

Features

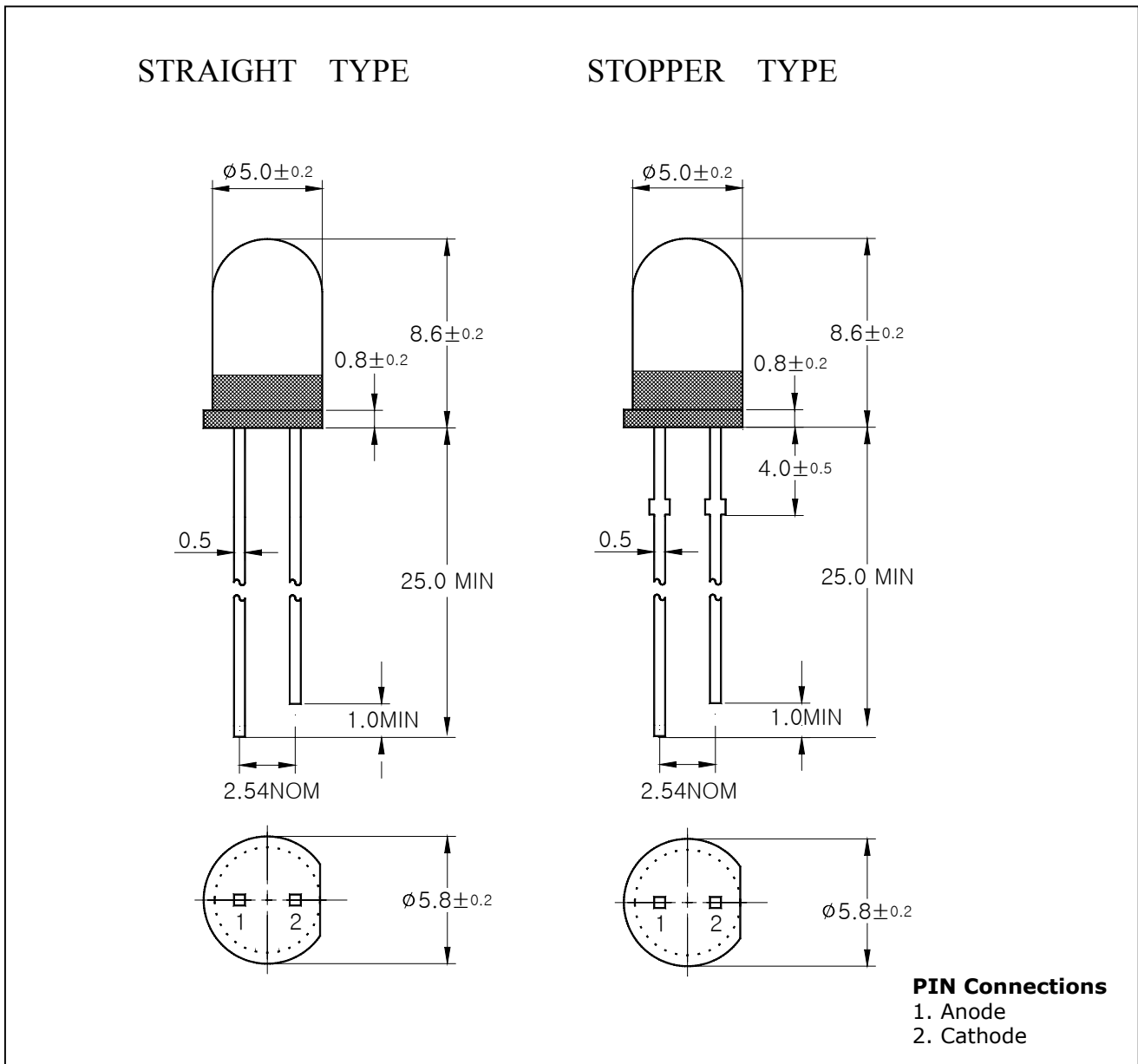
- Transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Super luminosity

Application

- Message boards

Outline Dimensions

unit : mm



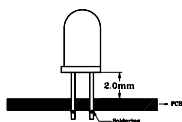
SHE113MD / SHE113MD-(B)

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	120	mW
Forward Current	I_F	40	mA
*1Peak Forward Current	I_{FP}	65	mA
Reverse Voltage	V_R	4	V
Operating Temperature	T_{opr}	-20 ~ 85	°C
Storage Temperature	T_{stg}	-30 ~ 100	°C
*2Soldering 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	$I_F = 20\text{mA}$	1.6	2.0	2.5	V
*4Luminous Intensity	I_V	$I_F = 20\text{mA}$	230	486	1170	mcd
Peak Wavelength	λ_P	$I_F = 20\text{mA}$	-	570	-	nm
Spectrum Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	30	-	nm
Reverse Current	I_R	$V_R = 4\text{V}$	-	-	10	uA
*3Half Angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	± 11	-	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

N	O	P	Q
230~350	350~520	520~780	780~1170

Characteristic Diagrams

Fig. 1 $I_F - V_F$

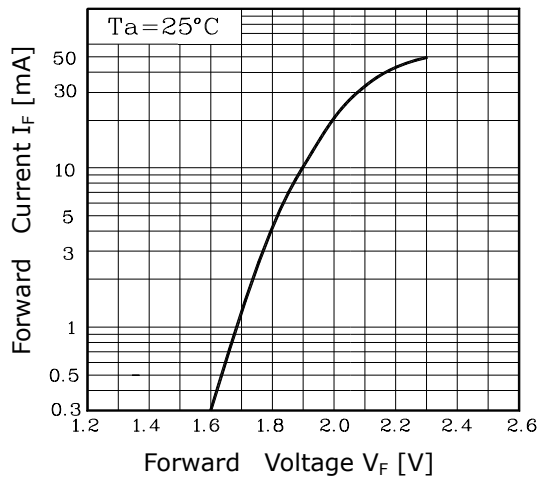


Fig. 2 $I_V - I_F$

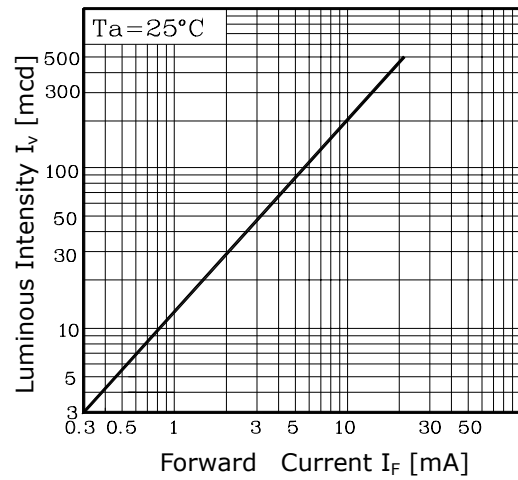


Fig. 3 $I_F - T_a$

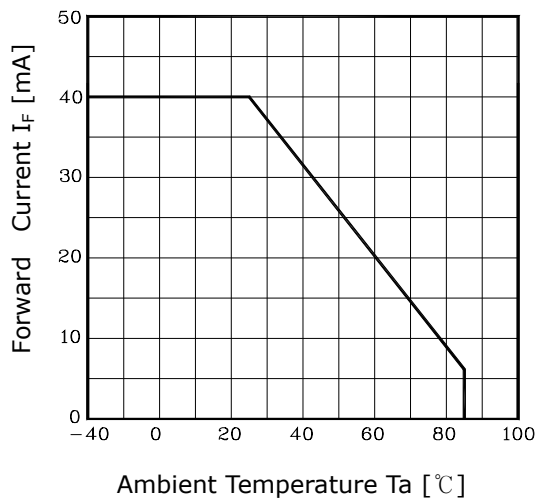


Fig. 4 Spectrum Distribution

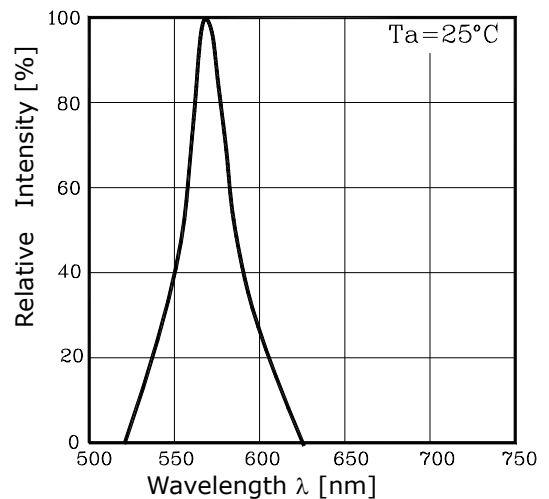
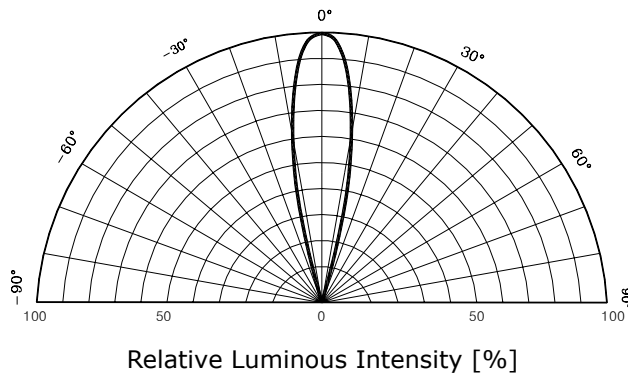


Fig. 5 Radiation Diagram



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