AUK Semiconductor

SHE113MD / SHE113MD-(B)

High Efficiency LED Lamp

Features

- Transparency lens type
- ϕ5mm(T-1 3/4) all plastic mold type
- Super luminosity

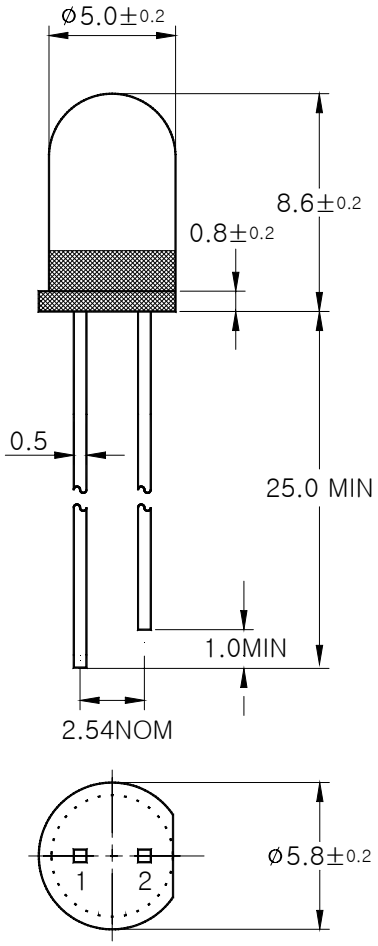
Application

- Message boards

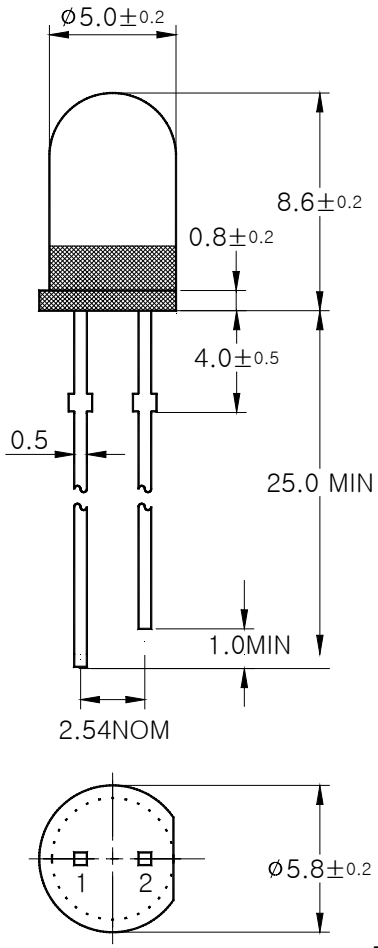
Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE

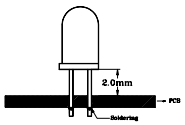


PIN Connections
1. Anode
2. Cathode

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}	-20～85	℃
Storage Temperature	T_{stg}	-30～100	℃
*[2]Soldering Temperature	T_{sol}	260℃ 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

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F= 20mA	1.6	2.0	2.5	V
*[4]Luminous Intensity	I_V	I_F= 20mA	230	486	1170	mcd
Peak Wavelength	λ_P	I_F= 20mA	-	570	-	nm
Spectrum Bandwidth	$\Delta\lambda$	I_F= 20mA	-	30	-	nm
Reverse Current	I_R	V_R=4V	-	-	10	uA
*[3]Half Angle	$\theta 1/2$	I_F= 20mA	-	±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 ±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

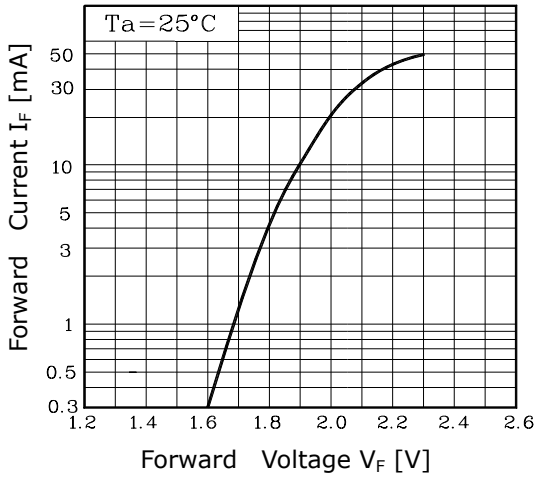


Fig. 2 I_V - I_F

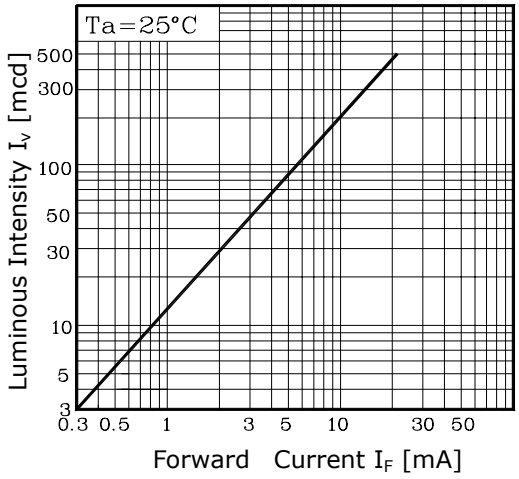


Fig. 3 I_F – Ta

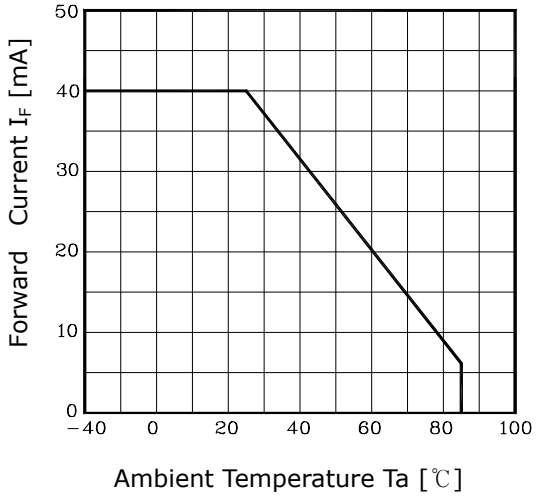


Fig.4 Spectrum Distribution

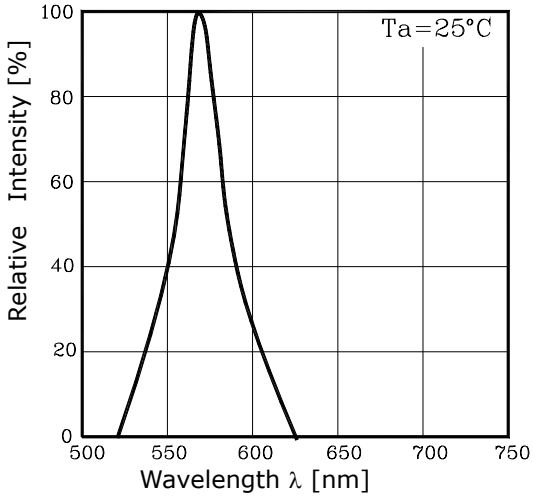
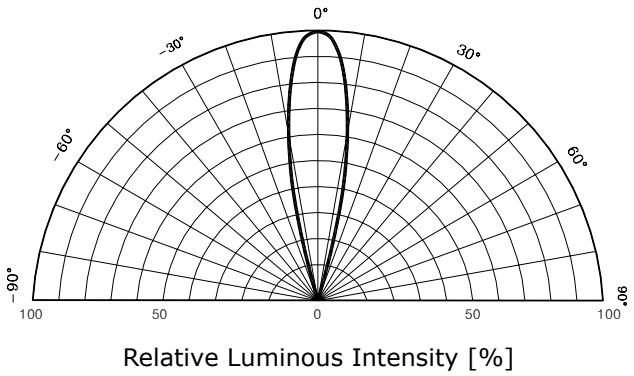


Fig. 5 Radiation Diagram



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