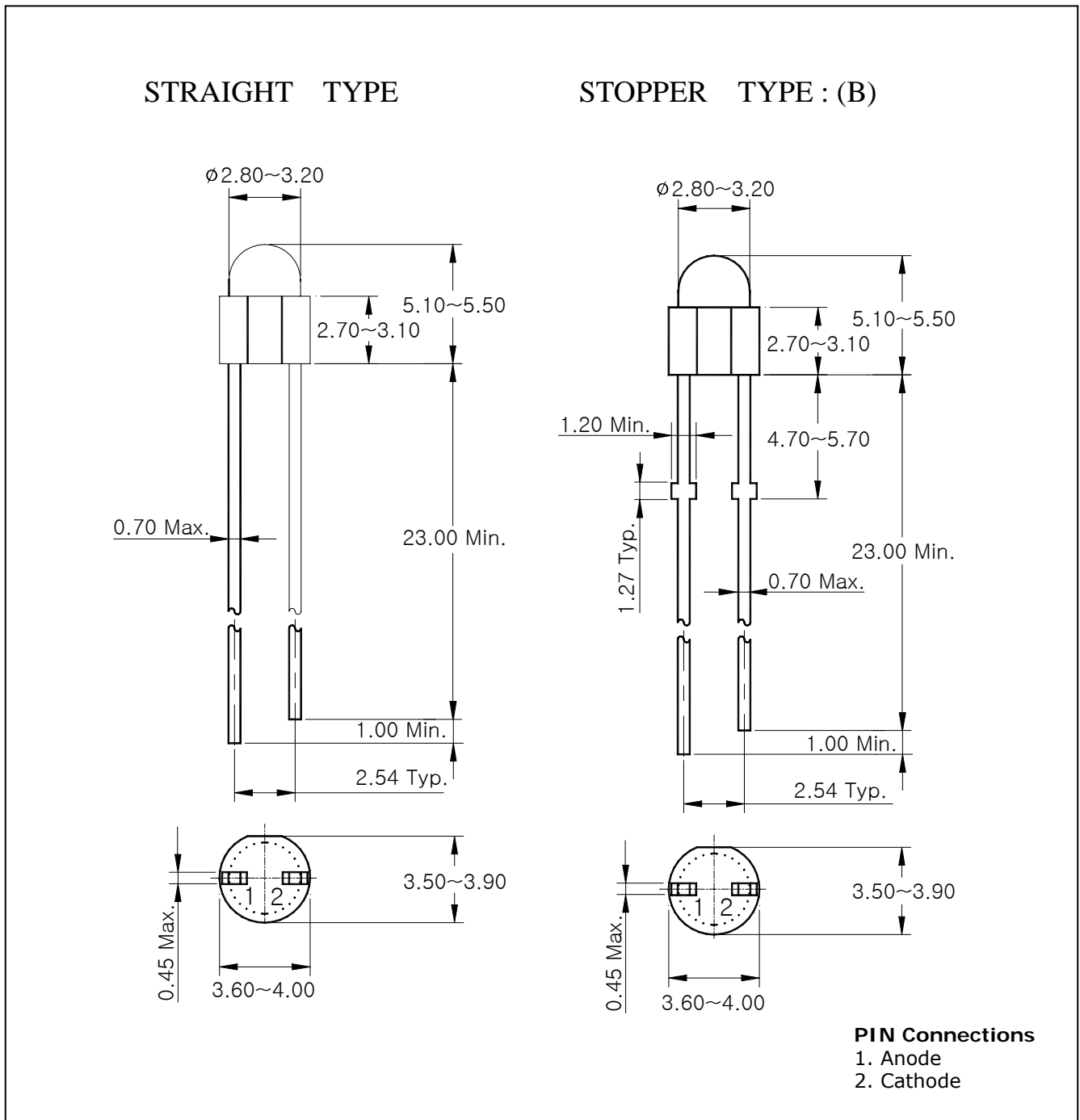


Features

- $\phi 3\text{mm}$ (T-1) all plastic mold type
- Available on tape and reel

Outline Dimensions

unit : mm



SM3317-D / SM3317-D(B)

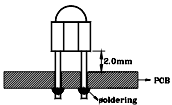
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	70	mW
Forward current	I_F	30	mA
*1 Peak forward current	I_{FP}	50	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25 ~ 85	°C
Storage temperature range	T_{stg}	-30 ~ 100	°C
*2 Soldering temperature	T_{sol}	260°C for 10 seconds	

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

*2. Keep the distance more than 2.0mm from PCB to the bottom of LED package



Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$	1.9	-	2.3	V
*4 Luminous intensity	I_V	$I_F = 20\text{mA}$	230	-	780	mcd
Dominant wavelength	λ_D	$I_F = 20\text{mA}$	569	572	575	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	30	-	nm
Reverse current	I_R	$V_R = 4\text{V}$	-	-	10	uA
*3 Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	± 22	-	deg

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

*4. Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$

• $V_F / I_V / \lambda_D$ Grade Classification (Ta=25°C)

Test Condition @ $I_F = 20\text{mA}$		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]
1 : 1.9~2.1	N : 230~350	a : 569~571
	O : 350~520	b : 571~573
2 : 2.1~2.3	P : 520~780	c : 573~575

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

Characteristic Diagrams

Fig. 1 $I_F - V_F$

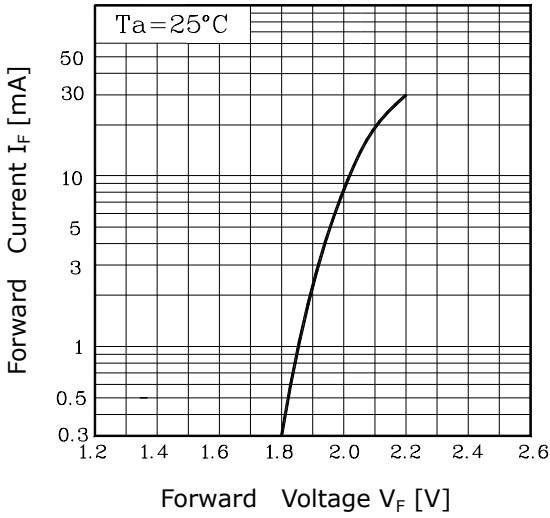


Fig. 2 $I_V - I_F$

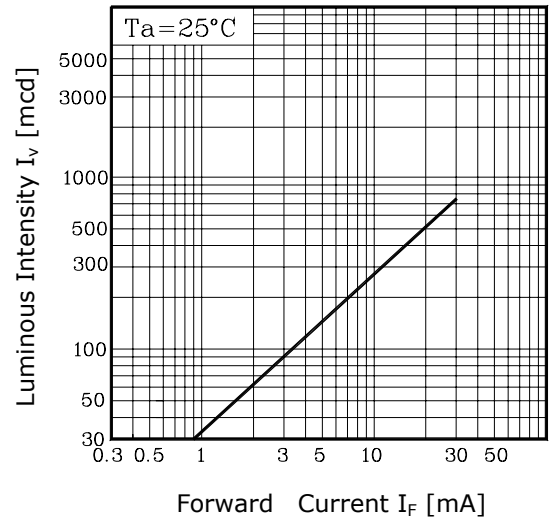


Fig. 3 $I_F - T_a$

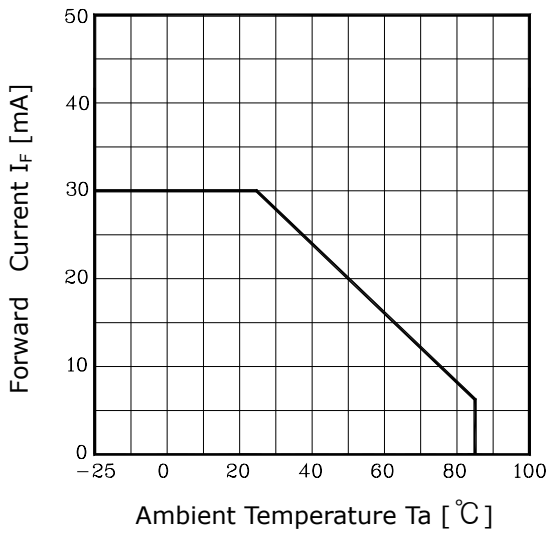


Fig. 4 Spectrum Distribution

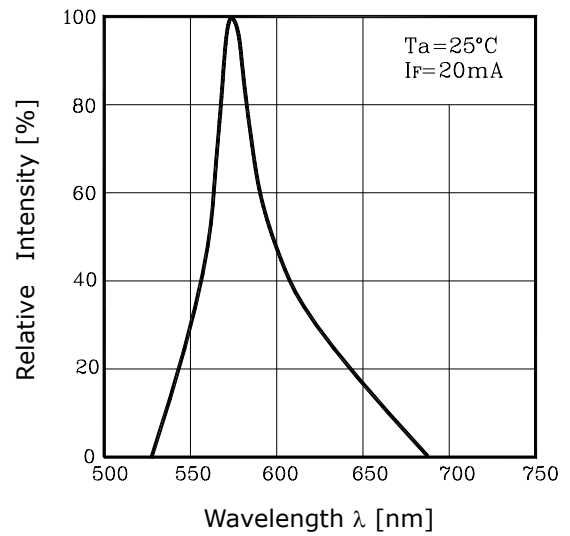
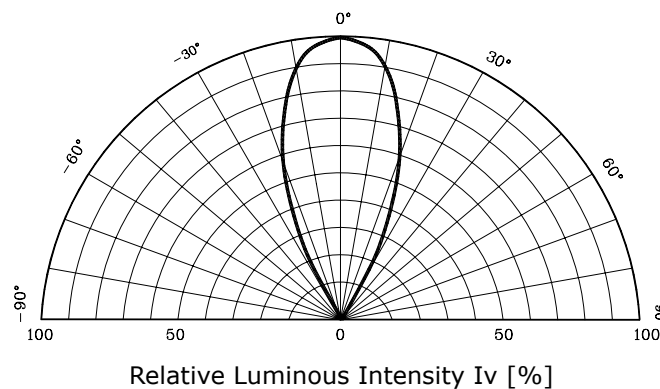


Fig. 5 Radiation Diagram



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