

Features

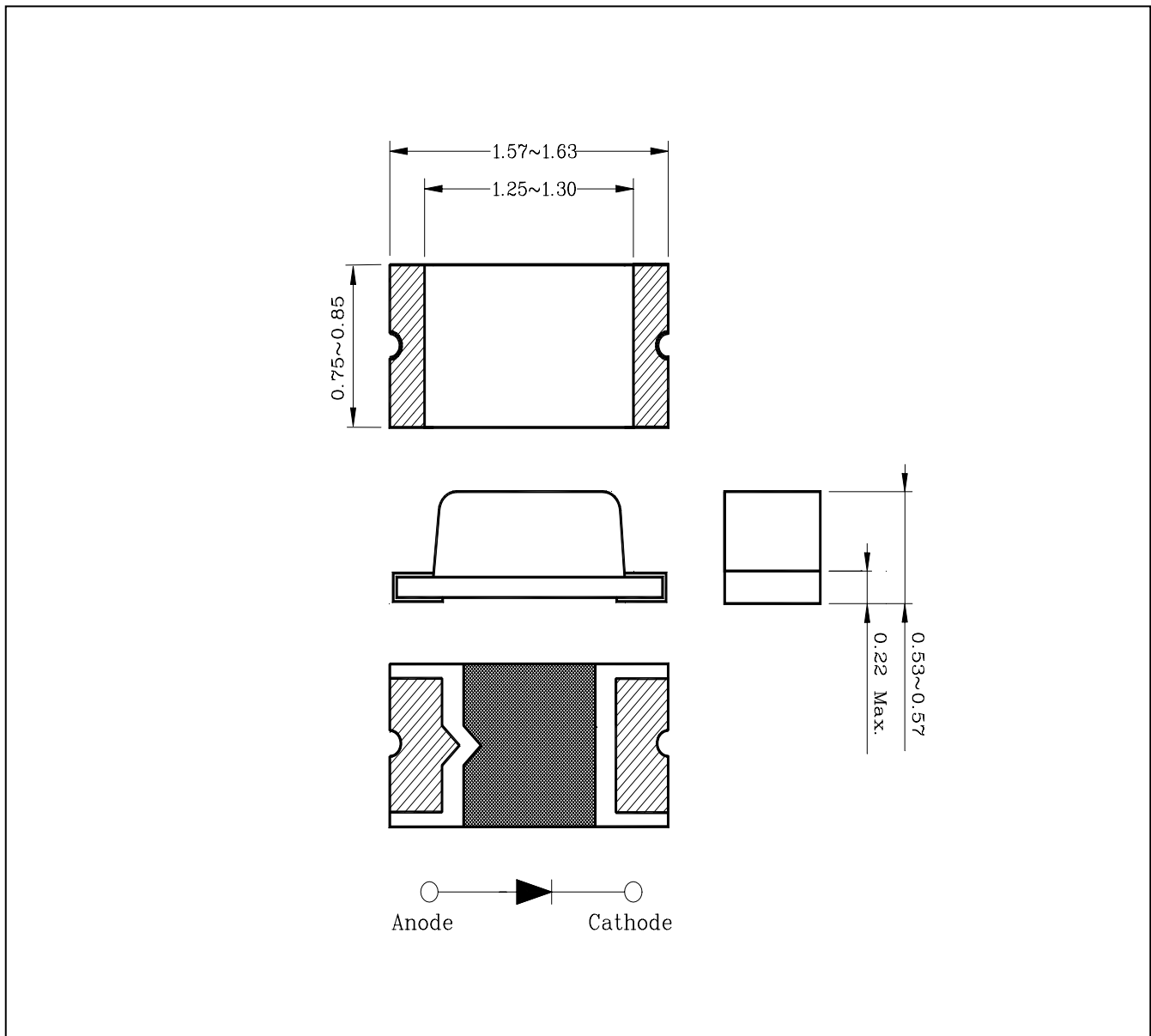
- 1.6mm(L)×0.8mm small size surface mount type
- Thin package of 0.55mm(H) thickness
- Diffusion lens optic
- Low power consumption type chip led

Applications

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

Outline Dimensions

unit : mm



Absolute Maximum Ratings

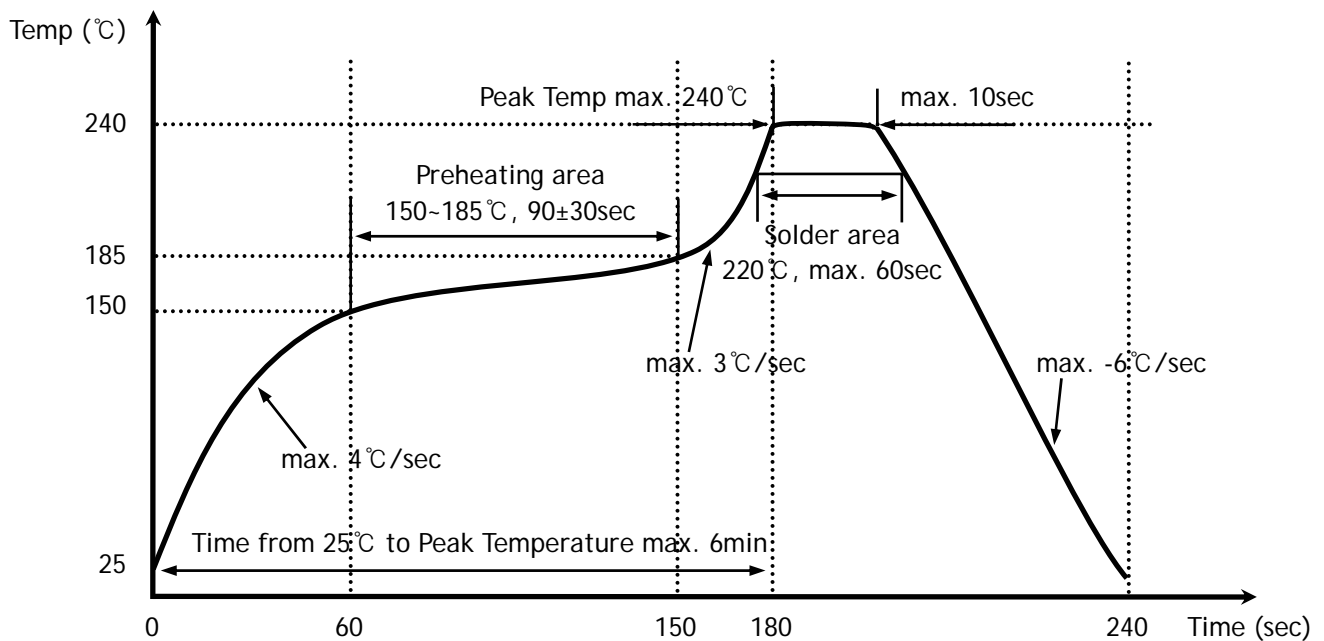
(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	63	mW
Forward current	I_F	25	mA
*1 Peak forward current	I_{FP}	50	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25 ~ 80	°C
Storage temperature range	T_{stg}	-30 ~ 100	°C
*2 Soldering temperature	T_{sol}	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)



Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F= 20mA$	-	2.2	2.5	V
*3 Luminous intensity	I_V	$I_F= 20mA$	27	-	155	mcd
*5 Peak wavelength	λ_P	$I_F= 20mA$	588	593	597	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F= 20mA$	-	30	-	nm
Reverse current	I_R	$V_R=4V$	-	-	10	uA
*4 Half angle	$\theta_{1/2}$	$I_F= 20mA$	-	±65	-	deg
	X Y		-	±70	-	

- *4. $\theta_{1/2}$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity
- *5. λ_p Grade Classification (λ_p Grade tolerance for $\pm 3\text{nm}$)
- *3. Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$
- I_v / λ_p Grade Classification ($T_a = 25^\circ\text{C}$)

Test Condition @ $I_F = 20\text{mA}$	
Luminous Intensity [mcd]	Peak Wavelength [nm]
I : 27~43	a : 588~593
J : 43~68	
K : 68~100	b : 593~597
L : 100~155	

(Do not use to combine grade classification. It must be used separately grade classification)

Characteristic Diagrams

Fig. 1 $I_F - V_F$

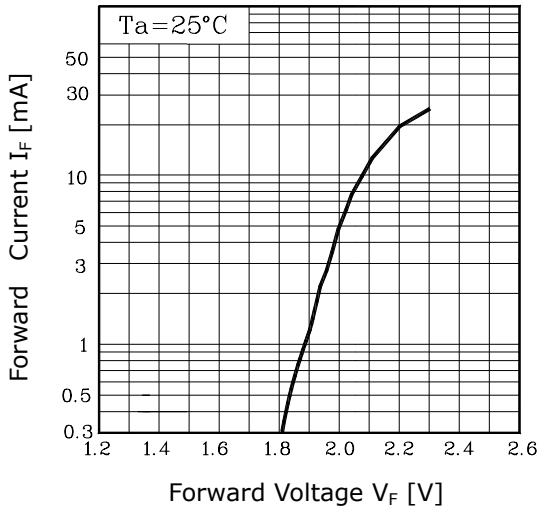


Fig. 2 $I_V - I_F$

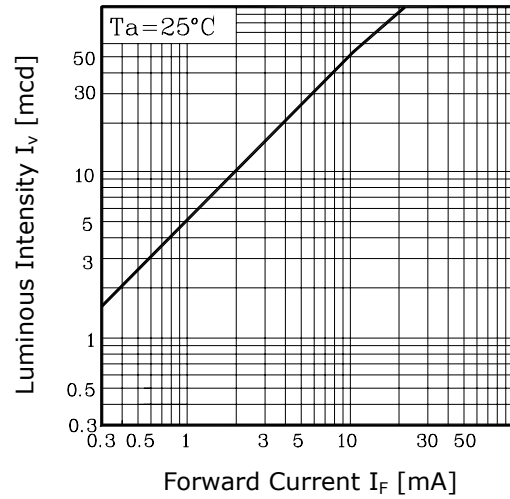


Fig. 3 $I_F - T_a$

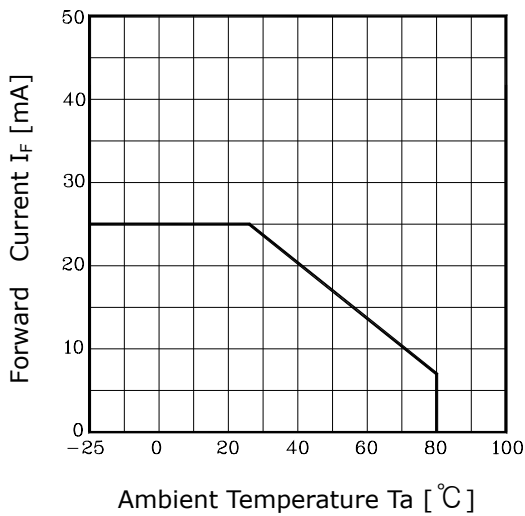


Fig.4 Spectrum Distribution

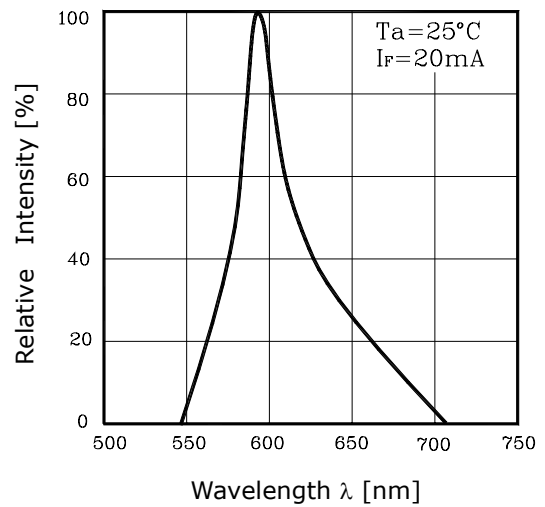


Fig. 5-1 Radiation Diagram(X)

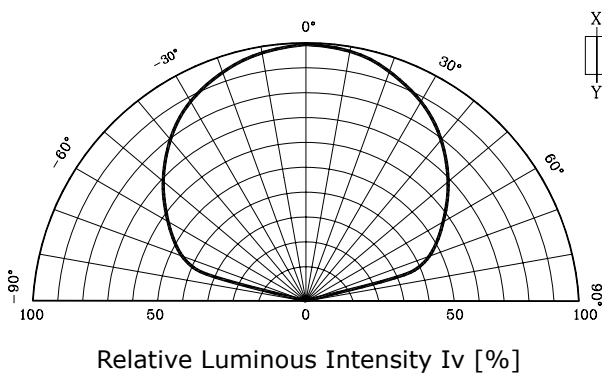
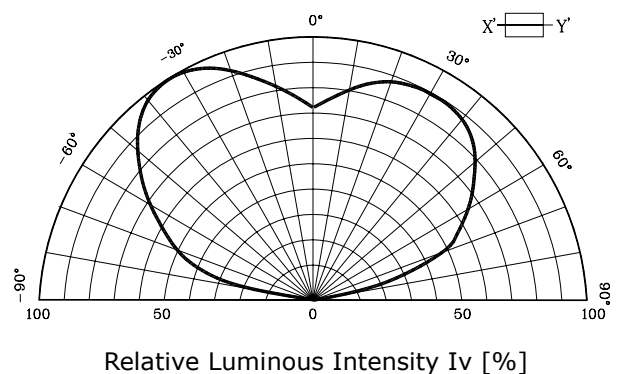


Fig. 5-2 Radiation Diagram(Y)



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