

Features

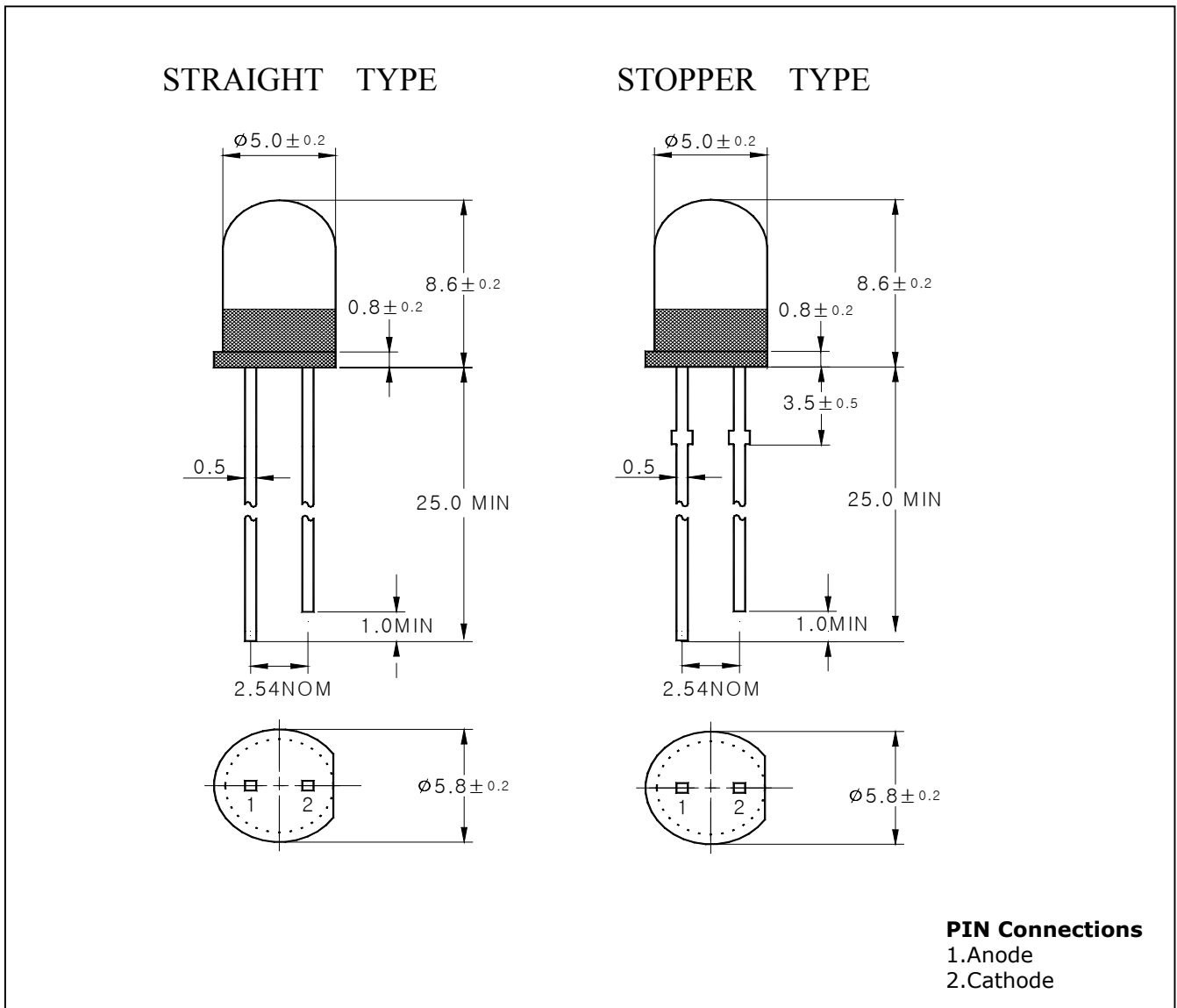
- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Super luminosity

Application

- Traffic Signal
- Massage Board

Outline Dimensions

unit : mm



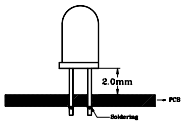
SHE123YF / SHE123YF-(B)

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	120	mW
Forward Current	I_F	40	mA
*1 Peak Forward Current	I_{FP}	65	mA
Reverse Voltage	V_R	4	V
Operating Temperature	T_{opr}	-25 ~ 85	°C
Storage Temperature	T_{stg}	-30 ~ 100	°C
*2 Soldering Temperature	T_{sol}	260°C for 5 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 Characteristics

$T_a = 25^\circ\text{C}$

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	1.8	2.3	2.7	V
*4 Luminous Intensity	I_V	$I_F = 20\text{mA}$	1170	2800	5940	mcd
Peak Wavelength	λ_p	$I_F = 20\text{mA}$	-	592	-	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	$\theta^{1/2}$	$I_F = 20\text{mA}$	-	± 20	-	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 $\pm 18\%$

*4. Luminous Intensity classification

R	S	T	U
1170~1760	1760~2640	2640~3960	3960~5940

Characteristic Diagrams

Fig. 1 $I_F - V_F$

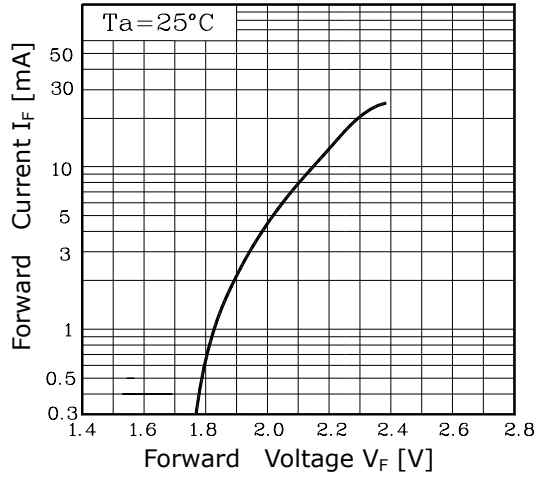


Fig. 2 $I_V - I_F$

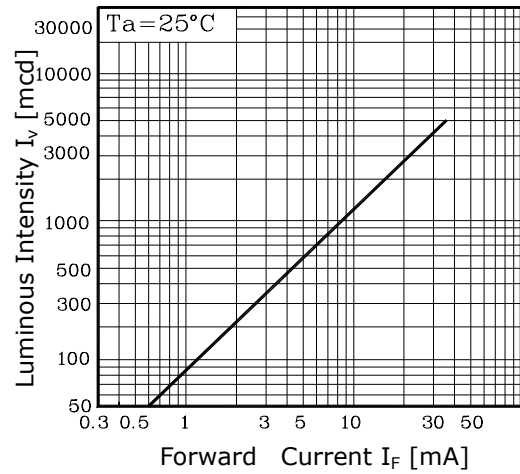


Fig. 3 $I_F - T_a$

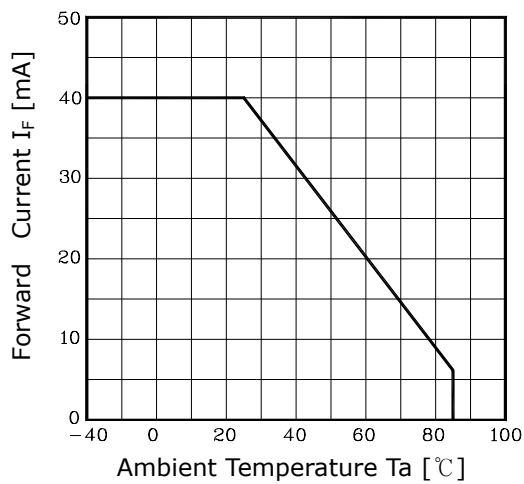


Fig. 4 Spectrum Distribution

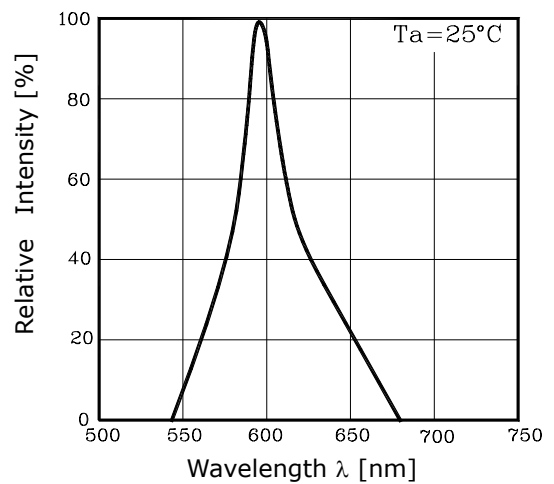
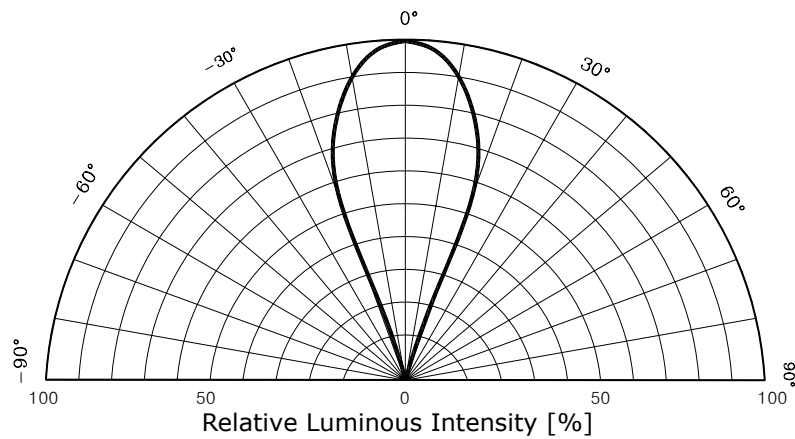


Fig. 5 Radiation Diagram



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