



SM2333

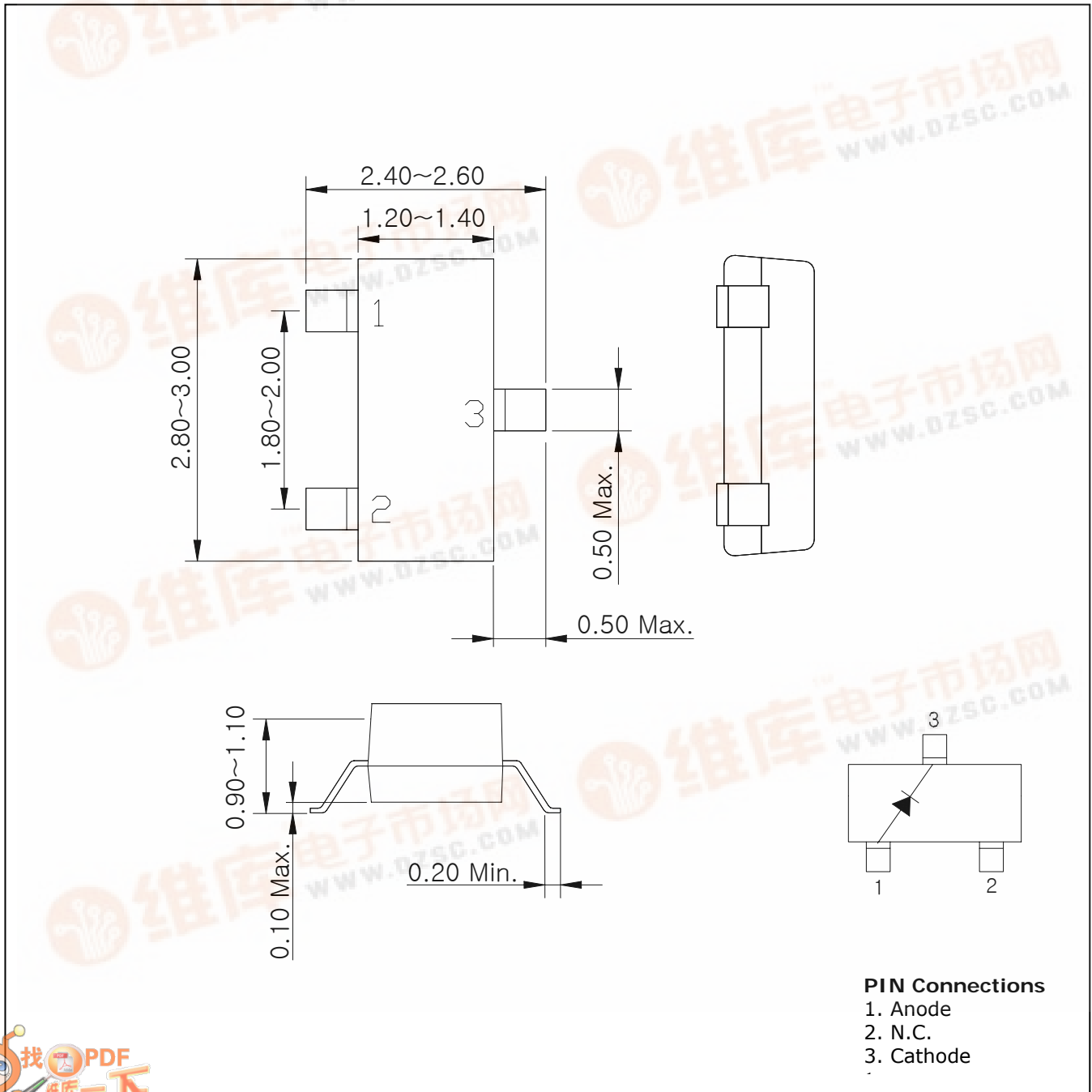
Chip LED

Features

- Colorless transparency lens type
- Compact type
- Radiation size 1.3mm × 2.9mm
- Surface mount lead configuration

Outline Dimensions

unit : mm



Absolute Maximum Ratings

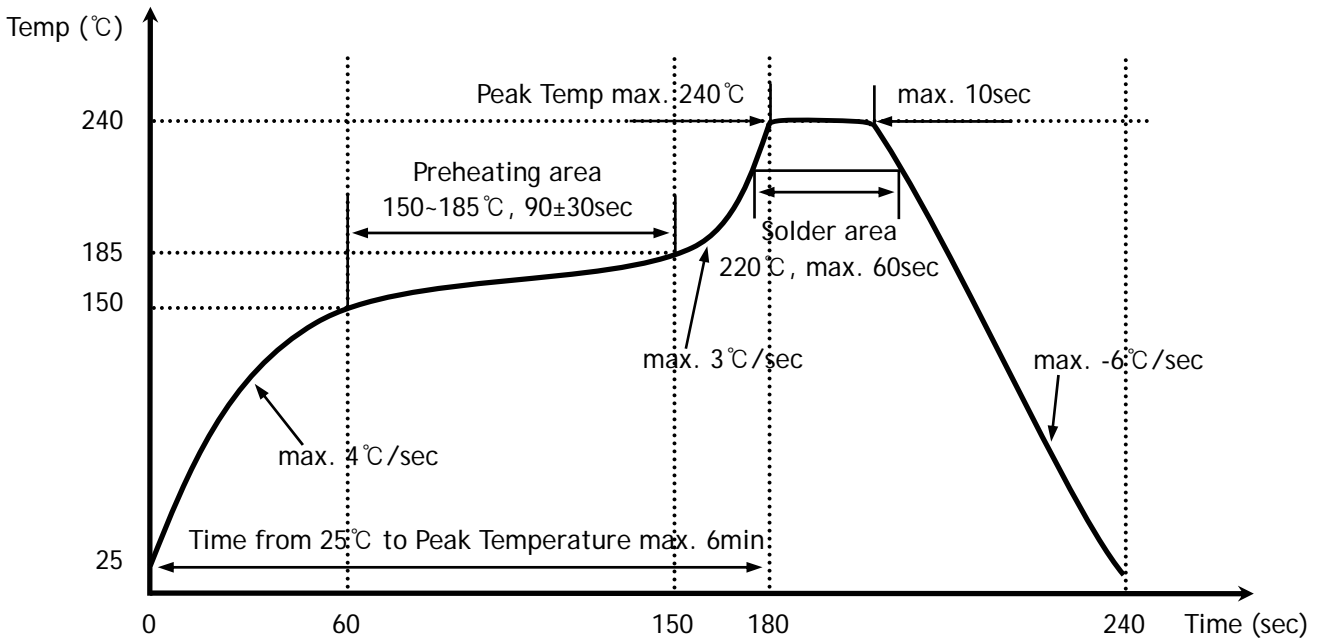
(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P _D	63	mW
Forward current	I _F	25	mA
*1Peak 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
*2Soldering 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	-	2.1	2.5	V
Luminous intensity	I _V	I _F = 20mA	4	-	-	mcd
Peak wavelength	λ _P	I _F = 20mA	-	570	-	nm
Spectrum bandwidth	Δλ	I _F = 20mA	-	30	-	nm
Reverse current	I _R	V _R =4V	-	-	10	uA
*3Half angle	θ _{1/2}	I _F = 20mA	-	±55	-	deg
				±70		

*3. θ_{1/2} is the off-axis angle where the luminous intensity is 1/2 the peak intensity

Characteristic Diagrams

Fig. 1 $I_F - V_F$

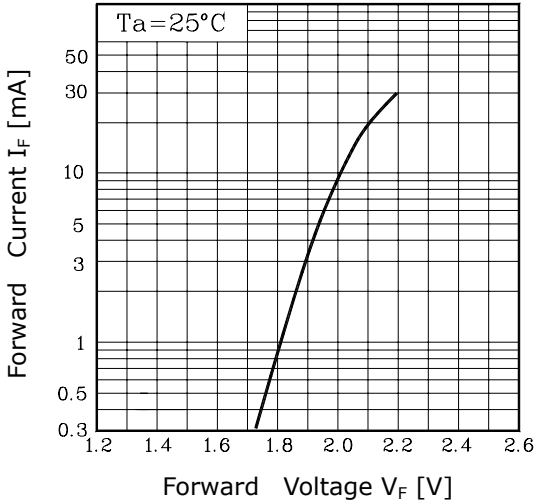


Fig. 2 $I_V - I_F$

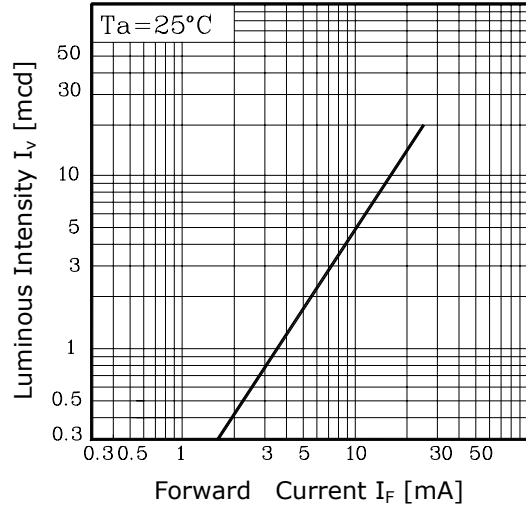


Fig. 3 $I_F - T_a$

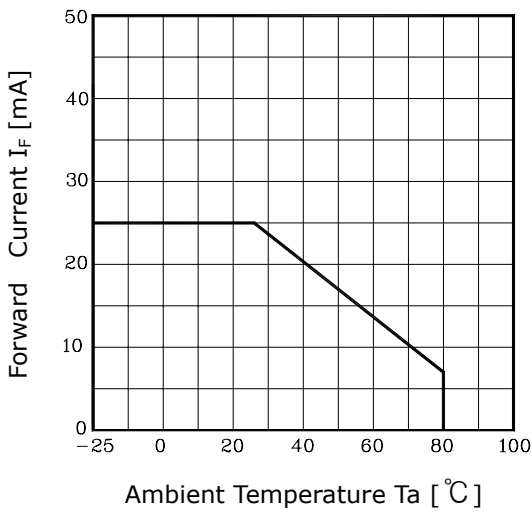


Fig.4 Spectrum Distribution

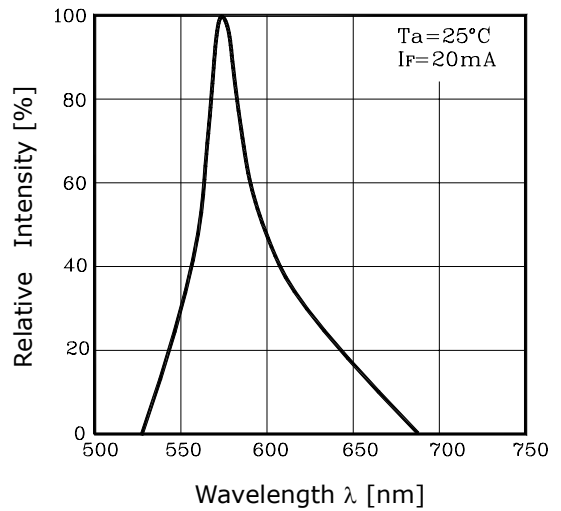


Fig. 5-1 Radiation Diagram(X)

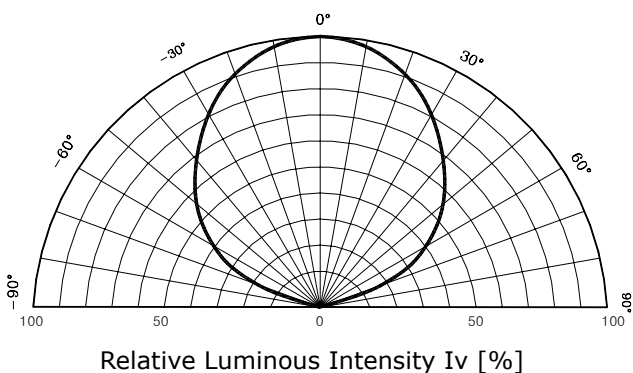
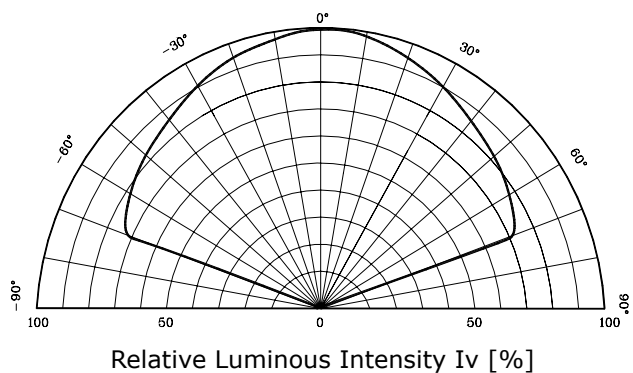


Fig. 5-2 Radiation Diagram(Y)



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