AUK Semiconductor

SG1316

Chip LED Lamp

Features

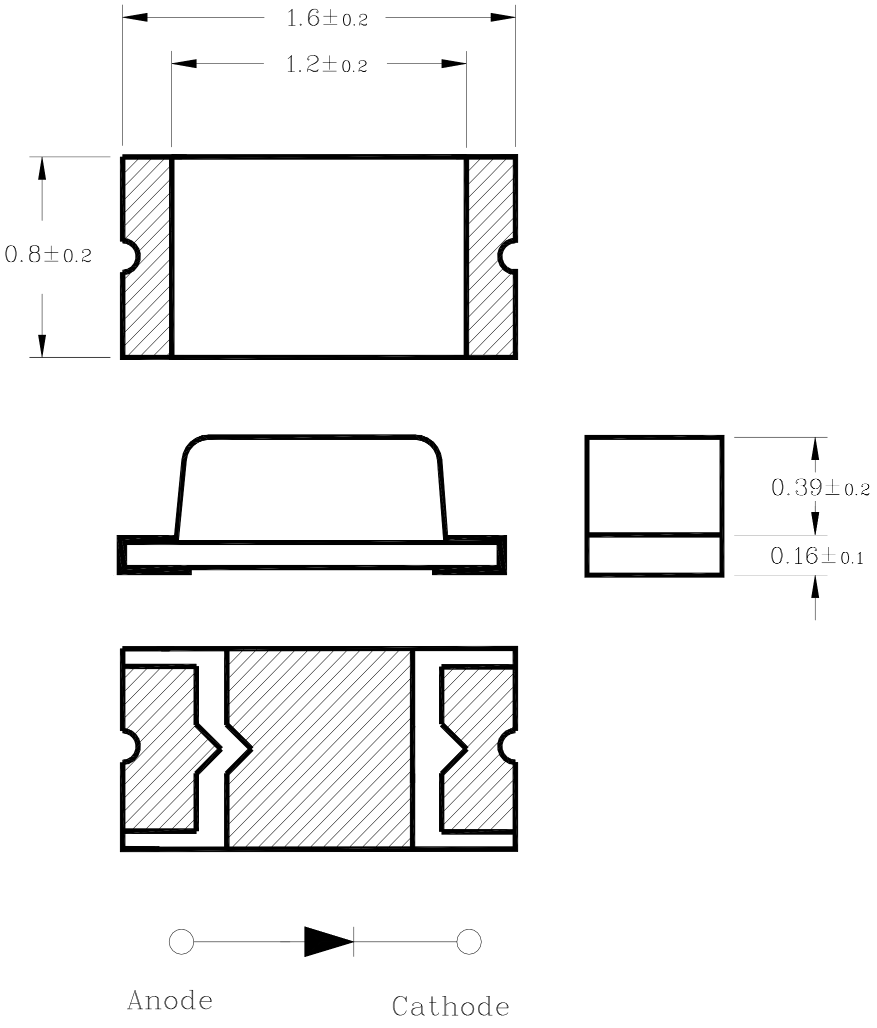
- 1.6mm(L)×0.8mm small size surface mount type
- Thin package of 0.55mm(H) thickness
- Transparent clear lens optic
- Low power consumption type chip LED

Applications

- LCD backlighting
- Keypad backlighting
- Symbol backlighting
- Front panel indicator lamp

Outline Dimensions

unit : mm



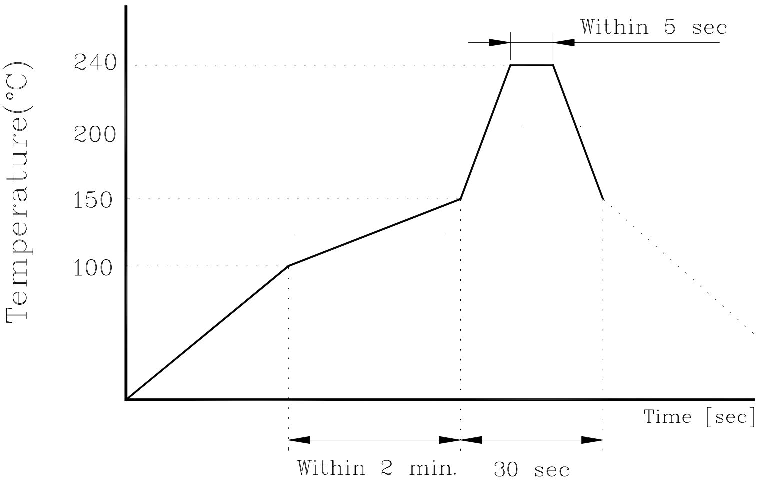
Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	70	mW
Forward Current	I_F	25	mA
*[1]Peak Forward Current	I_{FP}	50	mA
Reverse Voltage	V_R	4	V
Operating Temperature	T_{opr}	-25～80	℃
Storage Temperature	T_{stg}	-30～100	℃
*[2]Soldering Temperature	T_{sol}	240℃ for 5 seconds	

*1.Duty ratio = 1/16, Pulse width = 0.1ms

*2.Recommended soldering Temperature Profile

2-1) Preheating 100℃ to 150℃ within 2 minutes Soldering 240℃ within 5 seconds
Gradual cooling (Avoid quenching)



Electrical Characteristics

Characteristic	Symbol		Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F		I_F= 20mA	-	2.1	2.8	V
Luminous Intensity	I_V		I_F= 20mA	-	3	-	mcd
Peak Wavelength	λ_P		I_F= 20mA	-	557	-	nm
Spectrum Bandwidth	$\Delta\lambda$		I_F= 20mA	-	30	-	nm
Reverse Current	I_R		V_R=4V	-	-	10	uA
Half angle	θ1/2	X	I_F= 20mA	-	±65	-	deg
		Y		-	±70	-	

Characteristic Diagrams

Fig. 1 I_F - V_F

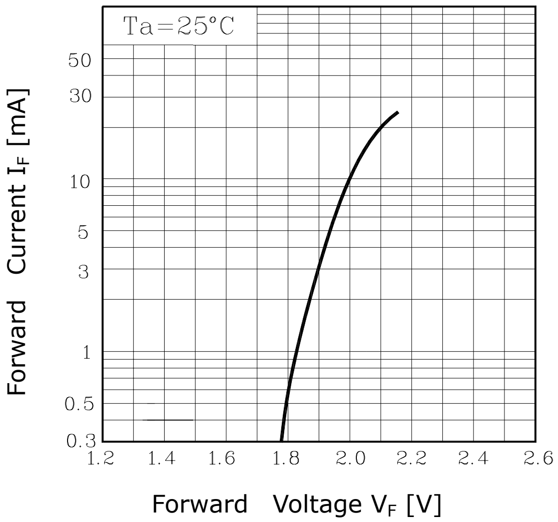


Fig. 2 I_V - I_F

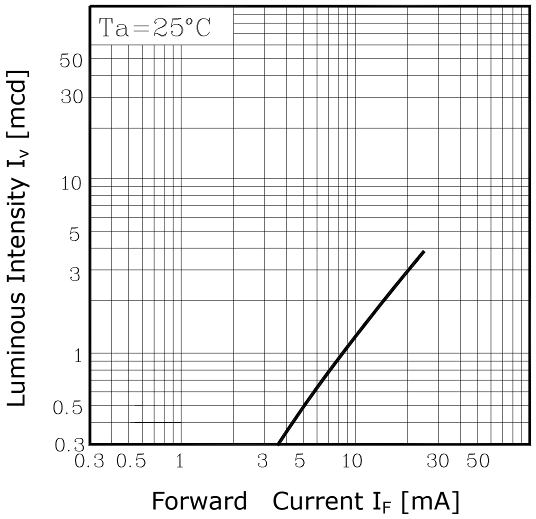


Fig. 3 I_F – Ta

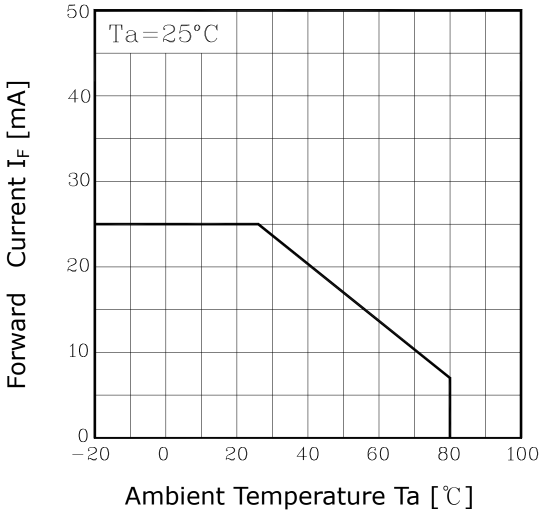


Fig.4 Spectrum Distribution

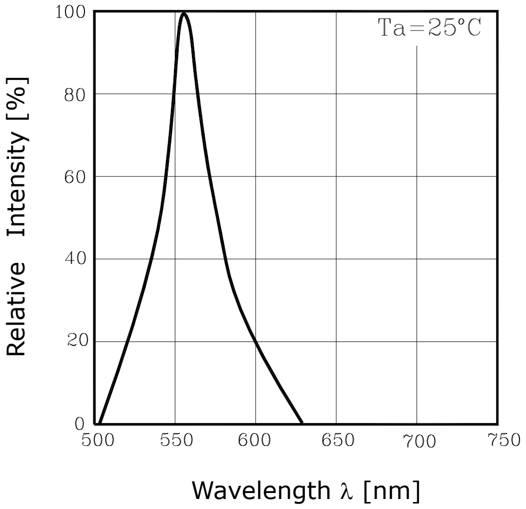


Fig. 5-1 Radiation Diagram(X)

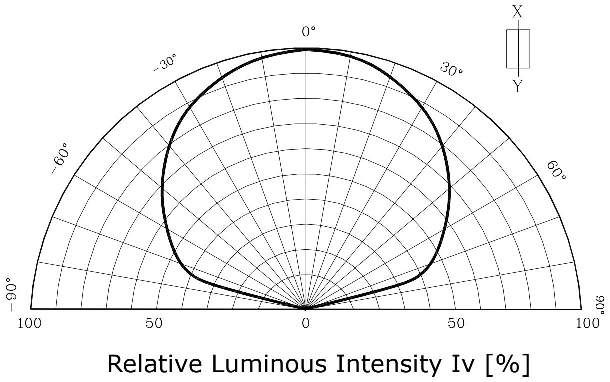


Fig. 5-2 Radiation Diagram(Y)