

Features

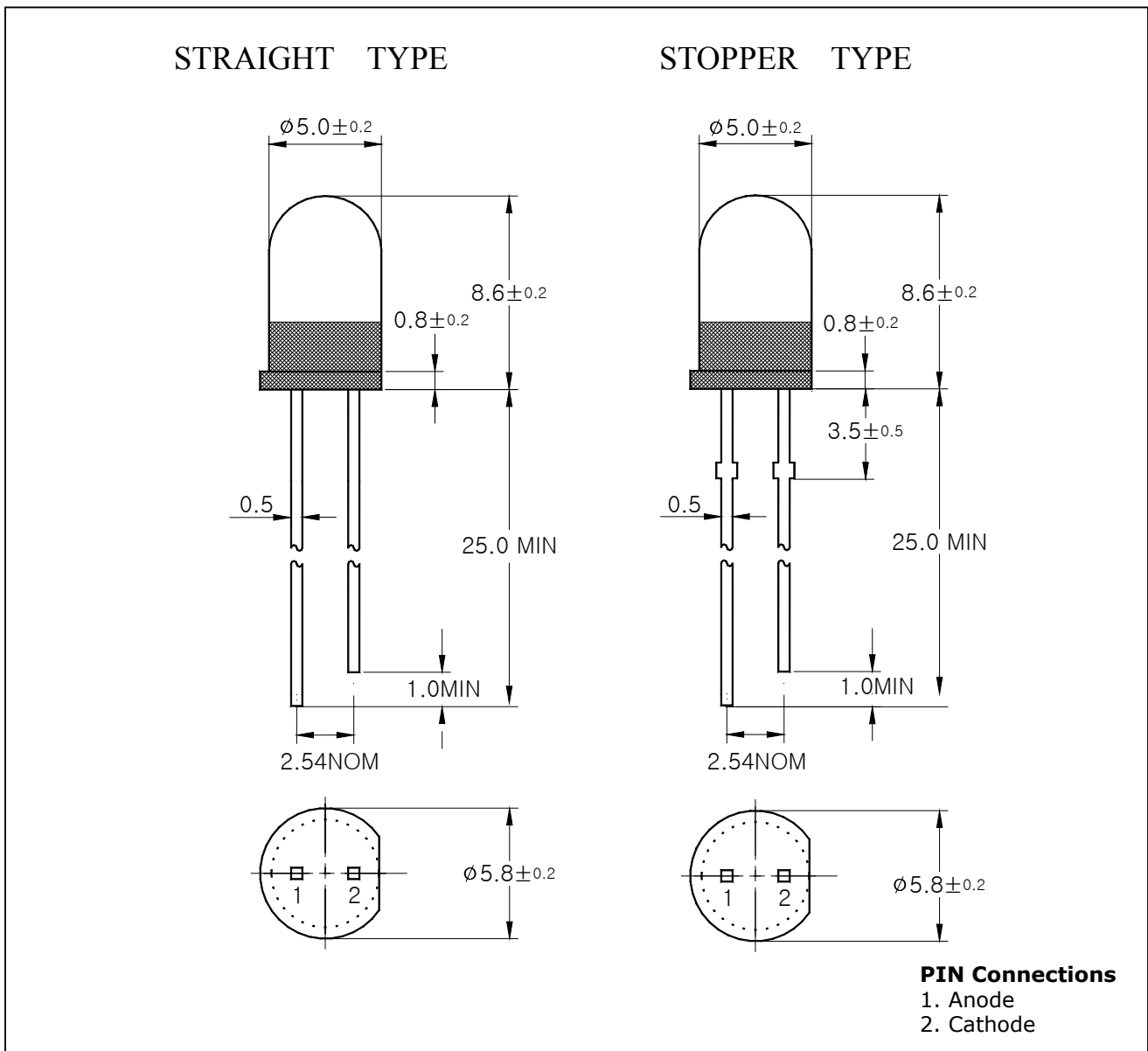
- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Super luminosity

Application

- Traffic Signal
- Massage Board

Outline Dimensions

unit : mm



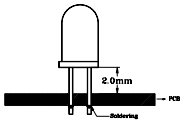
SHE123AF / SHE123AF-(B)

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	110	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	°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	2.1	2.5	V
*4 Luminous Intensity	I_V	$I_F = 20\text{mA}$	1170	3300	5940	mcd
Peak Wavelength	λ_p	$I_F = 20\text{mA}$	-	630	-	nm
Spectrum Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	17	-	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 $I_F - V_F$

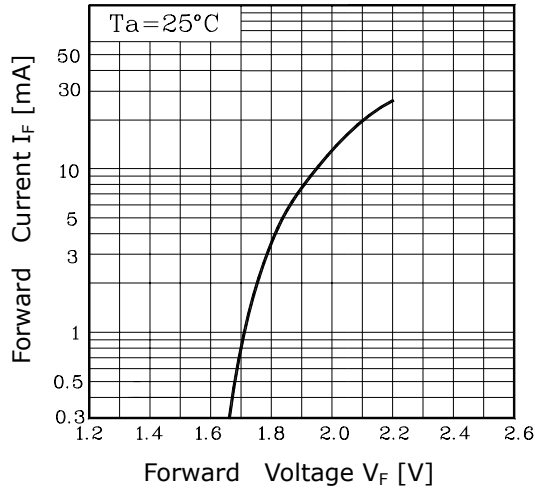


Fig. 2 $I_V - I_F$

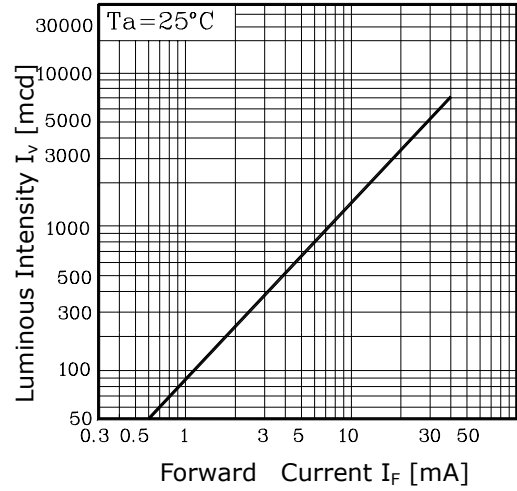


Fig. 3 $I_F - T_a$

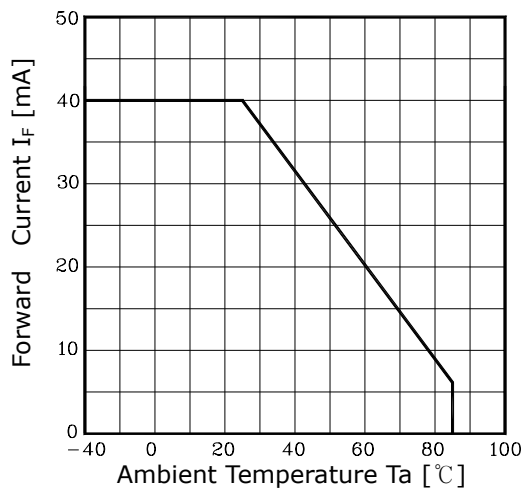


Fig. 4 Spectrum Distribution

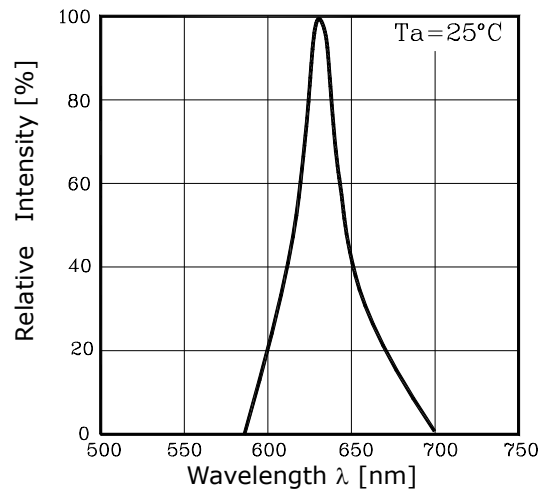
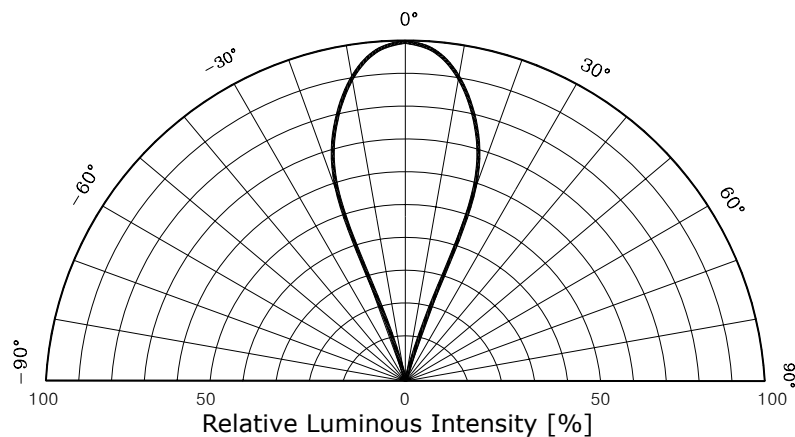


Fig. 5 Radiation Diagram



These AUK products are intended for usage in general electronic equipments(Office and communication equipment, measuring equipment, domestic electrification, etc.).

Please make sure that you consult with us before you use these AUK products in equipments which require high quality and/or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, traffic signal, combustion central, all types of safety device, etc.).

AUK cannot accept liability to any damage which may occur in case these AUK products were used in the mentioned equipments without prior consultation with AUK.