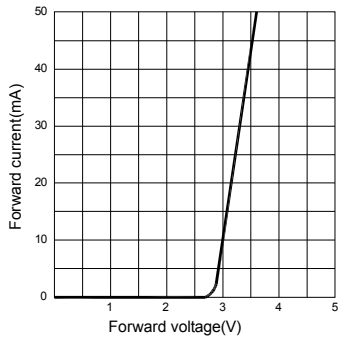


Fig.4 Relative luminous intensity vs. Ambient temperature

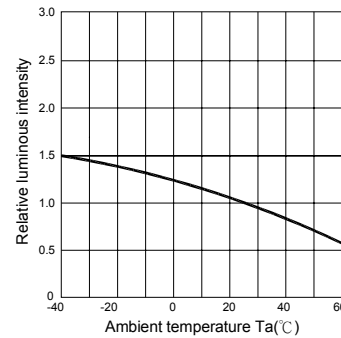


Fig.5 Relative luminous intensity vs. Forward current

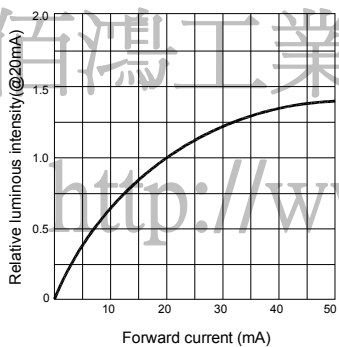
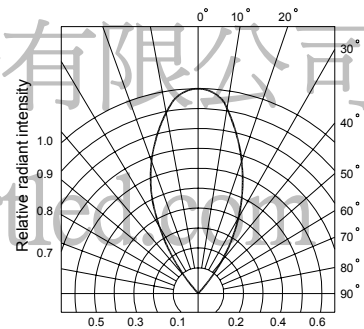


Fig.6 Radiation diagram



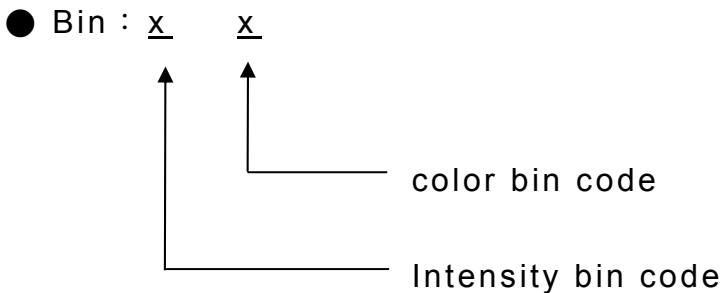
## ● Bin Limits

### 1. Intensity Bin Limits (At $I_F=20\text{mA}$ )

Bin Code	Min. (mcd)	Max. (mcd)
S	210	317
T	317	475
U	475	715
V	715	1070
W	1070	1600

### 2. Color Bin Limits (At $I_F=20\text{mA}$ ) : Dominant Wave Length $\lambda_d(\text{nm})$

Bin Code	Min. (nm)	Max. (nm)
3	460	465
4	465	470
5	470	475



NOTES: 1. Tolerance of measurement of luminous intensity. : ±15%

2. Tolerance of measurement of dominant wavelength : ±1.0nm

## ● DIP soldering (Wave Soldering)

Preheating : 120°C, within 120~180 sec.

Operation heating : 255°C ±5°C within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching).

