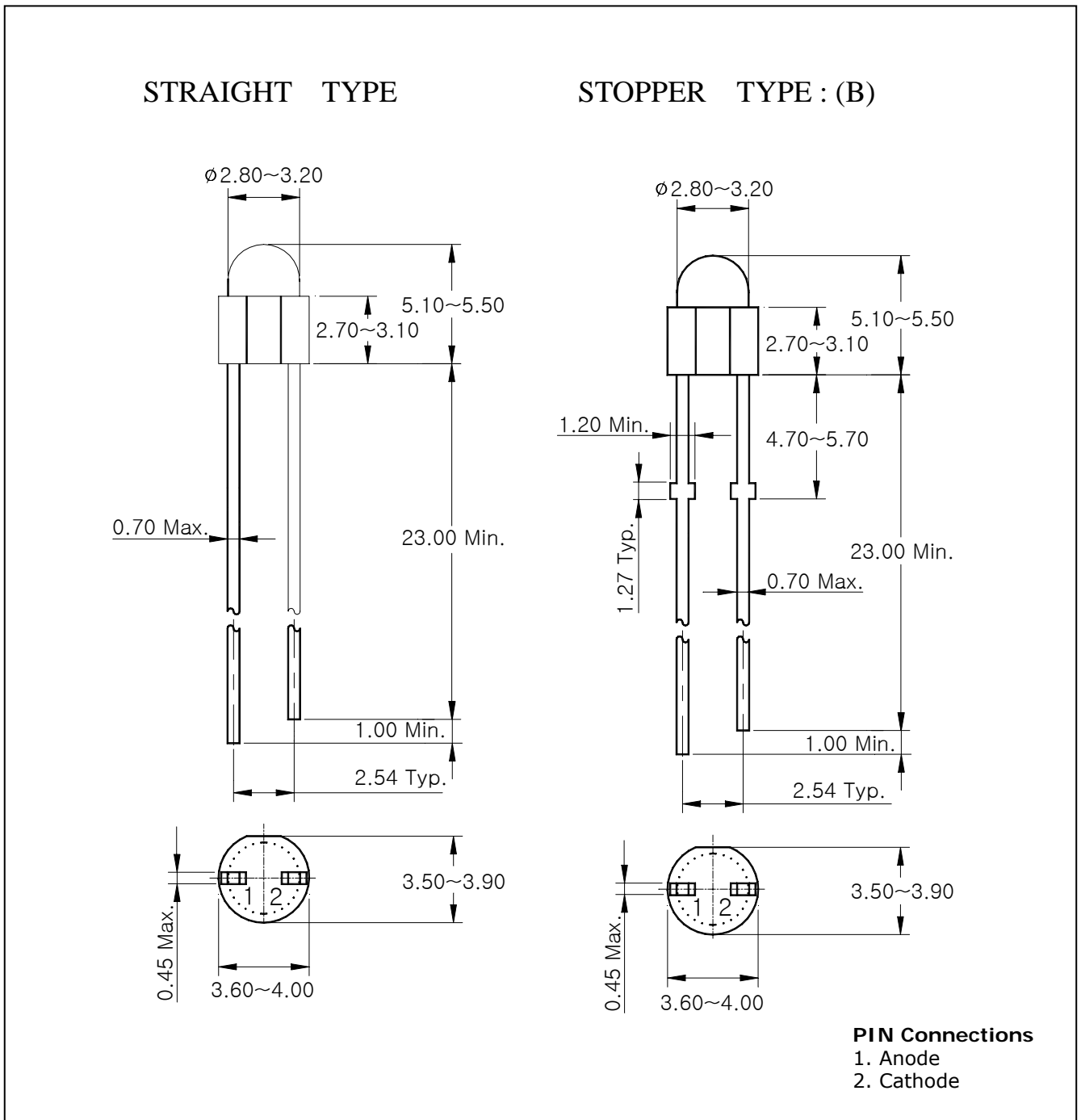


Features

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

Outline Dimensions

unit : mm



SM3317-D / SM3317-D(B)

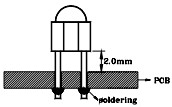
Absolute Maximum Ratings

(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_1 : 571~572
2 : 2.1~2.3	P : 520~780	b_2 : 572~573
		c : 573~575

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

Characteristic Diagrams

Fig. 1 $I_F - V_F$

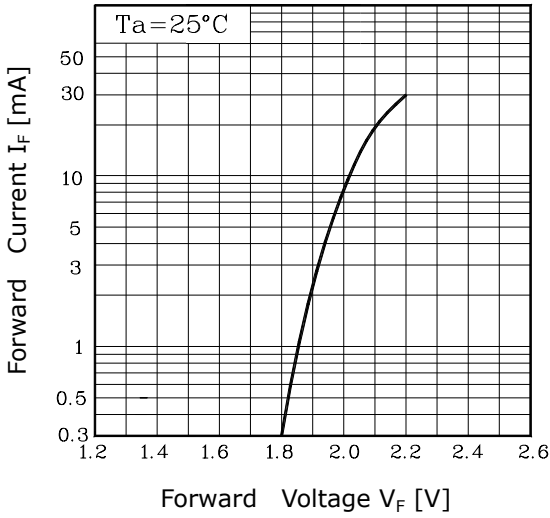


Fig. 2 $I_V - I_F$

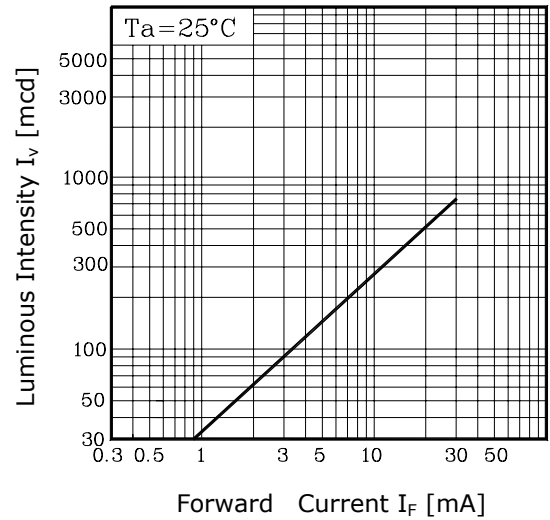


Fig. 3 $I_F - T_a$

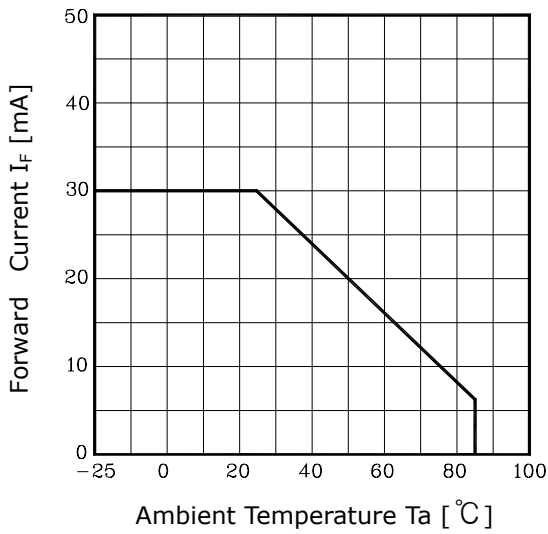


Fig.4 Spectrum Distribution

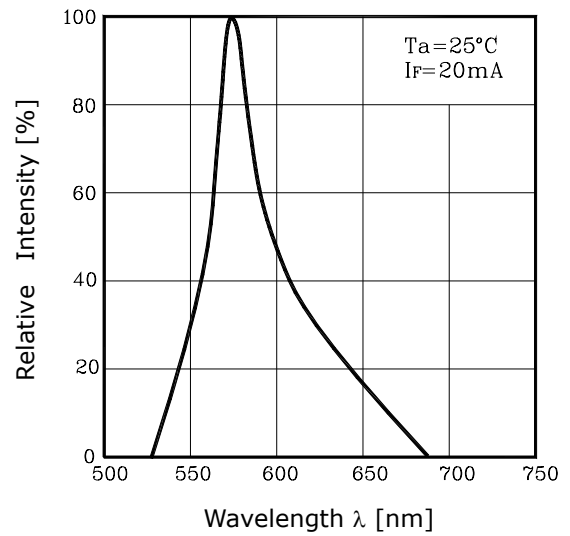
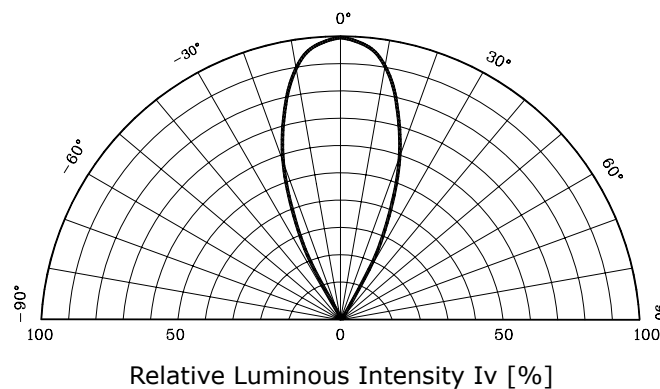


Fig. 5 Radiation Diagram



The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.