

**Features**

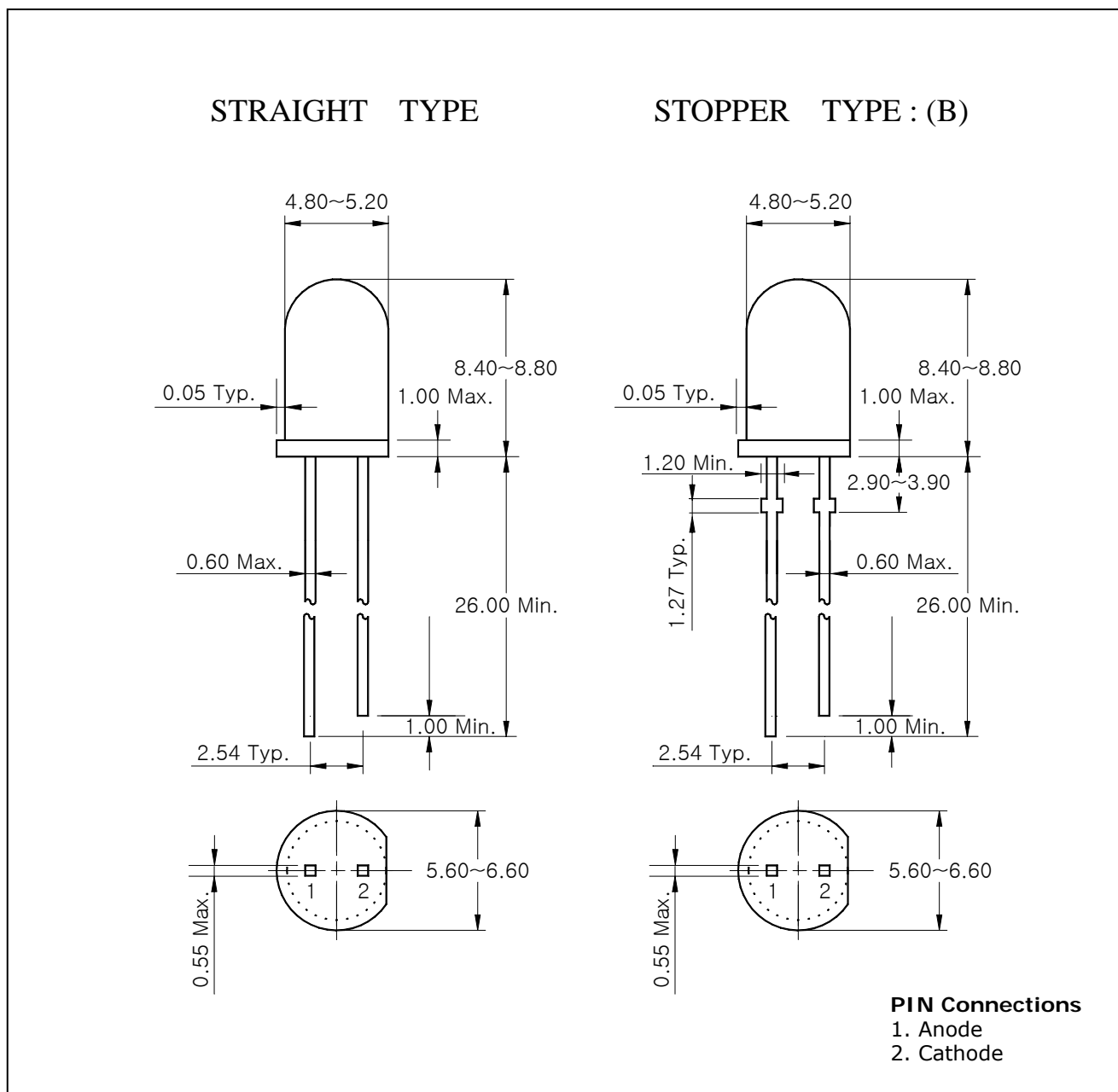
- Purple Colored transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Low power consumption
- High radiant intensity

**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**



# SI5415-H / SI5415-H(B)

## Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	$P_D$	145	mW
Forward current	$I_F$	100	mA
*1Peak forward current	$I_{FP}$	1	A
Reverse voltage	$V_R$	4	V
Operating temperature range	$T_{opr}$	-25~85	°C
Storage temperature range	$T_{stg}$	-30~100	°C
*2Soldering temperature	$T_{sol}$	260°C 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

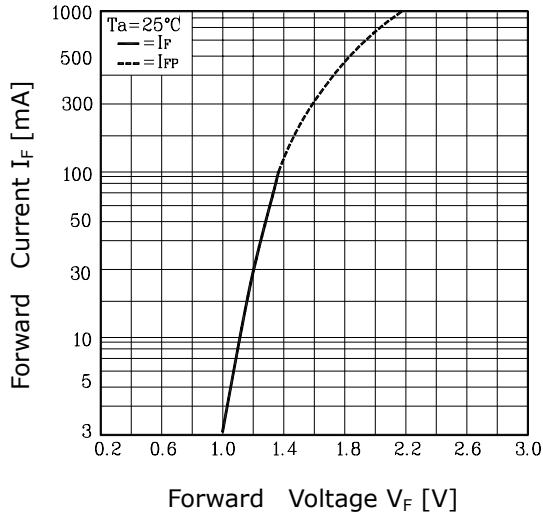
(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F= 50\text{mA}$	-	1.3	1.45	V
Radiant intensity	$I_E$	$I_F= 50\text{mA}$	20	36	-	mW/Sr
Peak wavelength	$\lambda_p$	$I_F= 50\text{mA}$	-	950	-	nm
Spectrum bandwidth	$\Delta_\lambda$	$I_F= 50\text{mA}$	-	50	-	nm
Reverse current	$I_R$	$V_R=4\text{V}$	-	-	10	uA
*3Half angle	$\theta^{1/2}$	$I_F= 50\text{mA}$	-	±20	-	deg

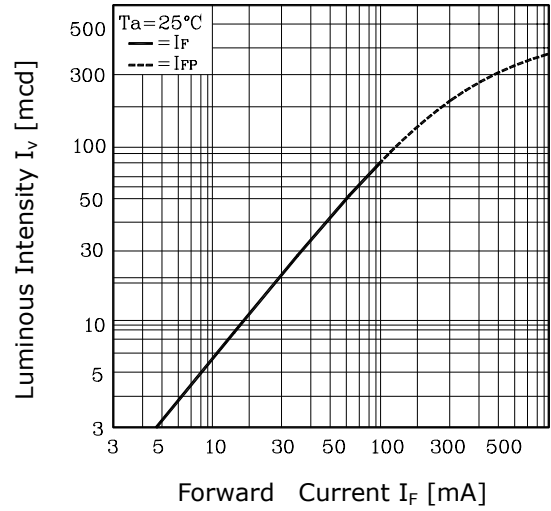
\*3.  $\theta^{1/2}$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity

## Characteristic Diagrams

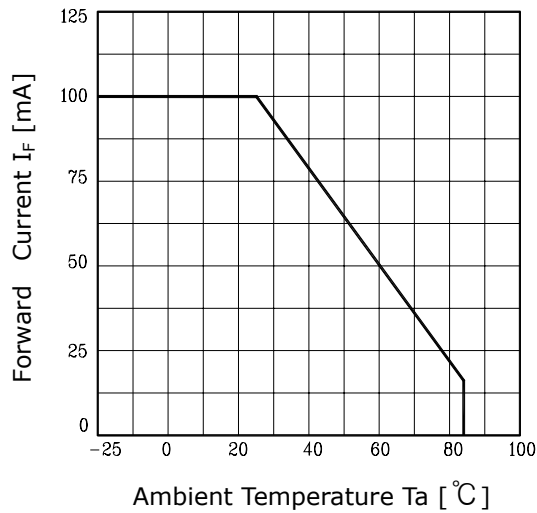
**Fig. 1  $I_F - V_F$**



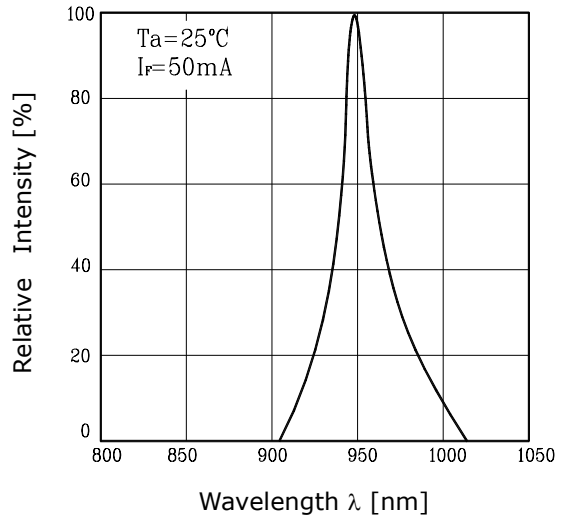
**Fig. 2  $I_E - I_F$**



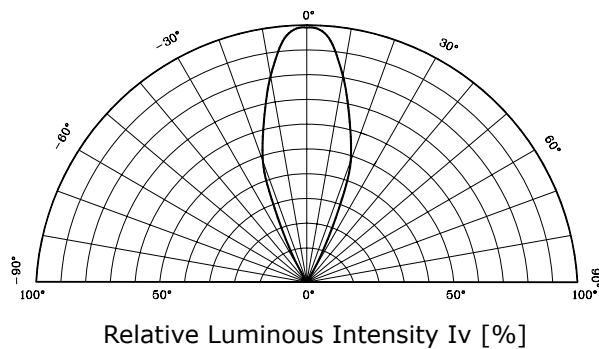
**Fig. 3  $I_F - T_a$**



**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.**