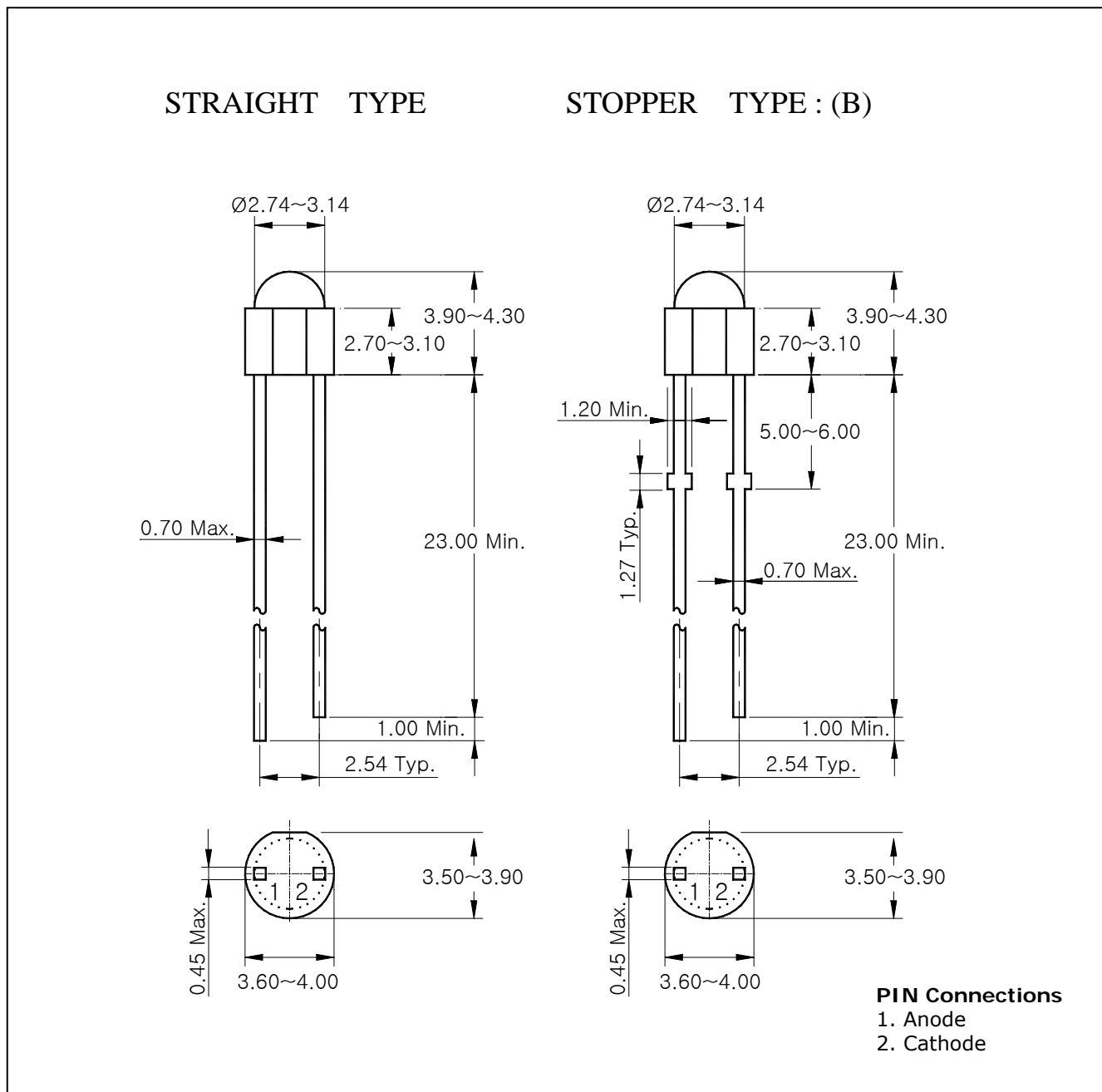


Features

- Yellow colored transparency lens type
- $\phi 3\text{mm}$ (T-1) all plastic mold type
- Wide viewing angle
- Low power consumption

Outline Dimensions

unit : mm



SY3418-E / SY3418-E(B)

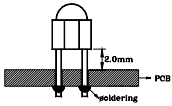
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	75	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	$I_F=20\text{mA}$	-	2.1	2.5	V
*3 Luminous intensity	I_V	$I_F=20\text{mA}$	155	-	520	mcd
*4 L Dominant wavelength	λ_D	$I_F=20\text{mA}$	587	593	600	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F=20\text{mA}$	-	30	-	nm
Reverse current	I_R	$V_R=4\text{V}$	-	-	10	uA
*5 Half angle	$\theta_{1/2}$	$I_F=20\text{mA}$	-	± 45	-	deg

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

*4. Dominant wavelength maximum tolerance for each grade classification limit is $\pm 2\text{nm}$

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

*4. Luminous Intensity Classification

M	N	O
155 ~ 230	230 ~ 350	350 ~ 520

Characteristic Diagrams

Fig. 1 $I_F - V_F$

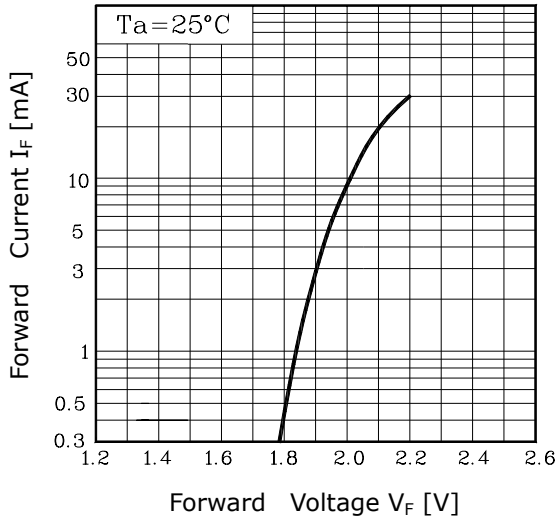


Fig. 2 $I_V - I_F$

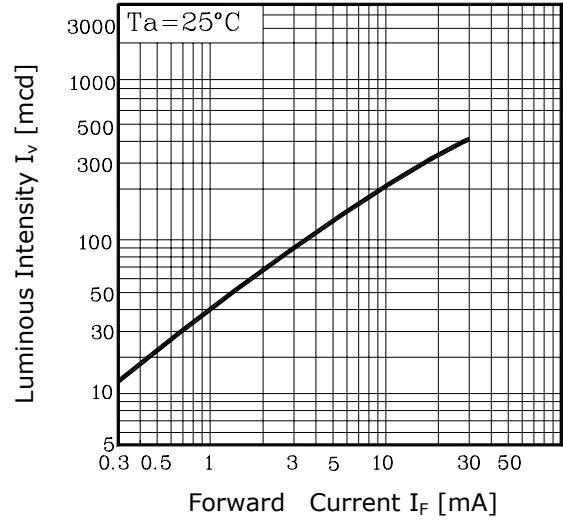


Fig. 3 $I_F - T_a$

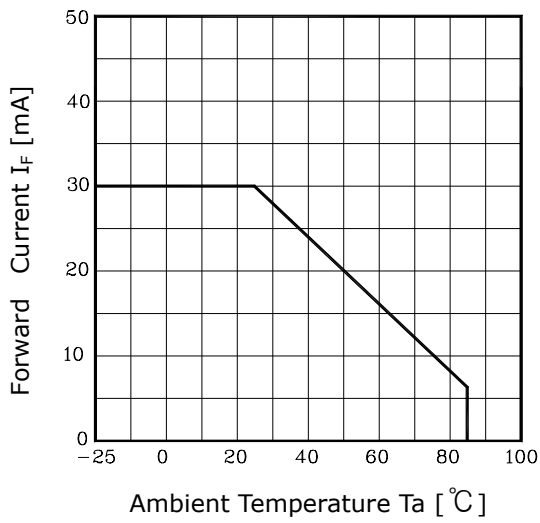


Fig.4 Spectrum Distribution

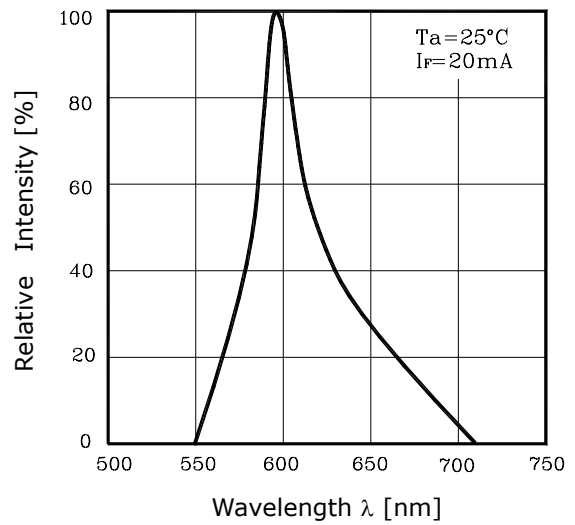
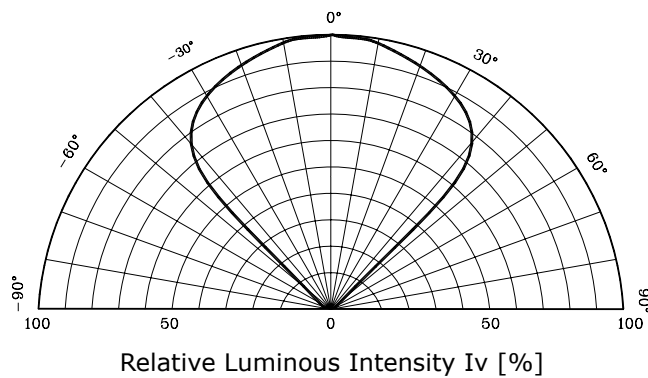


Fig. 5 Radiation Diagram



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