

### 1. Features

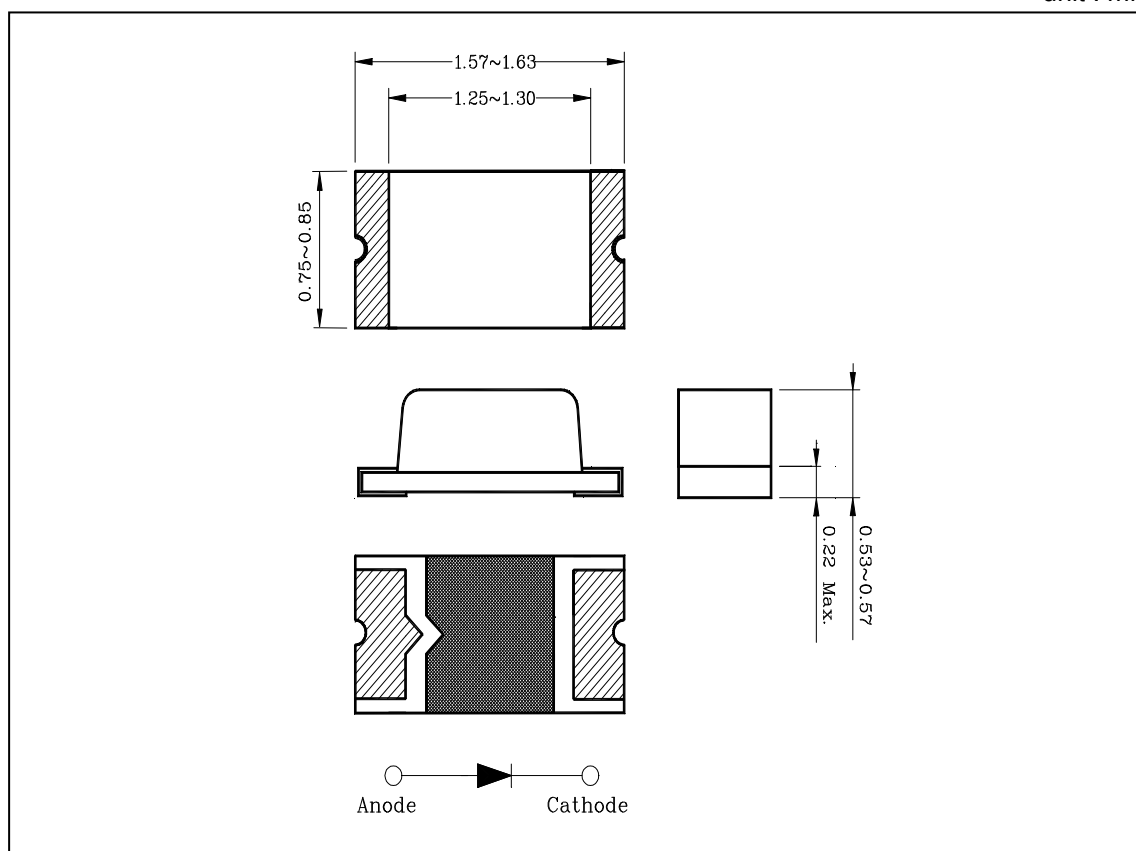
- ◆ 1.6mm(L)×0.8mm(W) small size surface mount type
- ◆ Thin package of 0.55mm(H) thickness
- ◆ Transparent clear lens optic
- ◆ Low power consumption type chip led
- ◆ Emitting Light Yellow Green (570nm)

### 2. Applications

- ◆ LCD backlighting
- ◆ Keypad backlighting
- ◆ Symbol backlighting
- ◆ Front panel indicator lamp

### 3. Outline Dimensions

unit : mm



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

**4. Absolute Maximum Ratings**

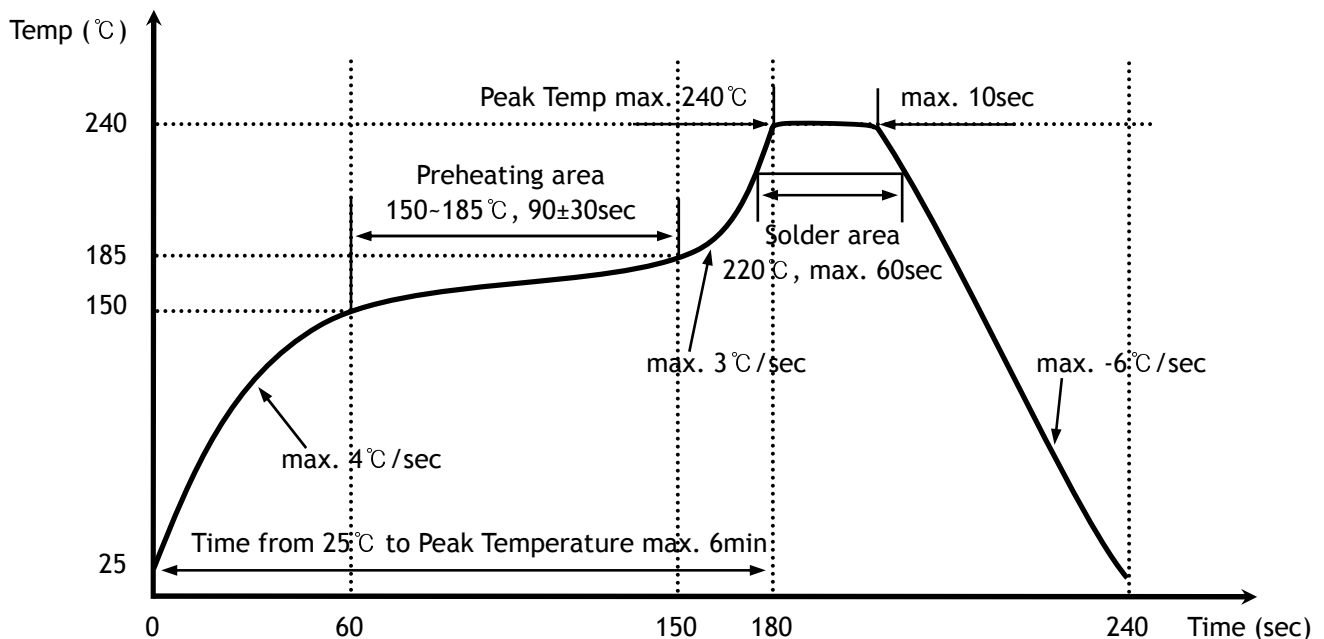
(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P <sub>D</sub>	60	mW
Forward current	I <sub>F</sub>	25	mA
*1 Peak forward current	I <sub>FP</sub>	50	mA
Reverse voltage	V <sub>R</sub>	4	V
Operating temperature range	T <sub>opr</sub>	-25~80	°C
Storage temperature range	T <sub>stg</sub>	-30~100	°C
*2 Soldering temperature	T <sub>sol</sub>	240°C for 10 seconds	

\*1. Duty ratio = 1/16, Pulse width = 0.1ms

\*2. Recommended reflow soldering temperature profile

- Preheating 150°C to 185°C within 120 seconds soldering 240°C within 10 seconds
- Gradual cooling (Avoid quenching)



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

5. Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F=20\text{mA}$	2.0	-	2.4	V
*3 Luminous intensity	$I_V$	$I_F=20\text{mA}$	4	-	17	mcd
Peak wavelength	$\lambda_P$	$I_F=20\text{mA}$	562	568	574	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F=20\text{mA}$	-	30	-	nm
Reverse current	$I_R$	$V_R=4\text{V}$	-	-	10	$\mu\text{A}$
*4 Half angle	$\theta/2$	$I_F=20\text{mA}$	-	X $\pm 65$	-	deg
	Y $\pm 70$					

\*3.The test result of  $I_F=20\text{mA}$  is only for reference

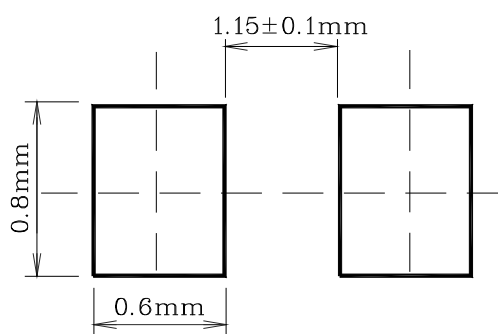
\*4. $\theta/2$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity

◆  $V_F / I_V / \lambda_P$  Grade Classification (Ta=25°C)

Test Condition @ $I_F=20\text{mA}$		
Forward Voltage [V]	Luminous Intensity [mcd]	Peak Wavelength [nm]
1 : 2.0~2.2	E : 4~6	a : 562~568
	F : 6~10	
2 : 2.2~2.4	G : 10~17	b : 568~574

(Each  $V_F$ ,  $I_V$ ,  $\lambda_P$  range did not consider a margin. Please refer to  $\pm 0.1\text{V}$  of  $V_F$  range,  $\pm 18\%$  of  $I_V$  range,  $\pm 1\text{nm}$  of  $\lambda_P$  range as a permitted limit and do not use to combine grade classification. It must be used separately grade classification)

\* Recommended Soldering Land Pattern



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

6. Characteristic Diagrams

Fig. 1  $I_F - V_F$

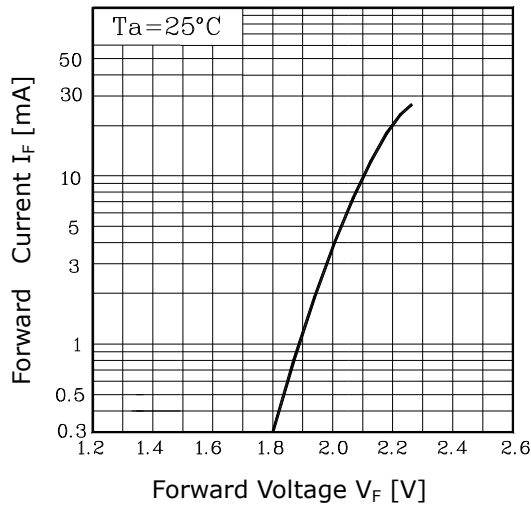


Fig. 2  $I_V - I_F$

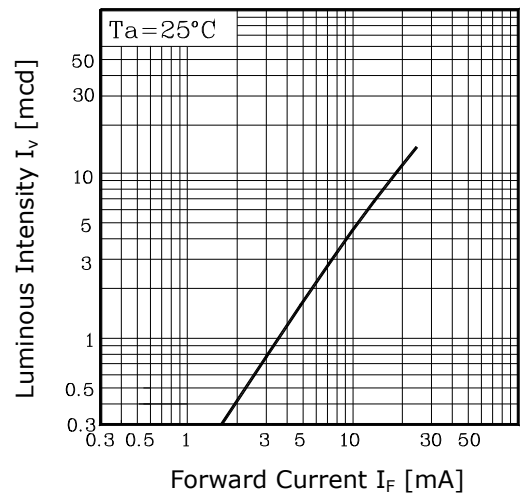


Fig. 3  $I_F - T_a$

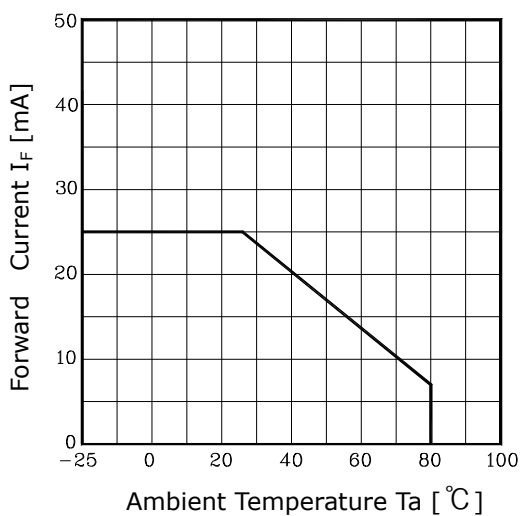


Fig.4 Spectrum Distribution

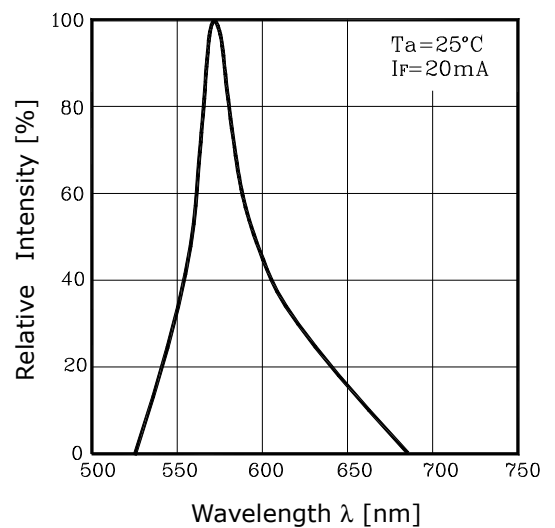


Fig. 5-1 Radiation Diagram(X)

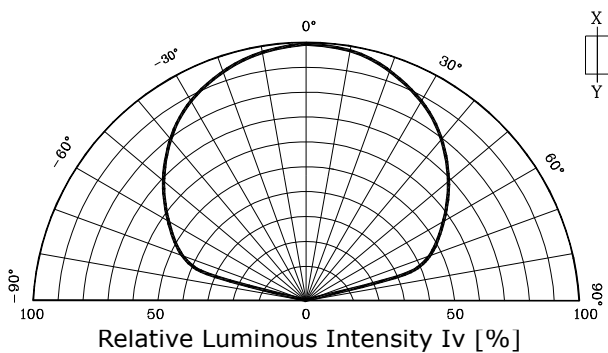
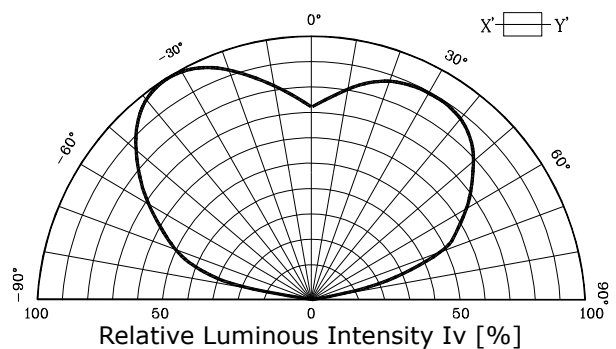


Fig. 5-2 Radiation Diagram(Y)



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.