



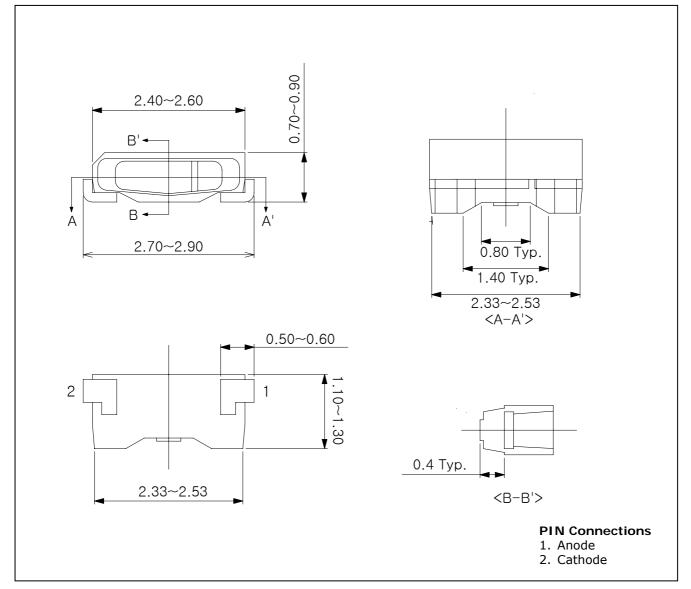


## **Features**

- 2.8mm(L)×1.2mm(W) small size surface mount type
- Thin package of 0.8mm(H) thickness
- Transparency SMD side view type
- Wide viewing angle: 110°

## **Outline Dimensions**

unit: mm



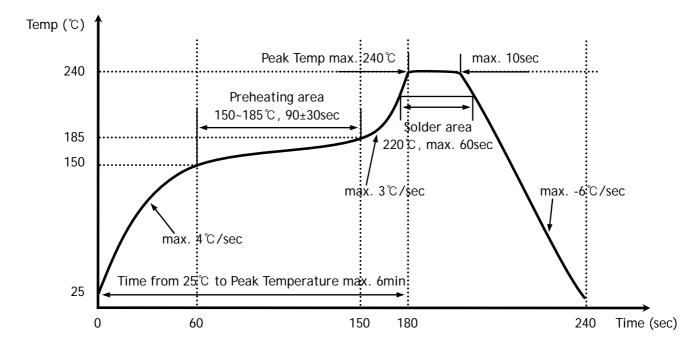
**Absolute Maximum Ratings** 

(Ta=25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	$P_D$	60	mW
Forward current	$I_{F}$	25	mA
*1Peak forward current	${ m I}_{\sf FP}$	50	mA
Reverse voltage	$V_R$	4	V
Operating temperature range	$T_{opr}$	-30~85	$^{\circ}$
Storage temperature range	$T_{stg}$	-40~100	$^{\circ}$
*2Soldering temperature	T <sub>sol</sub>	240℃ for 10 seconds	

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

<sup>-</sup> Preheating 150  $^\circ$  to 185  $^\circ$  within 120 seconds soldering 240  $^\circ$  within 10 seconds Gradual cooling (Avoid quenching)



**Electrical / Optical Characteristics** 

(Ta=25℃)

Characteristic	Symbol	Test Condition	Min	Тур	Max	Unit
Forward voltage	$V_{F}$	I <sub>F</sub> = 20mA	-	2.15	2.5	٧
* <sup>3</sup> Luminous intensity	$I_{V}$	I <sub>F</sub> = 20mA	230	-	520	mcd
Dominant wavelength	$\lambda_{D}$	I <sub>F</sub> = 20mA	617	621	627	nm
Spectrum bandwidth	$\Delta_{\lambda}$	I <sub>F</sub> = 20mA	-	35	-	nm
* <sup>4</sup> Half angle	θ1/2	I <sub>F</sub> = 20mA		±55		deg

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<sup>\*2.</sup> Recommended reflow soldering temperature profile

- \*3. Luminous intensity maximum tolerance for each grade classification limit is  $\pm 18\%$  (The test result of  $I_F$ =20mA is only for reference)
- \*4.  $\theta$ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

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Test Condition @ $I_F = 20mA$				
Luminous Intensity [mcd]	Dominant Wavelength [nm]			
N : 230~350	a: 617~621			
O: 350~520	b : 621~627			

## **Electrical Characteristic Curves**

Fig. 1  $I_F$  -  $V_F$ 

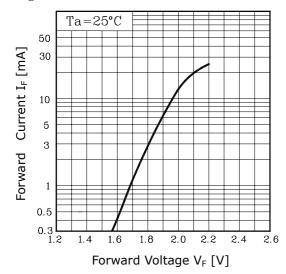


Fig. 2  $I_V$  -  $I_F$ 

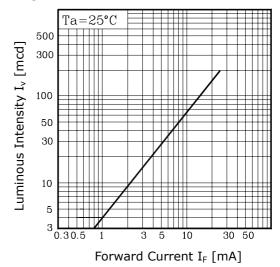
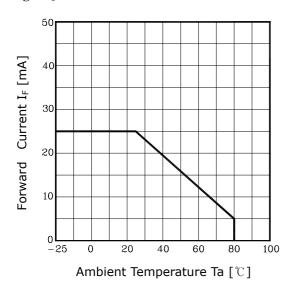


Fig.  $3 I_F - Ta$ 



**Fig.4 Spectrum Distribution** 

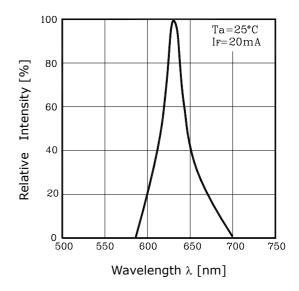
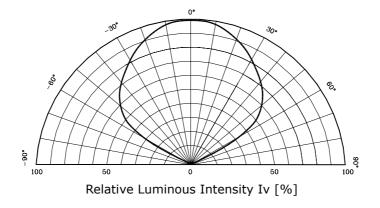


Fig. 5-1 Radiation Diagram(X)



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