

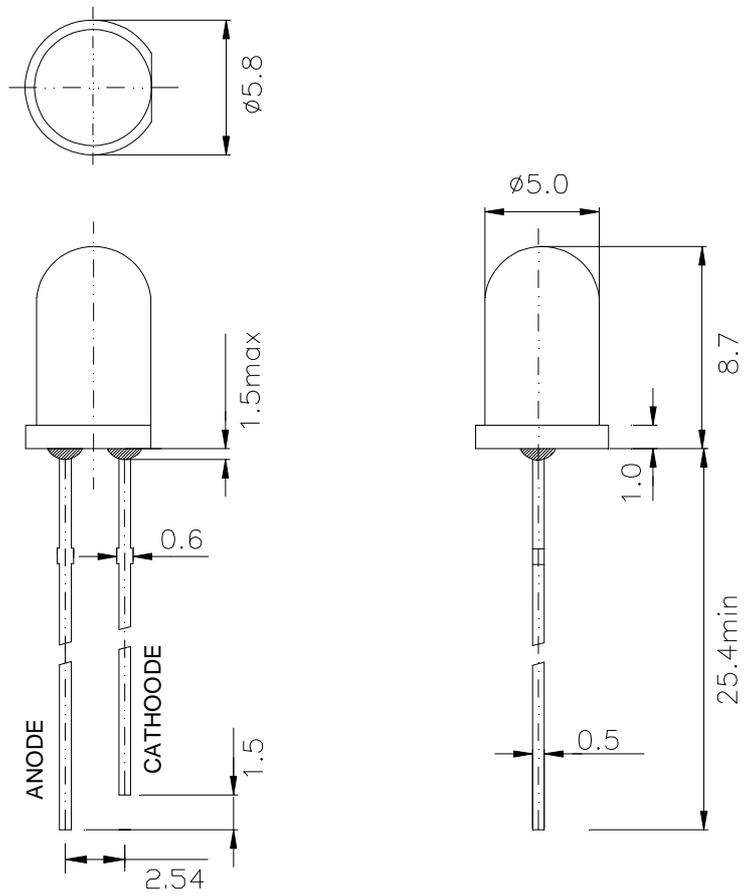
# PRODUCT SPECIFICATION

## Descriptions:

- 5mm Round Type
- Emitting Color: Red
- Viewing Angle: 30°
- No Stopper

CUSTOMER APPROVED SIGNATURES

## ■ Package Dimensions



Material	Lens Color	Source Color
AlGaInP	Water Clear	Red

### Notes:

1. All dimensions in mm tolerance are  $\pm 0.2 \text{ mm}$  unless otherwise noted.
2. An epoxy meniscus may extend about  $1.5 \text{ mm}$  down the leads.
3. Burr around bottom of epoxy may be  $0.5 \text{ mm}$  max.

■ **Absolute Maximum Ratings (Ta = 25°C)**

Items	Symbol	Absolute maximum Rating	Unit
Power Dissipation	P <sub>D</sub>	80	mW
Forward Current(DC) *2	I <sub>F</sub>	30	mA
Peak Forward Current*1	I <sub>FP</sub>	100	mA
Operation Temperature	T <sub>opr</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
Lead Soldering Temperature	T <sub>sol</sub>	Max.260°C for 5 sec Max. (3mm from the base of the epoxy bulb)	

\*1Pulse width ≤ 0.1msec duty ≤ 1/10

\*2For long term performance the drive currents between 10mA and 20mA are recommended. Please contact sales representative for more information on recommended drive conditions

■ **Typical Electrical & Optical Characteristics ( Ta = 25°C)**

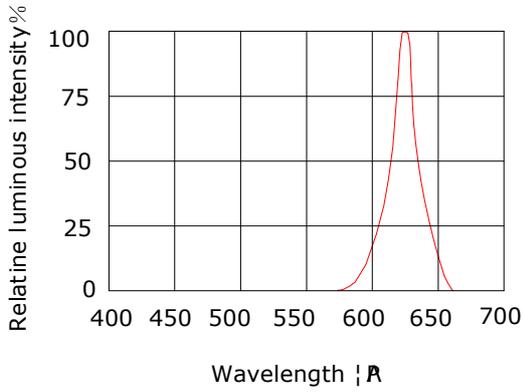
Items	Symbol	Condition	Min.	Type.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	1.8	2.2	2.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V	---	---	10	μA
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	620	625	630	nm
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> = 20mA	6000	7000	8000	mcd
50% Power Angle	2θ ½	I <sub>F</sub> = 20mA	---	30	---	Deg

■ **Notes:**

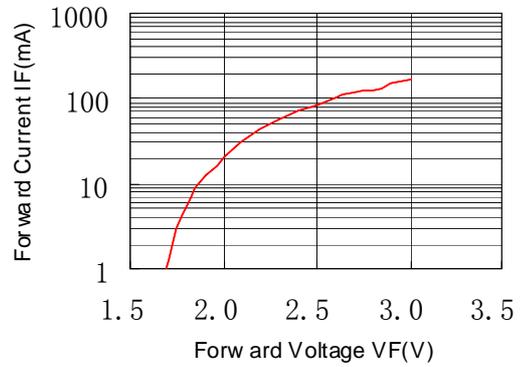
1. Tolerance of measurement of luminous intensity : ±15%
2. Tolerance of measurement of dominant wavelength : ±1.0nm
3. Tolerance of measurement of forward voltage : ±0.1V
4. θ/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity

■ **Typical Electrical Optical Characteristics Curves**(25°C Ambient Temperature Unless Otherwise Noted)

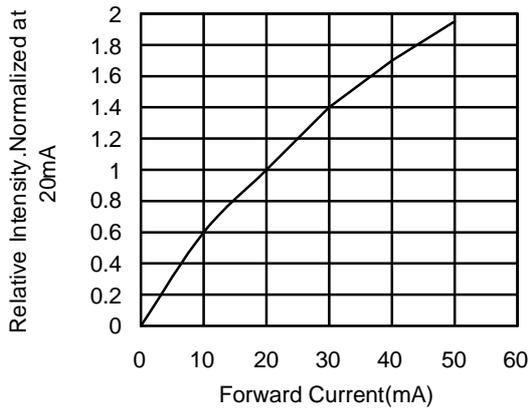
**Spectrum Distribution Ta=25°**



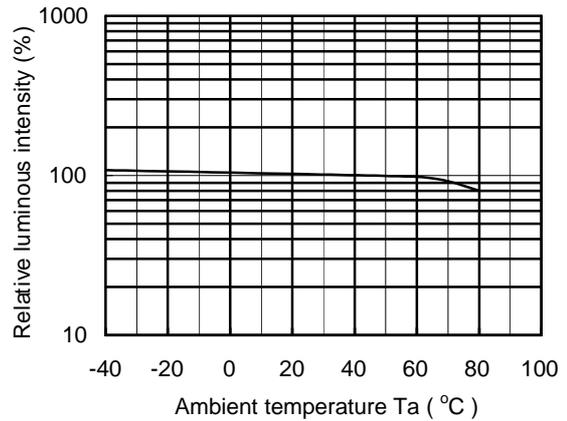
**Forward Voltage vs. Forward Current (Ta=25°C)**



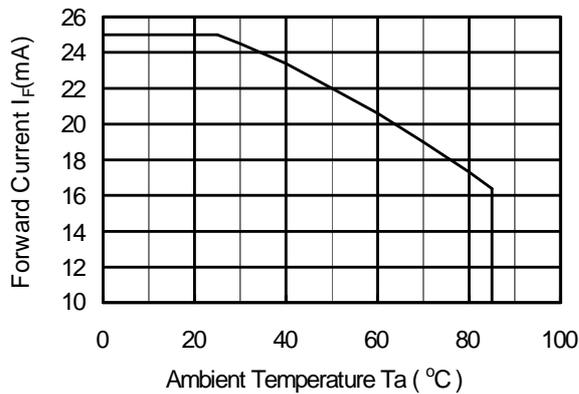
**Relative Luminous Intensity vs. Forward Current**



**Relative Luminous Intensity vs. Ambient Temperature ( $I_F=20mA$ )**



**Forward Current Derating Curve**



**Beam Pattern**

