

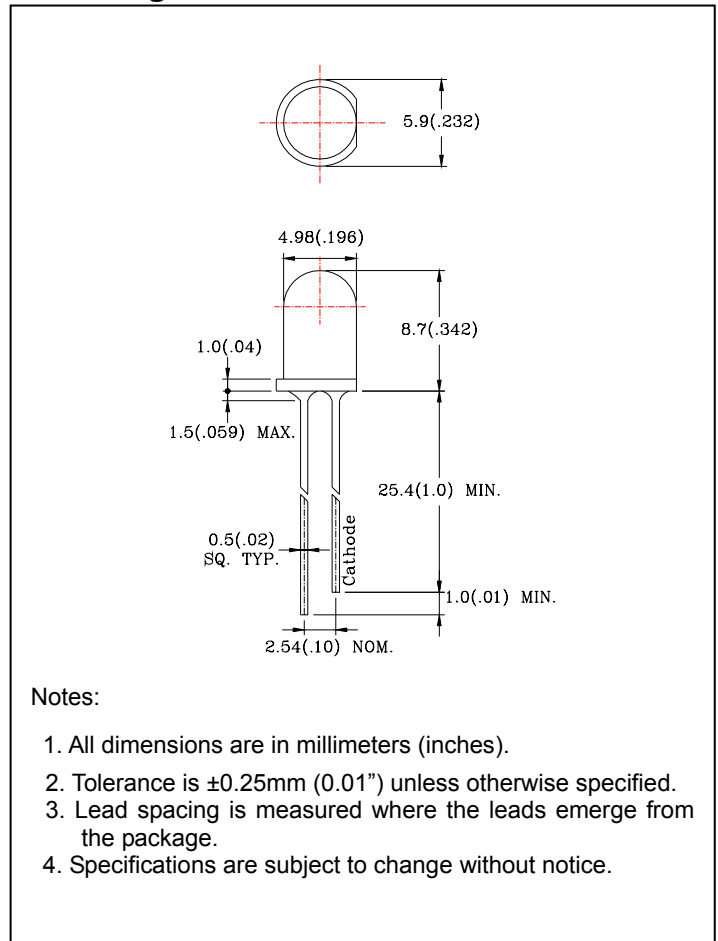
● Features:

1. Chip material: InGaN
2. Emitted color : White
3. Lens Appearance : Water Clear
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. T-1 3/4 type 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	Rating	Unit
Power Dissipation	P_d	120	mW
Forward Current	I_F	30	mA
Peak Forward Current* ¹	I_{FP}	150	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	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	-	3.5	4.0	V
Luminous Intensity	I_V	$I_F=20\text{mA}$	-	13000	-	mcd
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	μA
Chromatically Coordinates(note 4)	X	$I_F=20\text{mA}$	-	0.32	-	nm
	Y	$I_F=20\text{mA}$	-	0.31	-	nm
Spectral Line Half-width	$\Delta \lambda$	$I_F=20\text{mA}$	-	30	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	-	12	-	deg

● Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

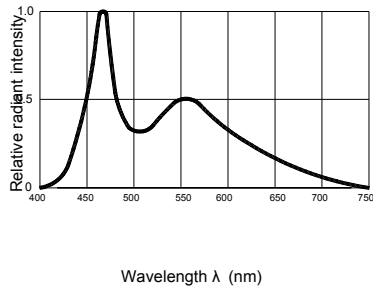


Fig.2 Forward current derating curve vs. Ambient temperature

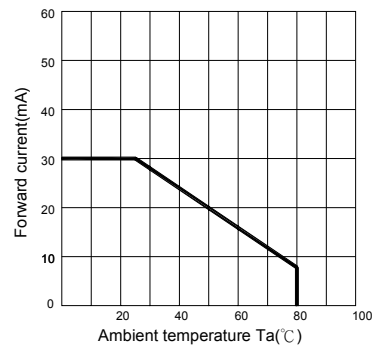


Fig.3 Forward current vs. Forward voltage

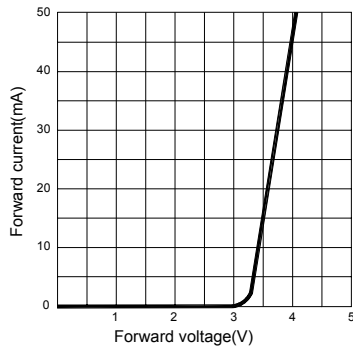


Fig.4 Relative luminous intensity vs. Ambient temperature

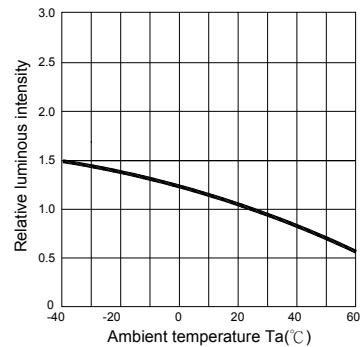


Fig.5 Relative luminous intensity vs. Forward current

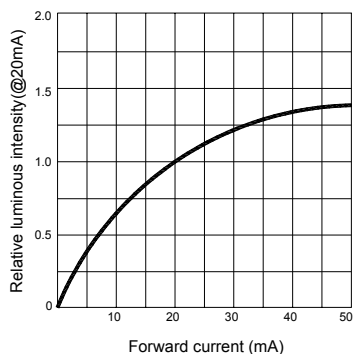
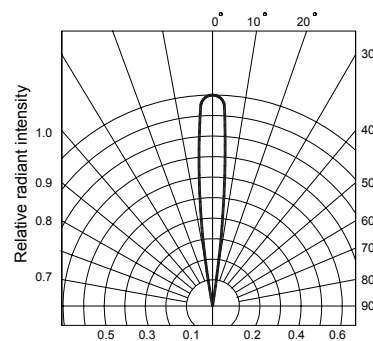


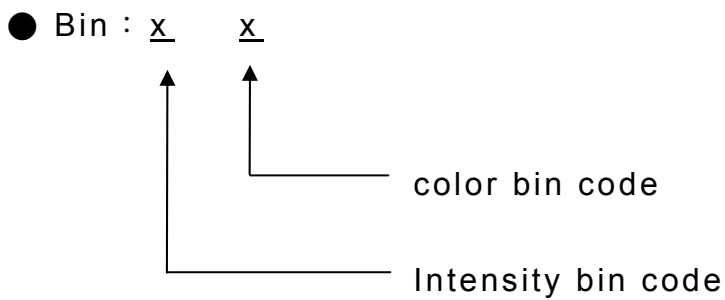
Fig.6 Radiation diagram



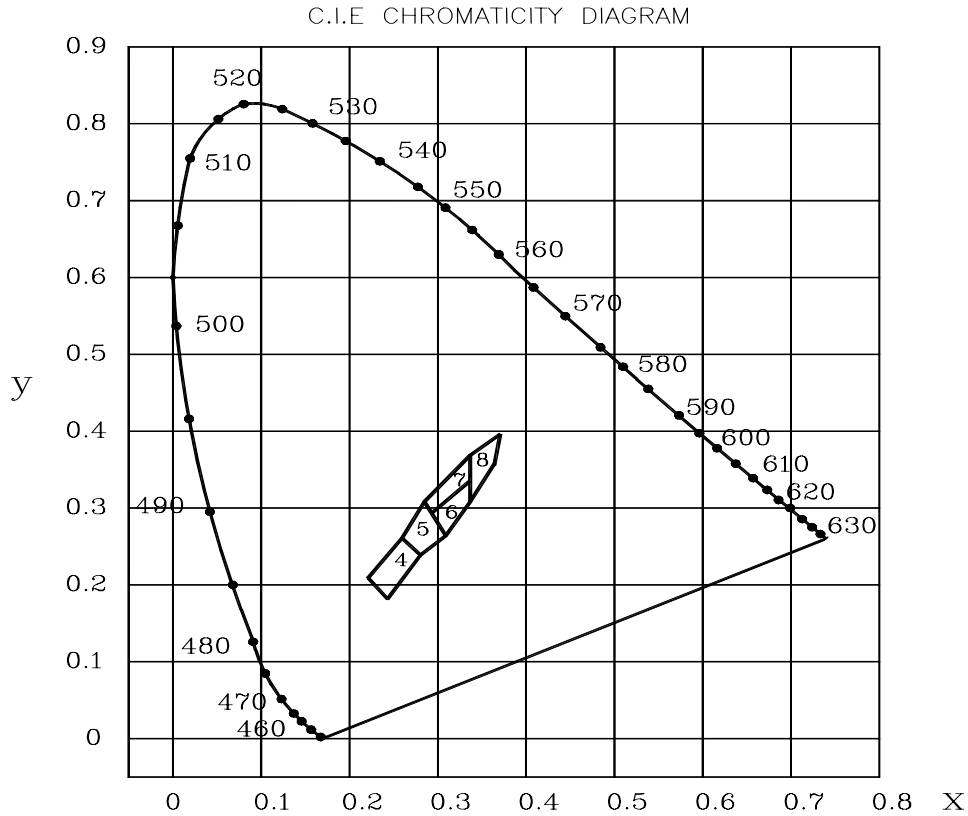
● **Bin Limits**

1. Intensity bin limits (At $I_F = 20\text{mA}$)

Bin Code	Min. (mcd)	Max. (mcd)
:	:	:
ZA	4880	9660
ZB	7320	14490
ZC	11000	21350
ZD	16500	32000
ZE	24800	48000
:	:	:



2. Color Bin Limits (nm at 20mA)



Bin	Chromaticity coordinates				
	x	y	x	y	
4	x	0.245	0.225	0.260	0.279
	y	0.190	0.215	0.262	0.242
5	x	0.279	0.260	0.283	0.305
	y	0.242	0.262	0.305	0.265
6	x	0.305	0.287	0.330	0.330
	y	0.265	0.295	0.339	0.305
7	x	0.287	0.283	0.330	0.330
	y	0.295	0.305	0.360	0.339
8	x	0.330	0.330	0.361	0.356
	y	0.305	0.360	0.385	0.351