AUK Semiconductor

SG1316

Chip LED Lamp

Features

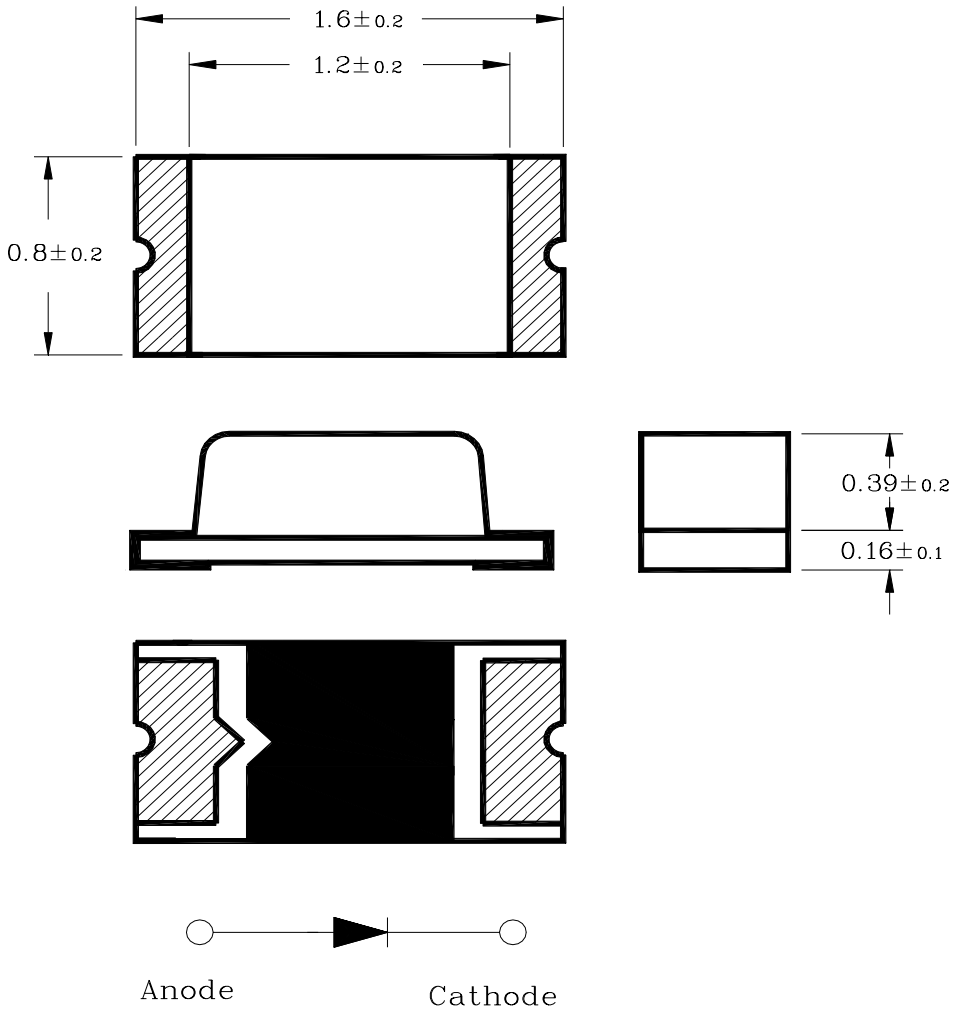
- 1.6mm(L)×0.8mm small size surface mount type
- Thin package of 0.55mm(H) thickness
- Transparent clear lens optic
- Low power consumption type chip LED

Applications

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

Outline Dimensions

unit : mm



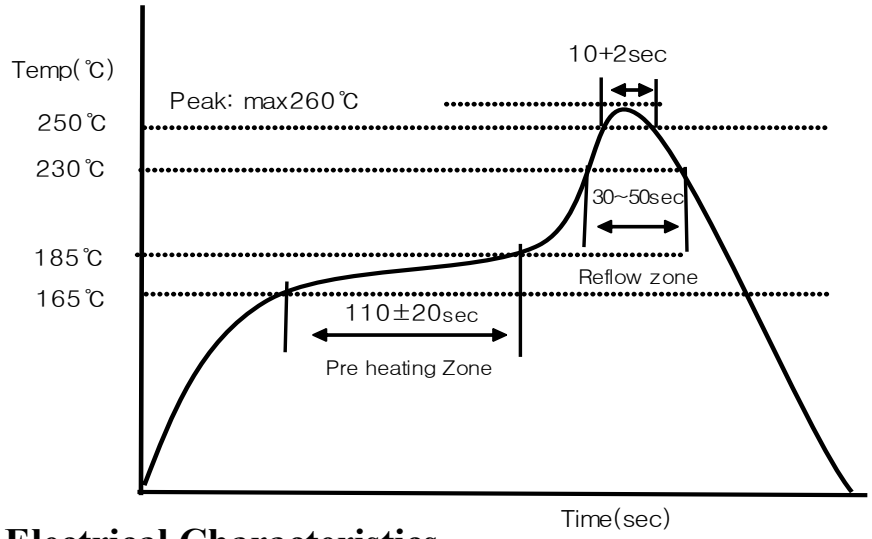
Absolute maximum ratings

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}	260℃ for 10 seconds	

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

*2. Recommended soldering Temperature Profile

2-1) Preheating 165℃ to 185℃ within 130 seconds Soldering 260℃ within 10 seconds
Gradual cooling (Avoid quenching)



Electrical Characteristics

Characteristic	Symbol		Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F		I_F= 10mA	-	2.0	2.4	V
			I_F= 20mA	-	2.1	2.8	V
*[4]Luminous Intensity	I_V		I_F= 10mA	-	1.3	-	mcd
			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	-	

*4. Luminous Intensity Maximum tolerance for each Grade Classification limit is ±18%

*4. Luminous Intensity classification (Test Condition : I_F = 10mA)

A	B	C	D
0.6~1.0	1.0~1.6	1.6~2.6	2.6~4.1

Characteristic Diagrams

Fig. 1 I_F - V_F

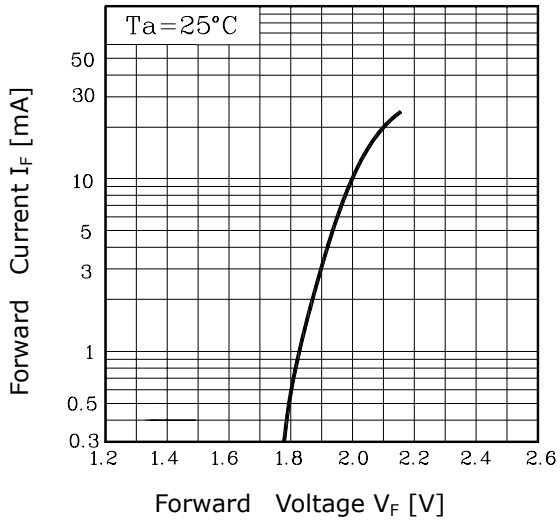


Fig. 2 I_V - I_F

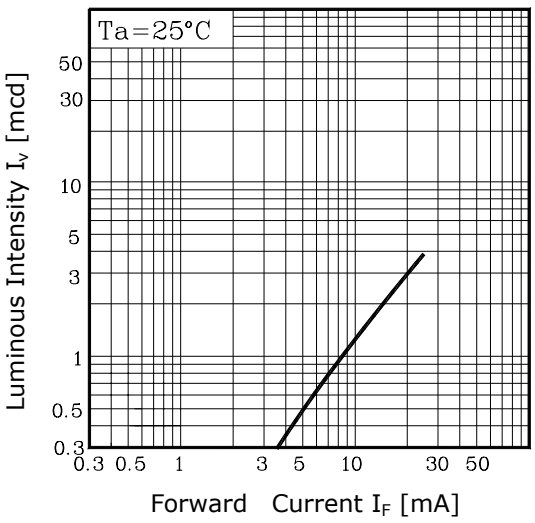


Fig. 3 I_F – Ta

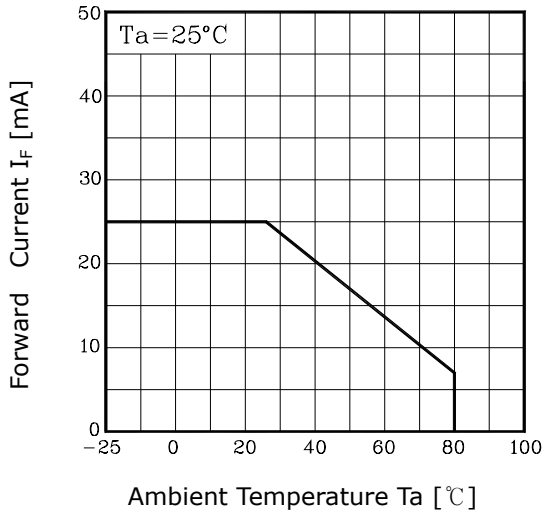


Fig.4 Spectrum Distribution

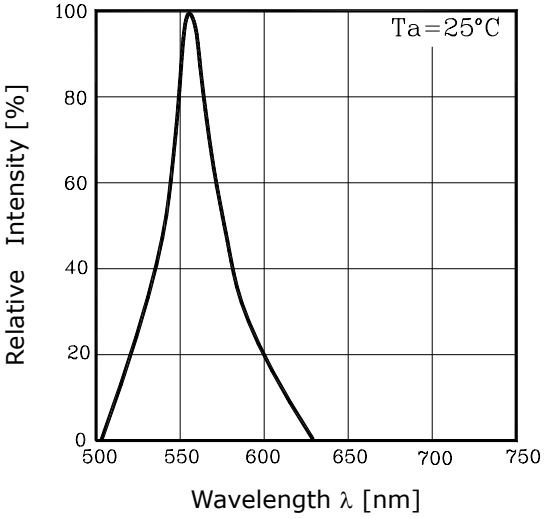


Fig. 5-1 Radiation Diagram(X)

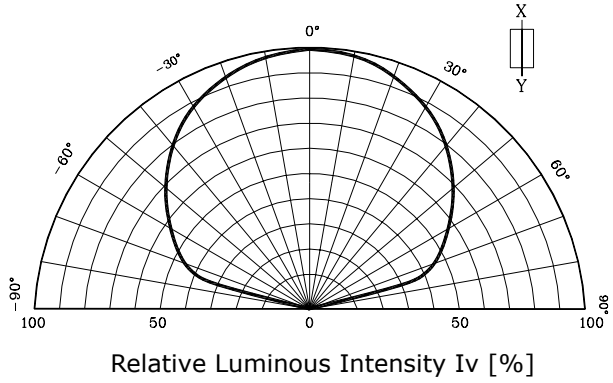
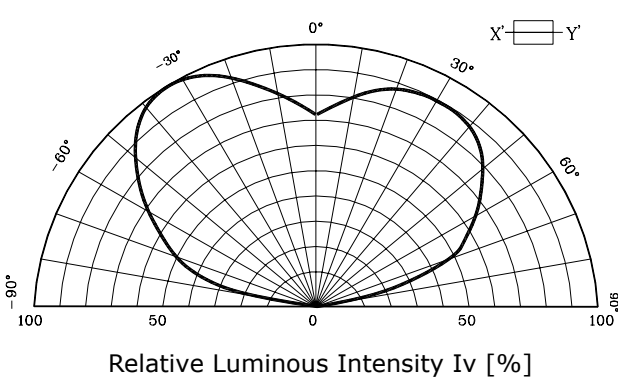


Fig. 5-2 Radiation Diagram(Y)



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