

## Features

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

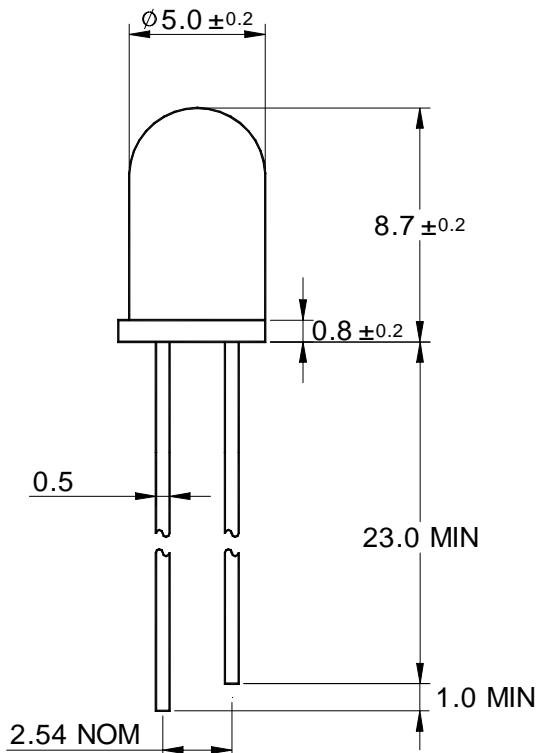
## Applications

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

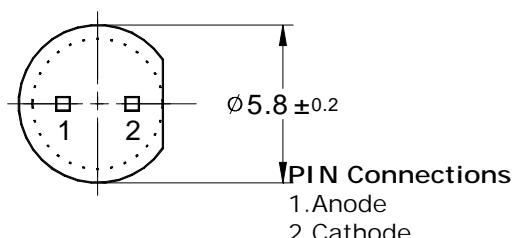
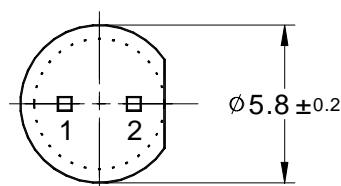
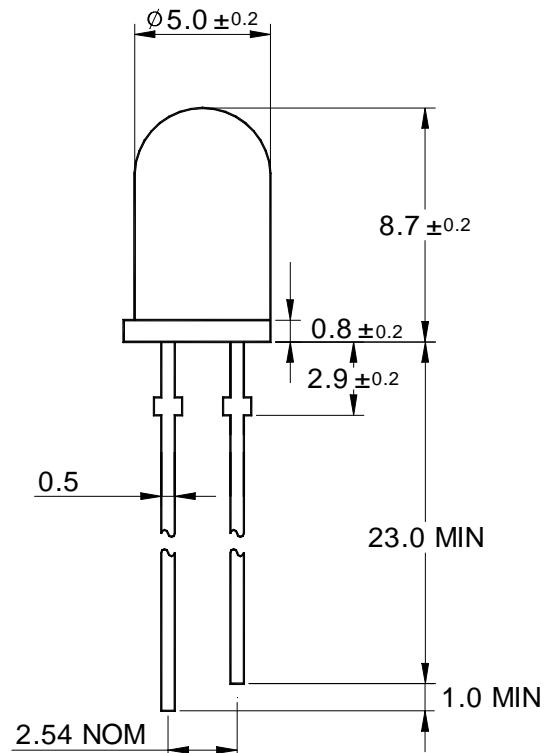
## Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE



## Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P <sub>D</sub>	150	mW
Forward Current	I <sub>F</sub>	100	mA
* <sup>1</sup> Peak Forward Current	I <sub>FP</sub>	1	A
Reverse Voltage	V <sub>R</sub>	4	V
Operating Temperature	T <sub>opr</sub>	-25 85	
Storage Temperature	T <sub>stg</sub>	-30 100	
* <sup>2</sup> Soldering Temperature	T <sub>sol</sub>	260 for 5 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

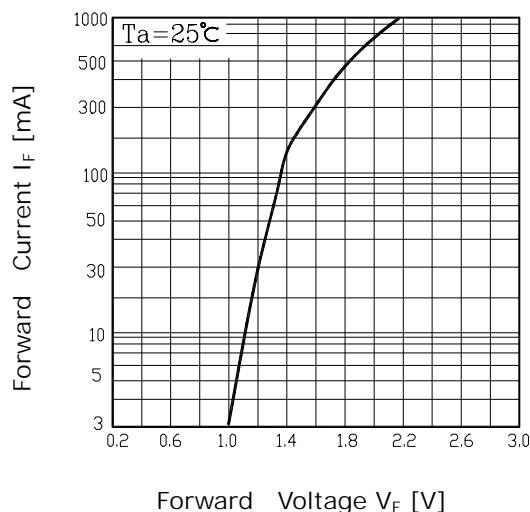
## Electrical Characteristics

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 50mA	-	1.3	1.7	V
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> = 50mA	15	35	-	mW/Sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 50mA	-	950	-	nm
Spectrum Bandwidth		I <sub>F</sub> = 50mA	-	50	-	nm
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =4V	-	-	10	uA
* <sup>3</sup> Half angle	θ <sup>1/2</sup>	I <sub>F</sub> = 50mA	-	±25	-	deg

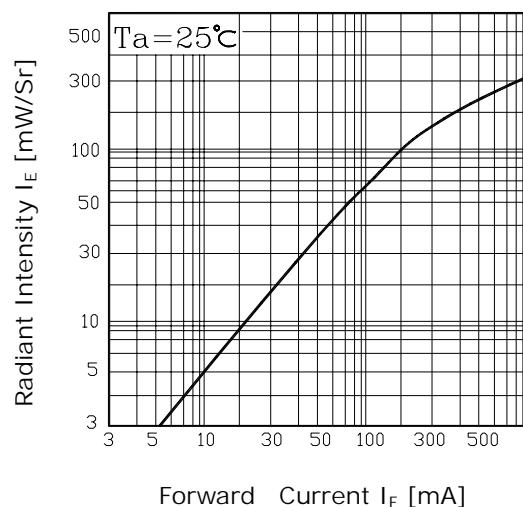
\*3. θ<sup>1/2</sup> is the off-axis angle where the luminous intensity is 1/2 the peak intensity

## Characteristic Diagrams

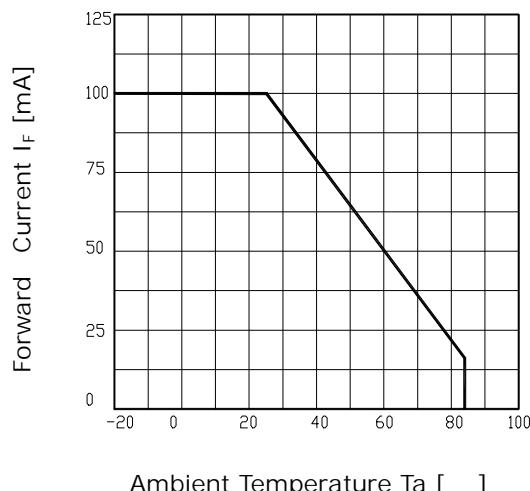
**Fig. 1 I<sub>F</sub> - V<sub>F</sub>**



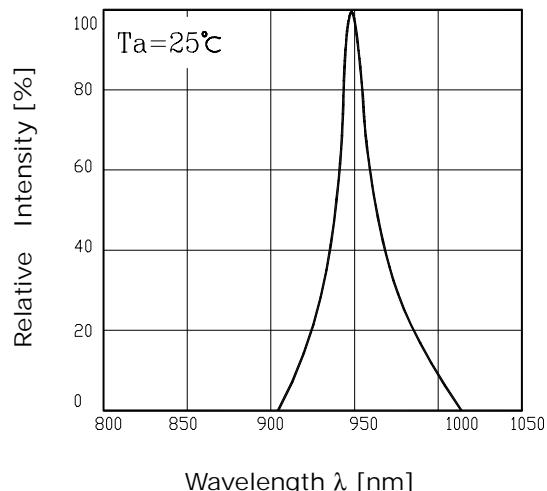
**Fig. 2 I<sub>E</sub> - I<sub>F</sub>**



**Fig. 3 I<sub>F</sub> – Ta**



**Fig.4 Spectrum Distribution**



**Fig. 5 Radiation Diagram**

