AUK Semiconductor

SHE155PGIE(B)

Oval Type High Efficiency LED Lamp

Features

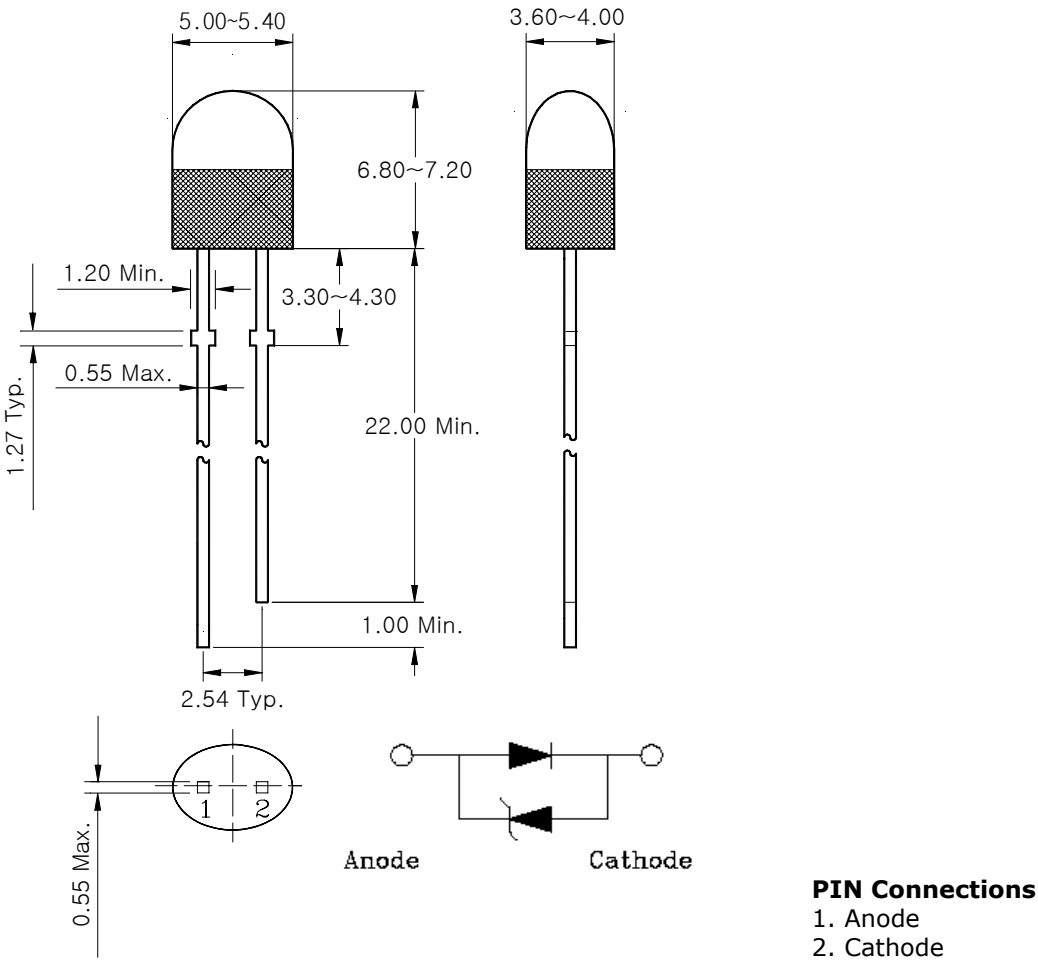
- Green colored diffusion lens type
- Ellipse type(X=5.2mm, Y=3.8mm)
- Ultra luminosity
- Flangeless package
- High power LEDs
- Oval shape
- Lens color : Green(Diffusion Type)
- Half angle(2 $\theta\frac{1}{2}$) : 110˚ / 40˚)
- **E ; ESD Protected (±2.0KV, 3 Times @100pF, 1.5KΩ)**

Application

- Full color displays
- Message boards
- Variable message signs(VMS)

Outline Dimensions

unit : mm



PIN Connections
1. Anode
2. Cathode

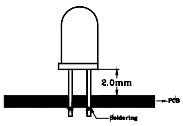
Absolute Maximum Ratings

(Ta = 25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	150	mW
Forward current	I_F	40	mA
*[1]Peak forward current	I_{FP}	50	mA
Operating temperature range	T_{opr}	-30～85	℃
Storage temperature range	T_{stg}	-30～100	℃
*[2]Soldering temperature	T_{sol}	260℃ 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



※ Recommend document

-. LED is very sensitive to ESD.

Electrical / Optical Characteristics

(Ta = 25℃)

Characteristic	Symbol		Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F		I_F= 20mA	-	3.2	3.8	V
*[4]Luminous intensity	I_V		I_F= 20mA	780	-	3200	mcd
Dominant wavelength	λ_D		I_F= 20mA	516	523	530	nm
Spectrum bandwidth	$\Delta\lambda$		I_F= 20mA	-	35	-	nm
*[3]Half angle	$\theta 1/2$	X	I_F= 20mA	-	±55	-	deg
		Y		-	±20	-	

*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

Q	R_1	R_2	S_1	S_2	T_1
780~1170	1170~1450	1450~1760	1760~2200	2200~2640	2640~3200

(Do not use to combine grade classification. It must be used separately grade classification)

Characteristic Diagrams

Fig. 1 I_F - V_F

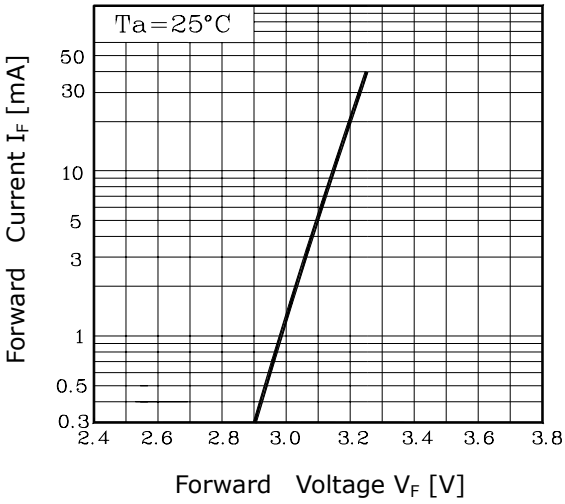


Fig. 2 I_V - I_F

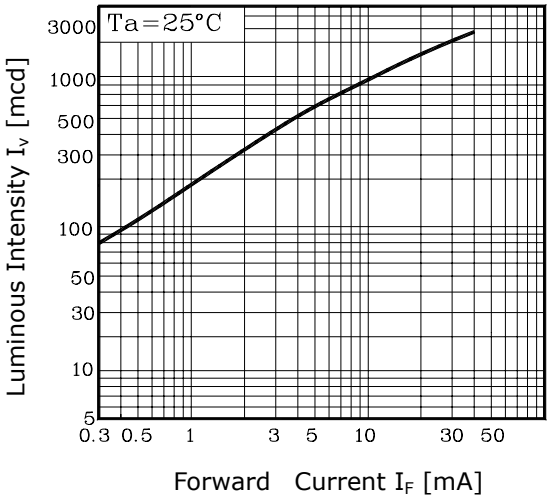


Fig. 3 I_F – Ta

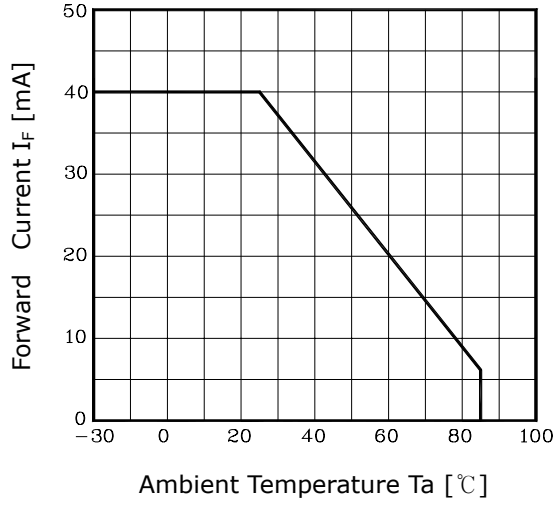


Fig.4 Spectrum Distribution

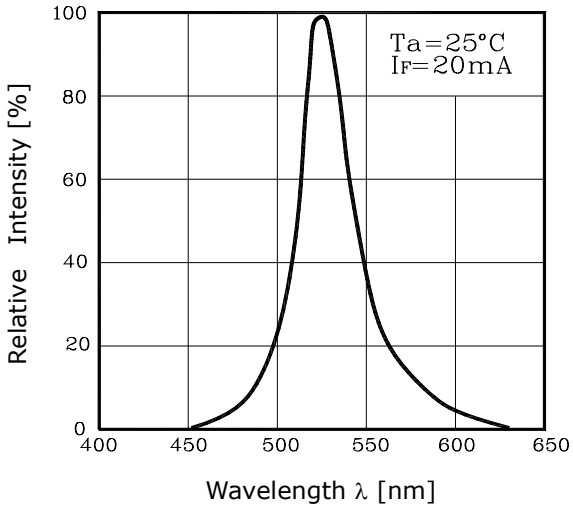


Fig. 5-1 Radiation Diagram(X)

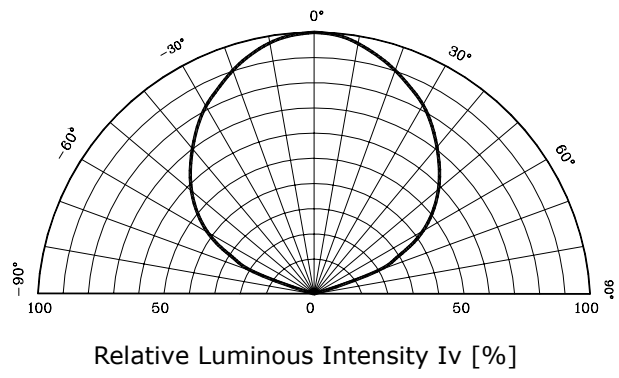
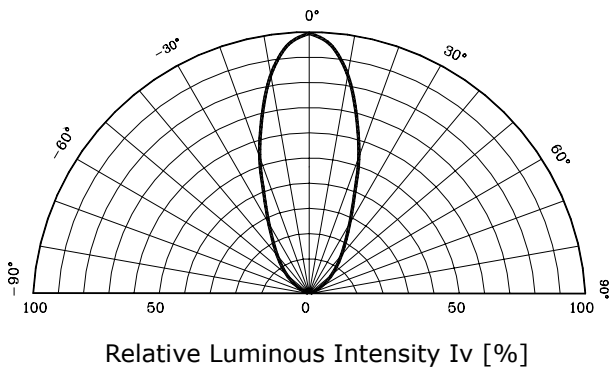


Fig. 5-2 Radiation Diagram(Y)



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