AUK Semiconductor

SM1316-L

Chip LED Lamp

Features

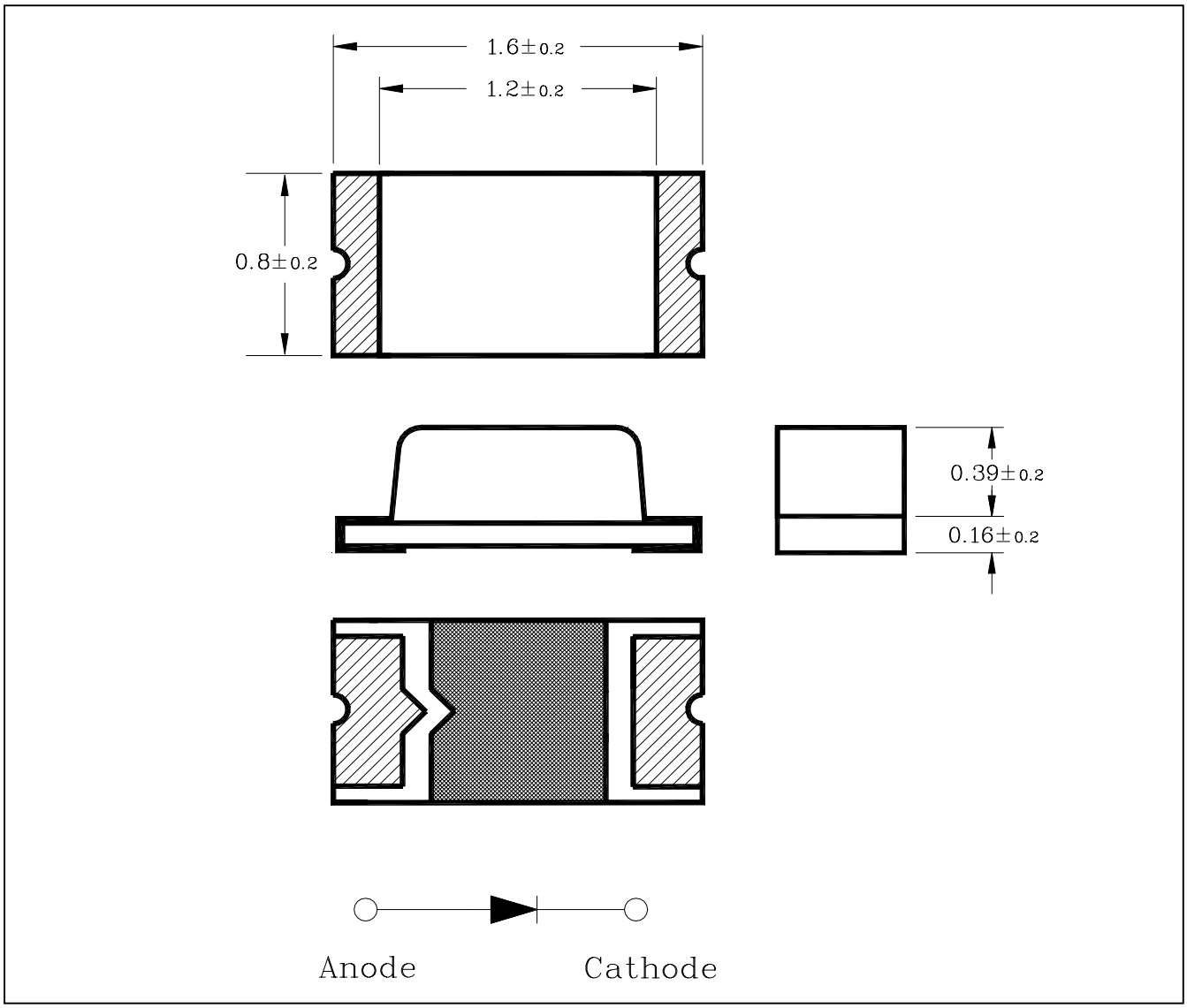
- 1.6mm(L)×0.8mm small size surface mount type
- Thin package of 0.55mm(H) thickness
- Transparent clear lens optic
- Low power consumption type chip led

Applications

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

Outline Dimensions

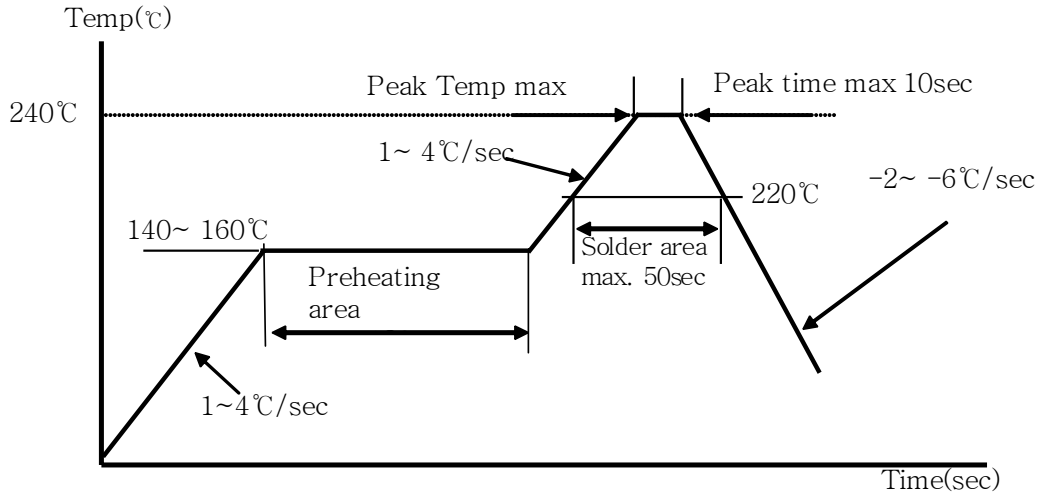
unit : mm



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	-	2.2	2.8	V
Luminous Intensity	I_V		I_F= 20mA	-	7	-	mcd
Peak Wavelength	λ_P		I_F= 20mA	-	560	-	nm
Spectrum Bandwidth	$\Delta\lambda$		I_F= 20mA	-	30	-	nm
Reverse Current	I_R		V_R=4V	-	-	10	uA
*[3]Half angle	$\theta 1/2$	X	I_F= 20mA	-	±65	-	deg
		Y		-	±70	-	

*3. $\theta 1/2$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity

Characteristic Diagrams

Fig. 1 I_F - V_F

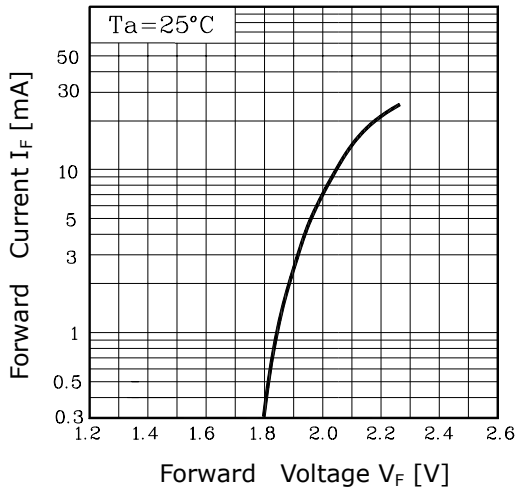


Fig. 2 I_V - I_F

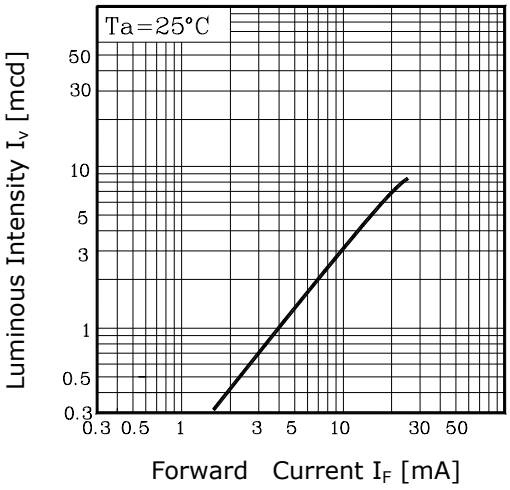


Fig. 3 I_F – Ta

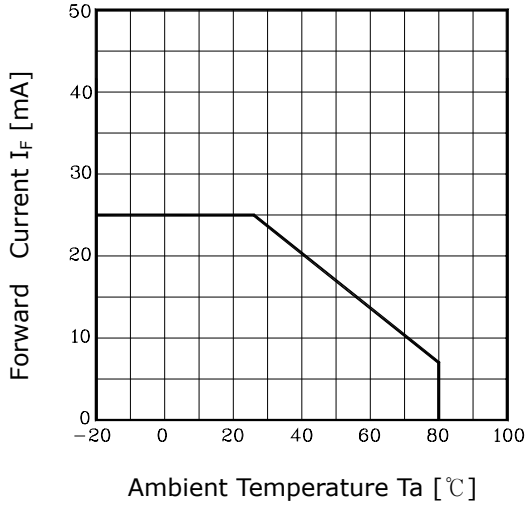


Fig.4 Spectrum Distribution

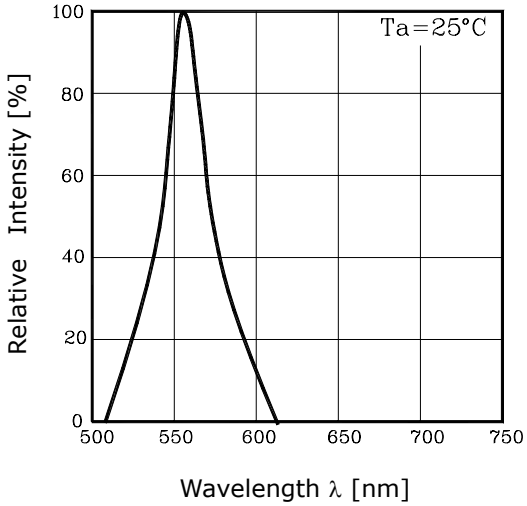


Fig. 5-1 Radiation Diagram(X)

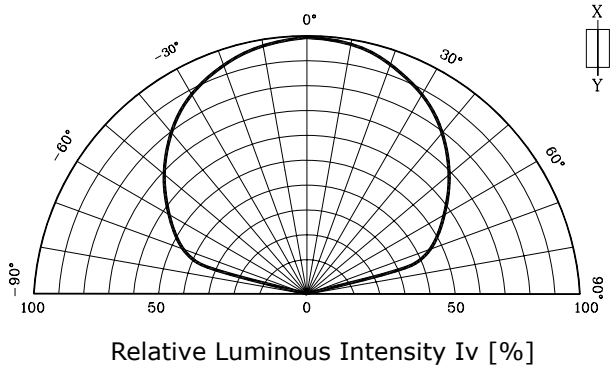
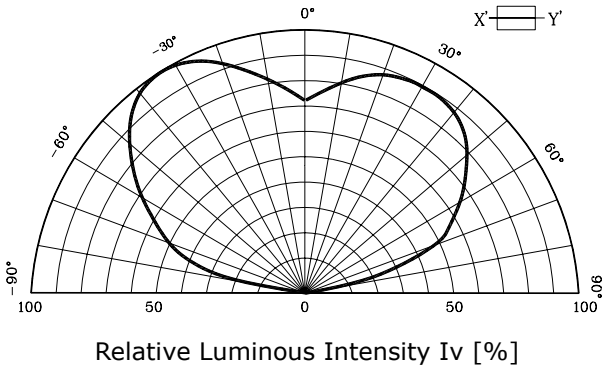


Fig. 5-2 Radiation Diagram(Y)



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.