

Features

- Purple Colored transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Low power consumption
- High radiant intensity

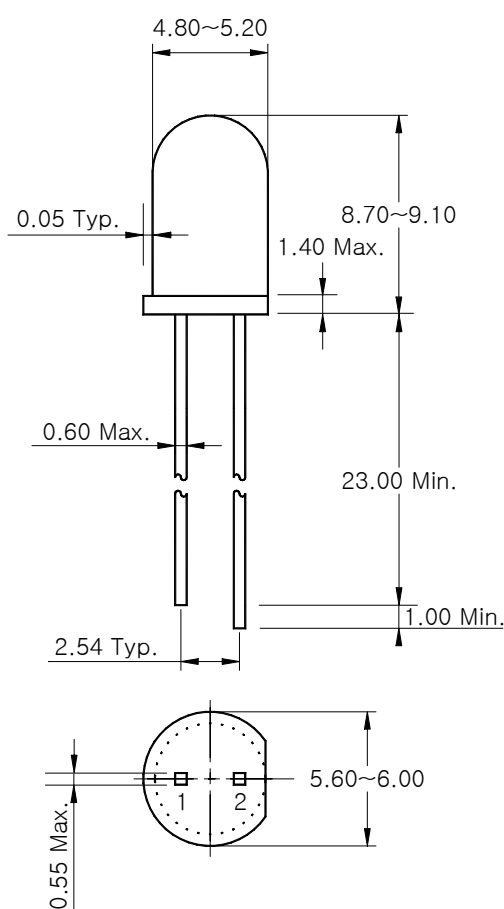
Applications

- Infrared remote control and free air transmission systems with low forward voltage and comfortable radiation angle requirements in combination with PIN photodiodes or phototransistors.

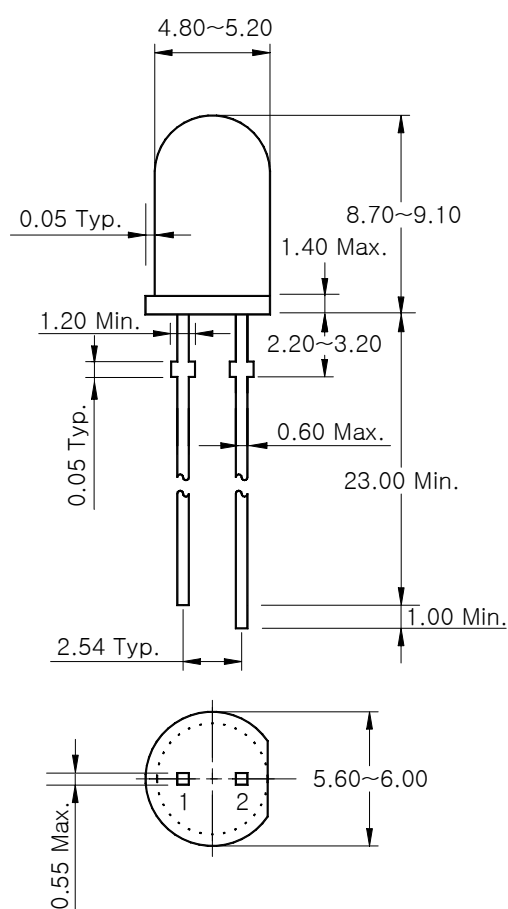
Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE : (B)



PIN Connections

1. Cathoe
2. Anode

Absolute Maximum Ratings**(Ta=25℃)**

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	145	mW
Forward current	I_F	100	mA
* ¹ Peak forward current	I_{FP}	1	A
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25~85	℃
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 IRED package

Electrical / Optical Characteristics**(Ta=25℃)**

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 50\text{mA}$	-	1.3	1.45	V
Radiant intensity	I_E	$I_F = 50\text{mA}$	10	22	-	mW/Sr
Peak wavelength	λ_P	$I_F = 50\text{mA}$	-	950	-	nm
Spectrum bandwidth	Δ_λ	$I_F = 50\text{mA}$	-	50	-	nm
Reverse current	I_R	$V_R = 4\text{V}$	-	-	10	uA
* ³ Half angle	$\theta^{1/2}$	$I_F = 50\text{mA}$	-	±30	-	deg

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

Characteristic Diagrams

Fig. 1 $I_F - V_F$

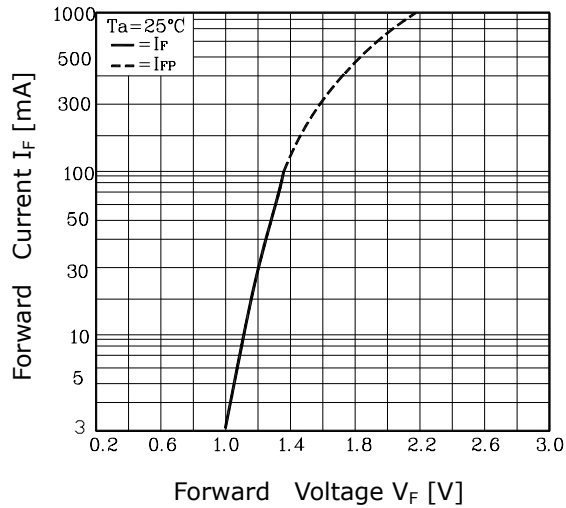


Fig. 2 $I_E - I_F$

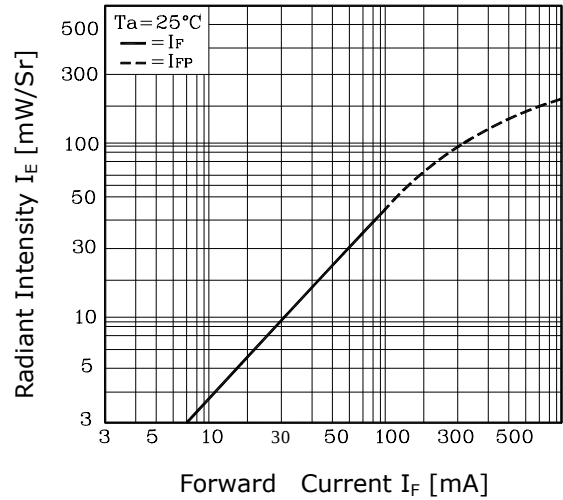


Fig. 3 $I_F - T_a$

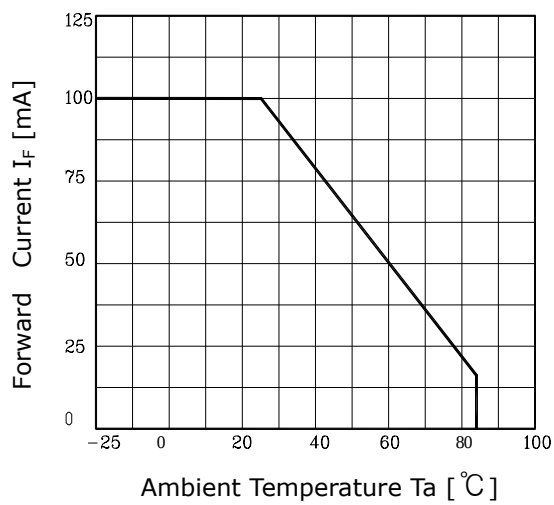


Fig. 4 Spectrum Distribution

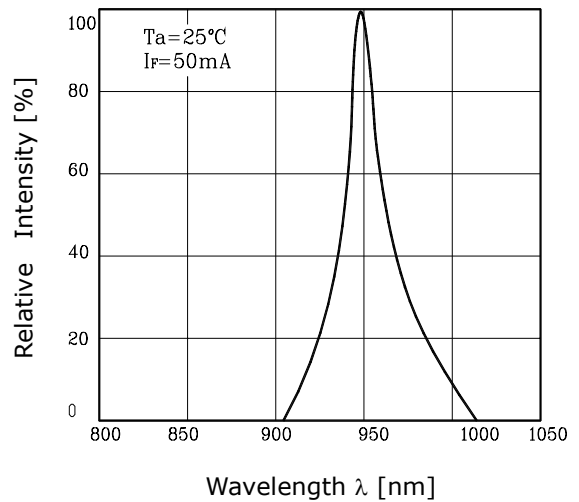
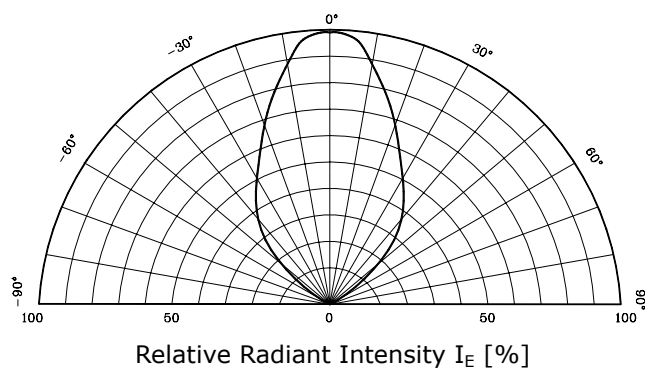


Fig. 5 Radiation Diagram



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.