

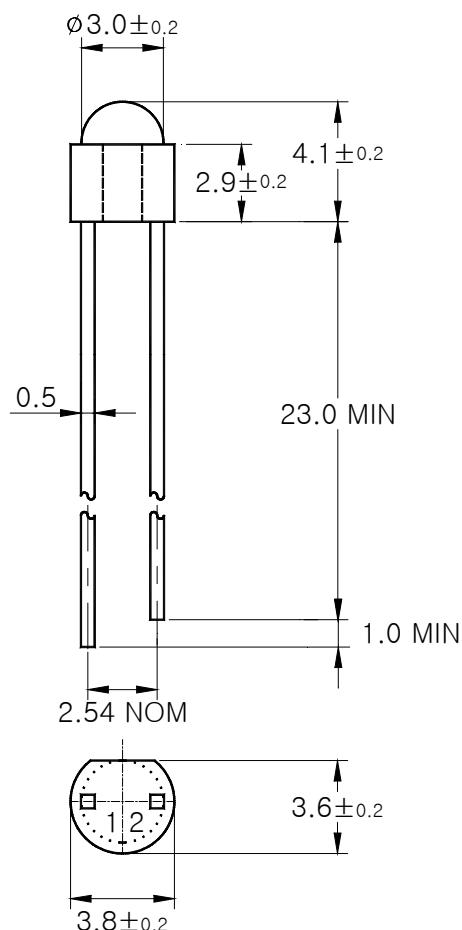
## Features

- Colorless transparency lens type
- $\phi 3\text{mm}(\text{T-1})$  all plastic mold type
- Wide half angle of intensity( $\theta_{\frac{1}{2}} = \pm 40^\circ$ )
- Super brightness

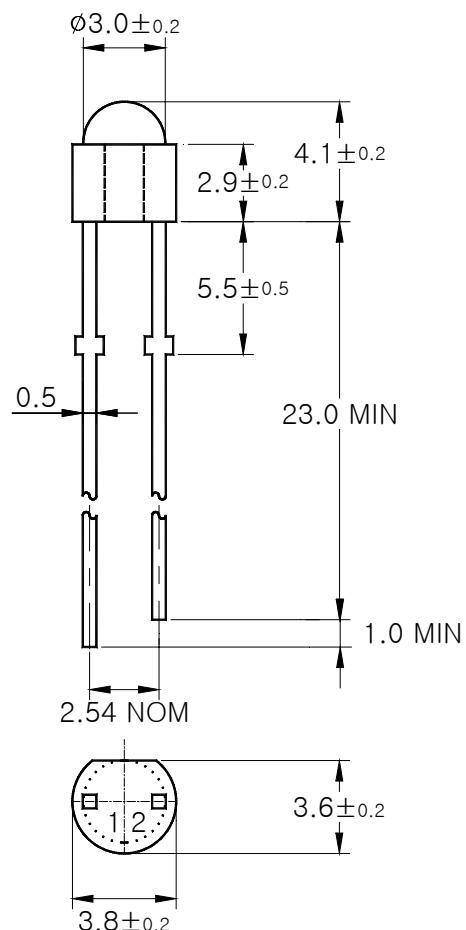
## Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE



### PIN Connections

- 1.Anode
- 2.Cathode

**Absolute maximum ratings**

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P <sub>D</sub>	70	mW
Forward Current	I <sub>F</sub>	30	mA
* <sup>1</sup> Peak Forward Current	I <sub>FP</sub>	50	mA
Reverse Voltage	V <sub>R</sub>	4	V
Operating Temperature	T <sub>opr</sub>	-25~85	°C
Storage Temperature	T <sub>stg</sub>	-30~100	°C
* <sup>2</sup> Soldering Temperature	T <sub>sol</sub>	260°C 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 LED package

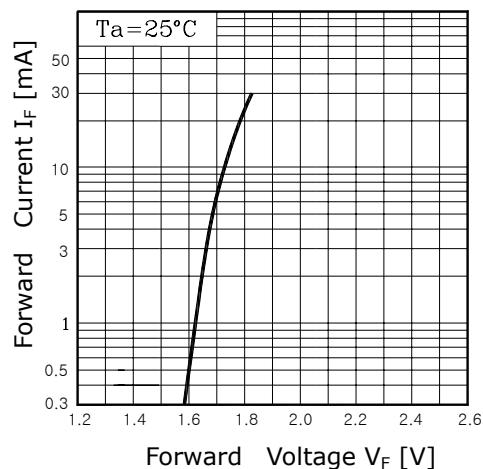
**Electrical Characteristics**

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	-	1.8	2.5	V
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> = 20mA	25	50	-	mcd
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 20mA	-	660	-	nm
Spectrum Bandwidth	Δ λ	I <sub>F</sub> = 20mA	-	20	-	nm
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =4V	-	-	10	uA
* <sup>3</sup> Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> = 20mA	-	±40	-	deg

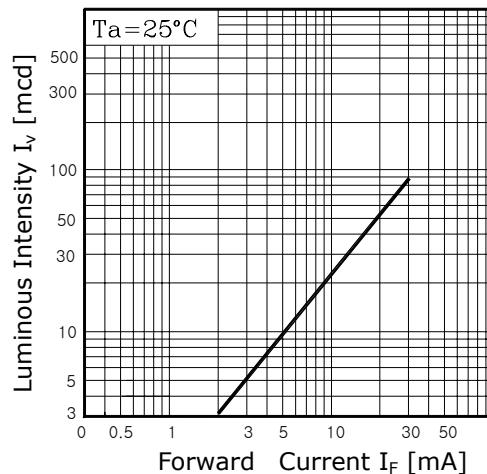
\*3. θ<sub>1/2</sub> is the off-axis angle where the luminous intensity is 1/2 the peak intensity

## Characteristic Diagrams

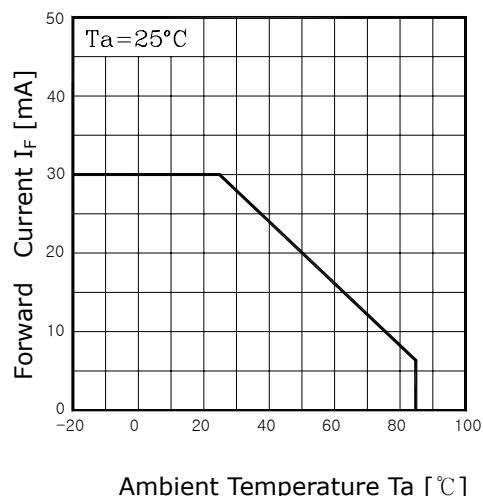
**Fig. 1**  $I_F - V_F$



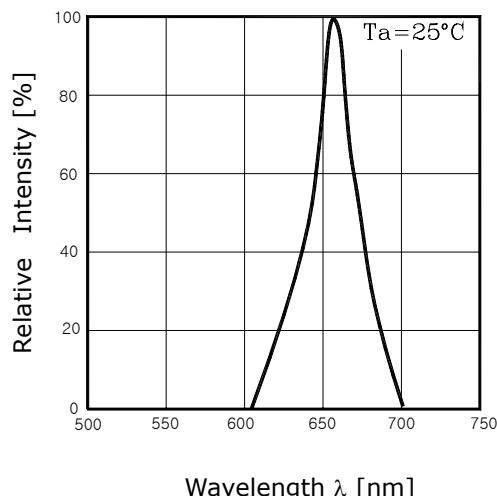
**Fig. 2**  $I_V - I_F$



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



**Fig.4 Spectrum Distribution**



**Fig. 5 Radiation Diagram**

