

Features

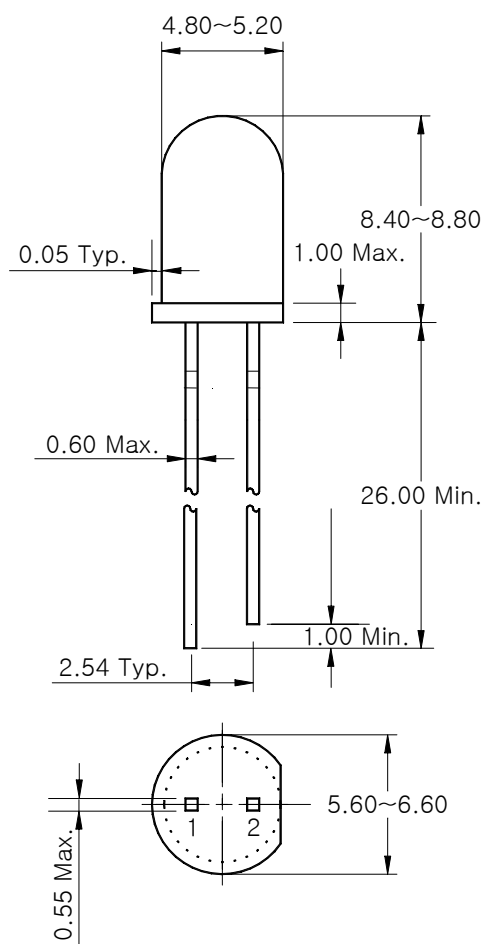
- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Super luminosity

Application

- Traffic Signal
- Massage Board

Outline Dimensions

unit : mm

**PIN Connections**

1. Anode
2. Cathode

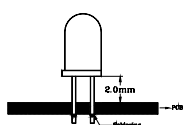
Absolute Maximum Ratings

(Ta=25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	70	mW
Forward current	I_F	30	mA
*1Peak forward current	I_{FP}	65	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25~85	℃
Storage temperature range	T_{stg}	-30~100	℃
*2Soldering 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



Electrical / Optical Characteristics

(Ta=25℃)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$	1.9	-	2.4	V
*4Luminous intensity	I_V	$I_F = 20\text{mA}$	3400	-	8910	mcd
Peak wavelength	λ_D	$I_F = 20\text{mA}$	615	620	625	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	30	-	nm
Reverse current	I_R	$V_R = 4\text{V}$	-	-	10	uA
*3Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	± 15	-	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 $\pm 18\%$ • $V_F / I_V / \lambda_D$ Grade Classification (Ta=25℃)

Test Condition @ $I_F = 20\text{mA}$		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]
1 : 1.9~2.0	$T_2 : 3400\sim 3960$	a : 615~620
2 : 2.0~2.1	$U_1 : 3960\sim 4900$	
3 : 2.1~2.2	$U_2 : 4900\sim 5940$	
4 : 2.2~2.3	$V_1 : 5940\sim 7400$	b : 620~625
5 : 2.3~2.4	$V_2 : 7400\sim 8910$	

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

Characteristic Diagrams

Fig. 1 $I_F - V_F$

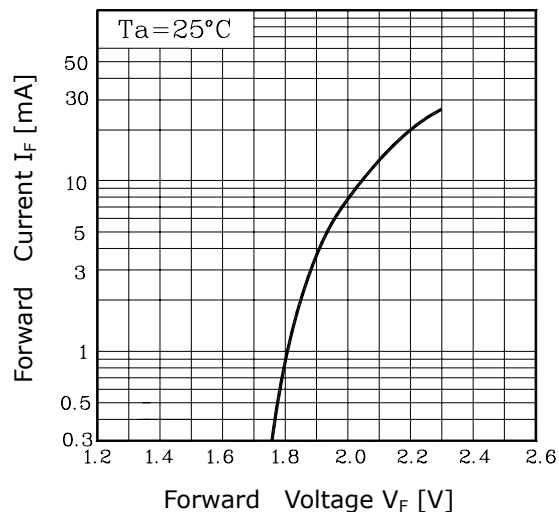


Fig. 2 $I_V - I_F$

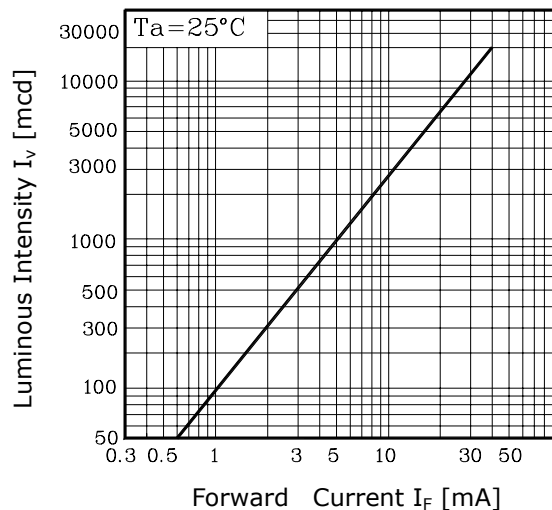


Fig. 3 $I_F - T_a$

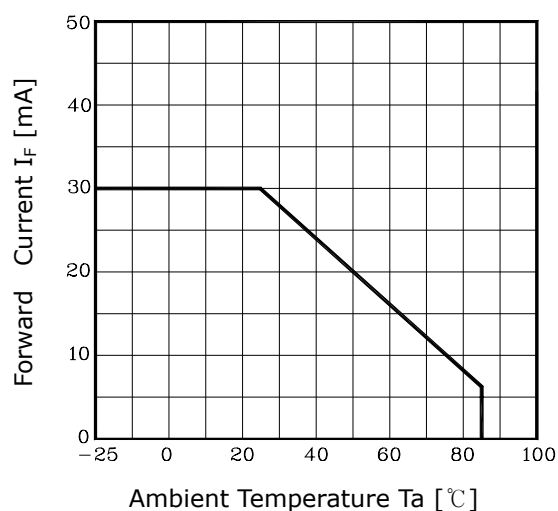


Fig. 4 Spectrum Distribution

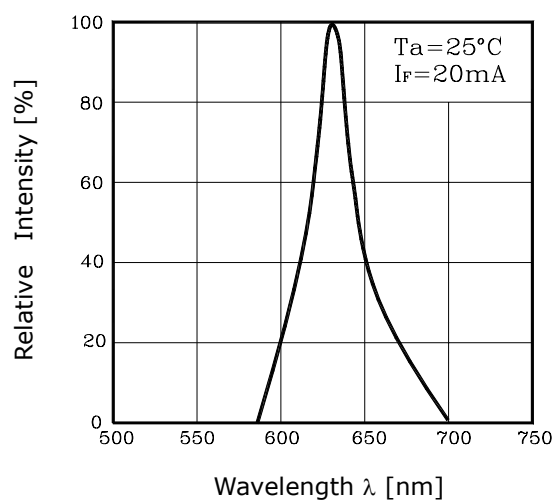
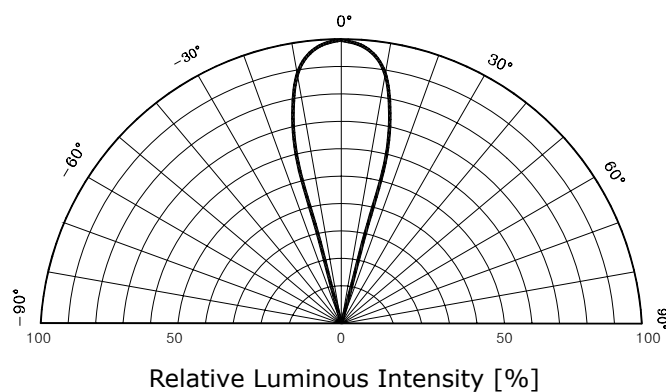


Fig. 5 Radiation Diagram



The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. 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, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.