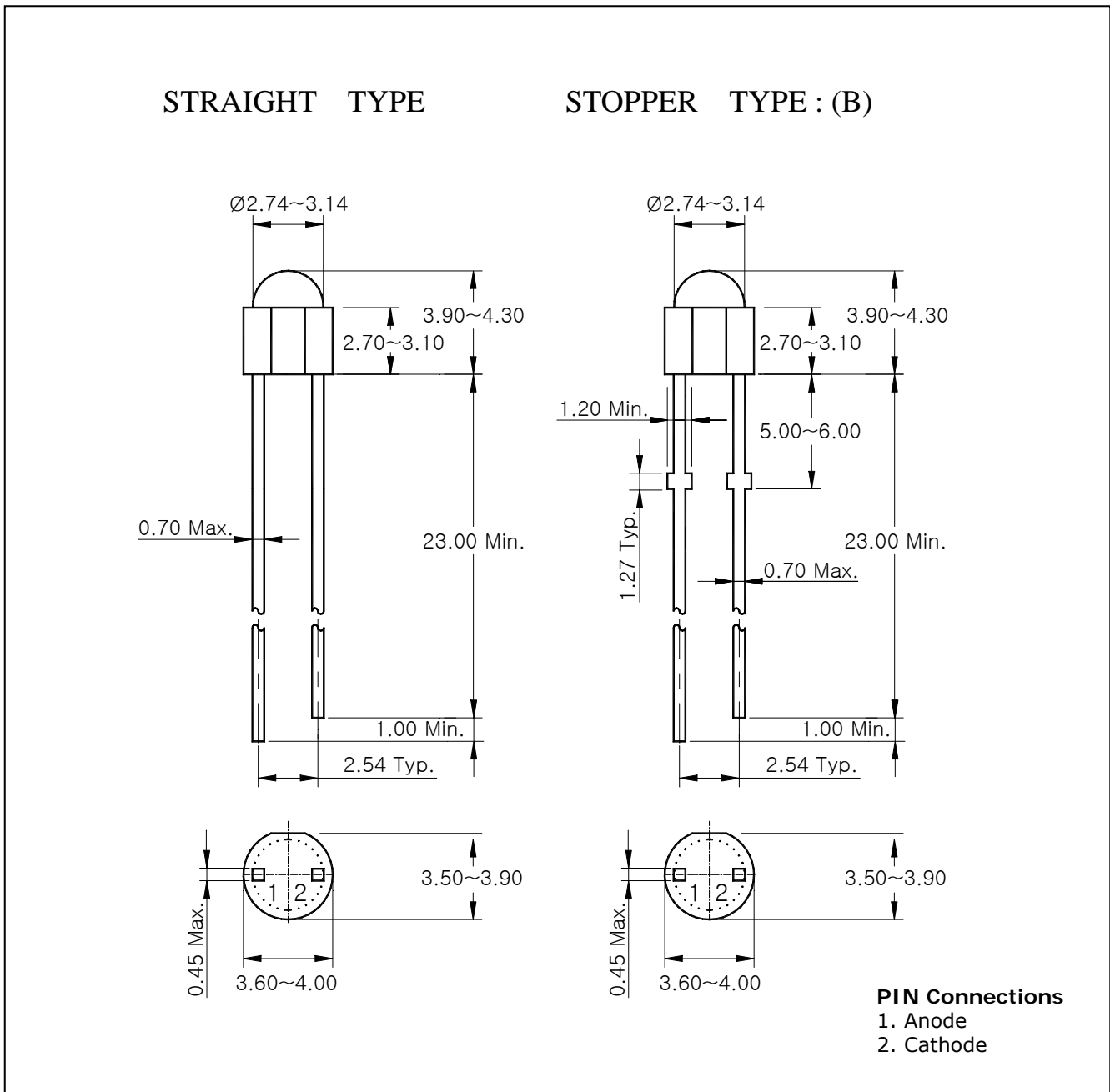


**Features**

- 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)

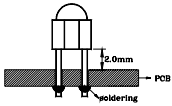
## Absolute Maximum Ratings

(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 LDomonant wavelength	$\lambda_D$	$I_F=20\text{mA}$	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	$\theta_{1/2}$	$I_F=20\text{mA}$	-	$\pm 45$	-	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  $\pm 2\text{nm}$

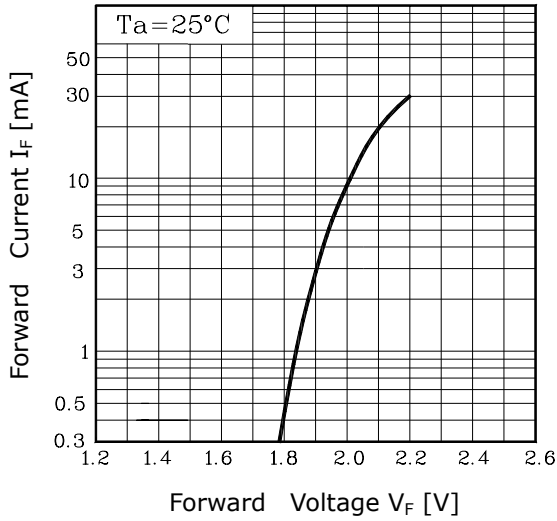
\*5.  $\theta_{1/2}$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity

\*4. Luminous Intensity Classification

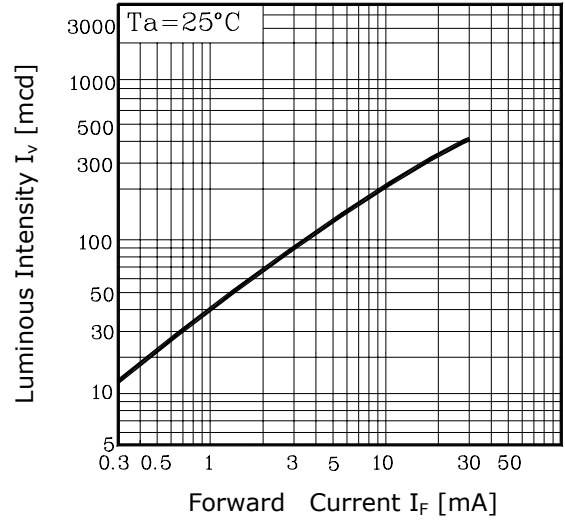
M	N	O
155 ~ 230	230 ~ 350	350 ~ 520

**Characteristic Diagrams**

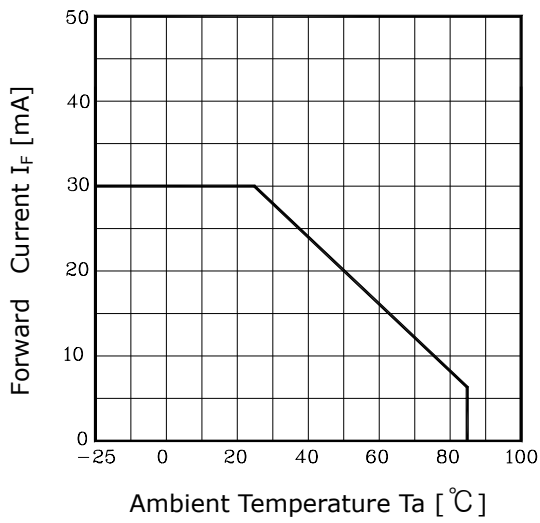
**Fig. 1  $I_F - V_F$**



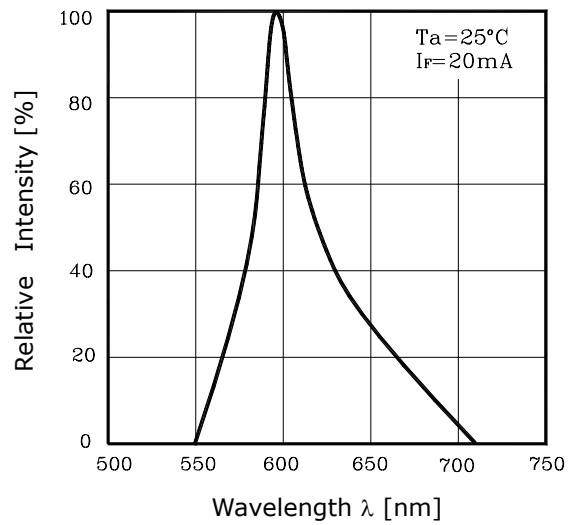
**Fig. 2  $I_V - I_F$**



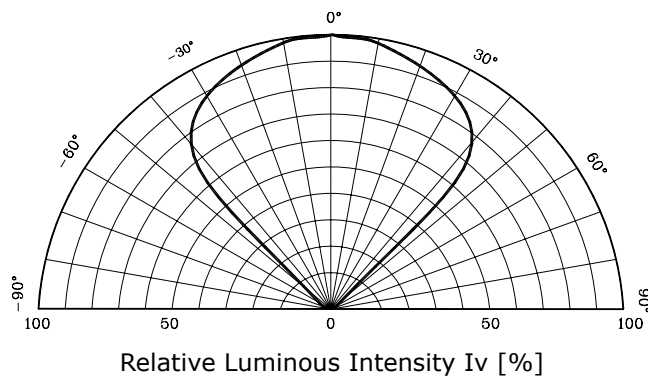
**Fig. 3  $I_F - T_a$**



**Fig.4 Spectrum Distribution**



**Fig. 5 Radiation Diagram**



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