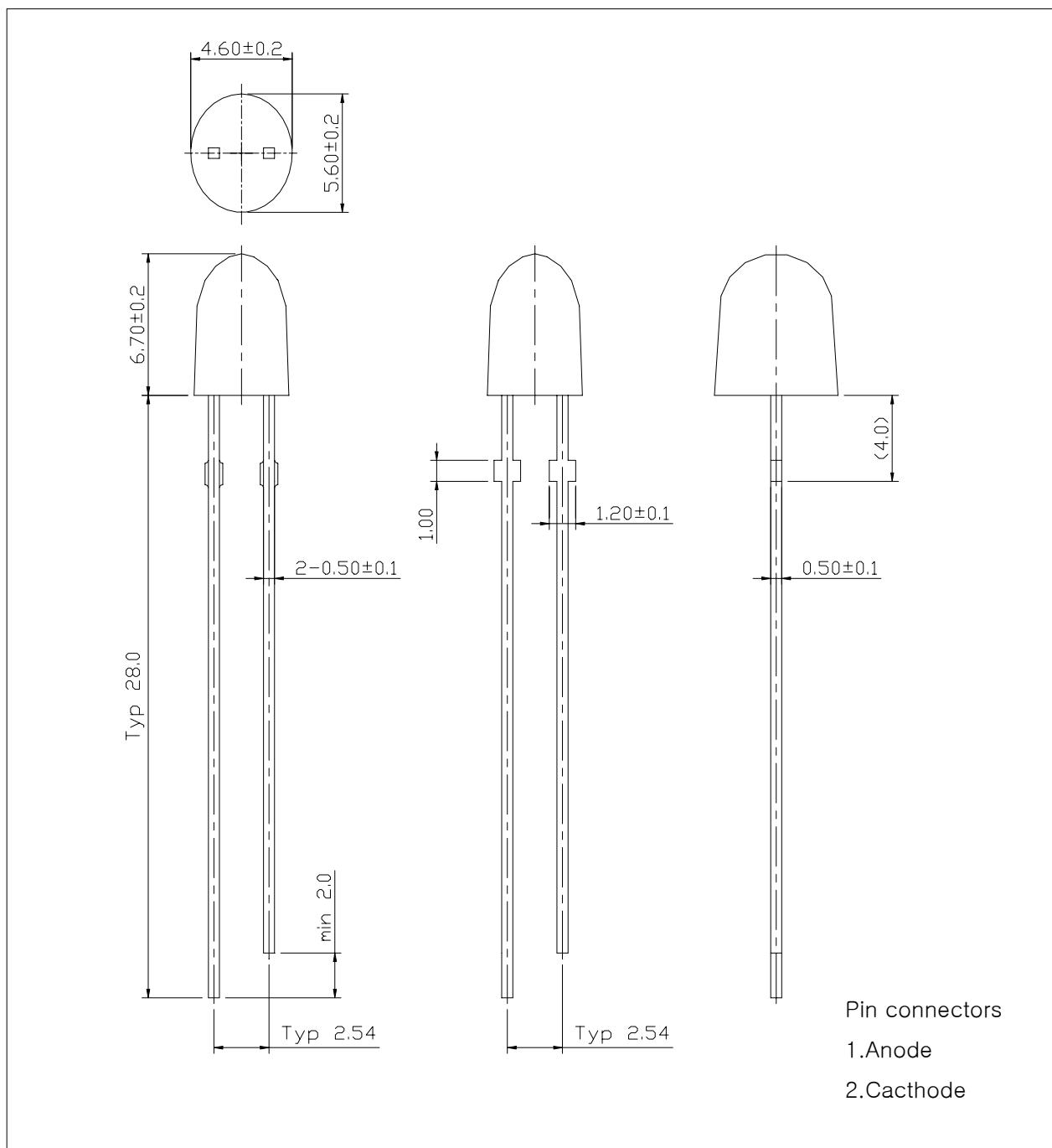


## ■ Features

- Colored diffusion lens type
- 5.8mm X 4.6mm Oval type
- High luminosity
- ESD Class(Mil Std-883d Method 3015.7) based on Human Body Model(HBM) : Class 3

## ■ Outline dimensions

(unit : mm)



## ■ Absolute Maximum Ratings

Characteristic	Symbol	Ratings	Unit
Power dissipation	P <sub>D</sub>	120	mW
Forward Current	I <sub>F</sub>	30	mA
* <sup>1</sup> Peak Forward Current	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-30~+85	°C
Storage Temperature	T <sub>stg</sub>	-40~+100	°C
* <sup>2</sup> Soldering Temperature	T <sub>sol</sub>	260°C for 5 seconds	

\*1.Duty ratio 1/10, Pulse Width 10msec

\*2.Keep the distance more than 2.0mm from PCB to the bottom of LED package

## ■ Electrical – Optical Characteristics

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	–	3.4	3.9	V
Spectrum Bandwidth	Δλ	I <sub>F</sub> = 20mA	–	35	–	nm
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	–	–	10	uA
* <sup>3</sup> Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> = 20mA	–	X :±17 Y :±34	–	deg

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

## ■ Dominant Wavelength

(Ta=25°C)

W <sub>D</sub> RANK	Test Condition	Min.	Typ.	Max.	Unit
A	I <sub>F</sub> = 20mA	465	–	470	nm
B		470	–	475	

\* Wavelength are tested at a current pulse duration 25ms and an accuracy of ±1 nm.

## ■ Luminous intensity ranks

(Ta=25°C)

I <sub>v</sub> RANK	Test Condition	Min.	Typ.	Max.	Unit
K	I <sub>F</sub> = 20mA	210	–	300	mcd
L		300	–	420	
M		450	–	600	
N		600	–	850	

\* Luminous intensity is tested at a current pulse duration of 25 ms and an accuracy of ±11%.

Intensity Measured : 0.01sr(CIE. LED\_B)

## ■ Forward Voltage

(Ta=25°C)

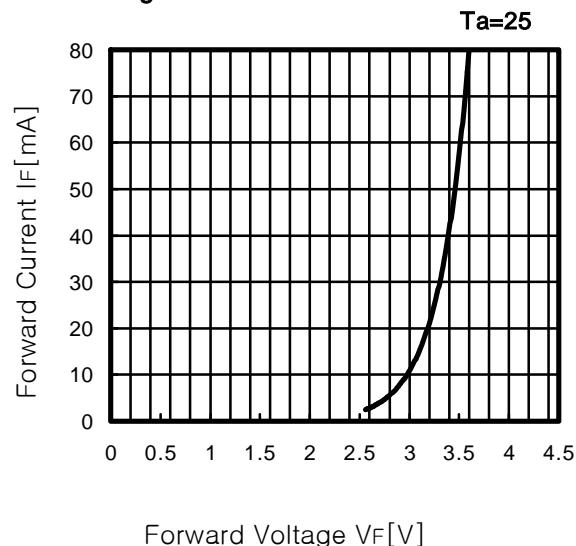
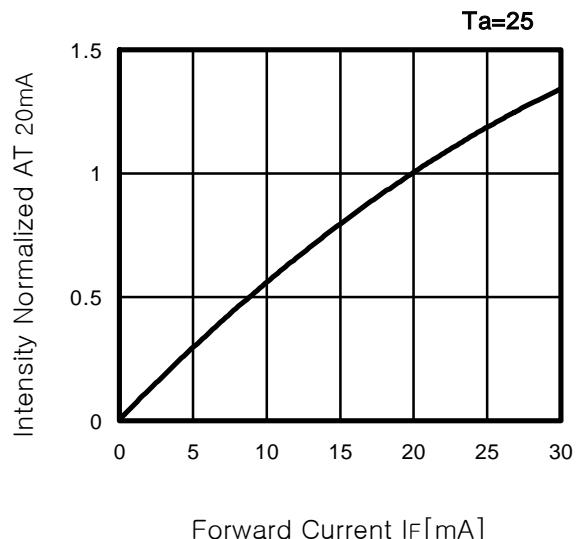
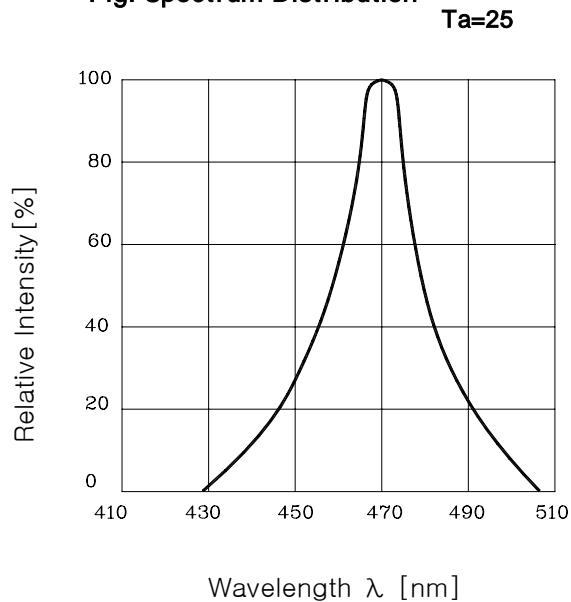
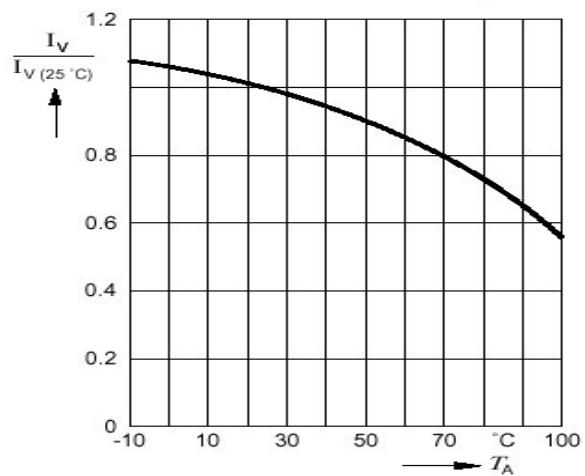
V <sub>F</sub> RANK	Test Condition	Min.	Typ.	Max.	Unit
1	I <sub>F</sub> = 20mA	–	3.2	3.4	V
2		3.4	3.6	3.9	

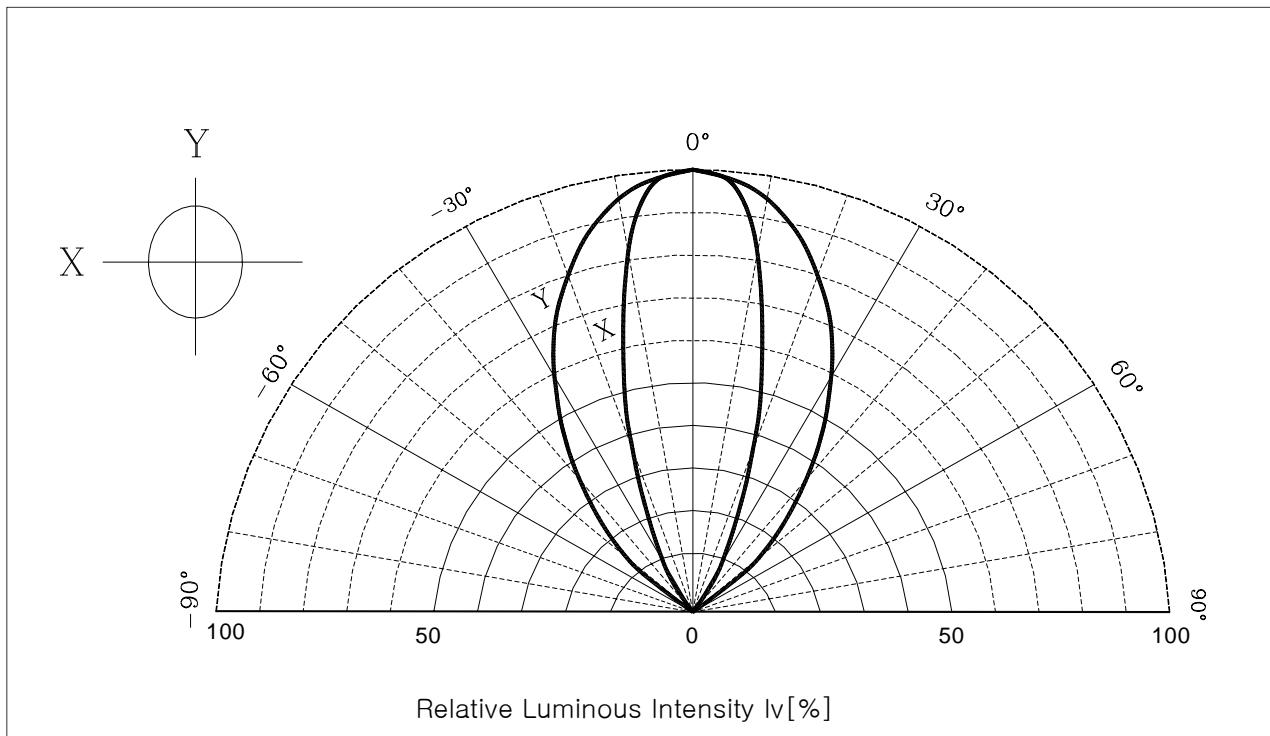
\* Voltages are tested at a current pulse duration of 1 ms and an accuracy of ±0.1V.

## ■ Precautions On LED using

\* To avoid optical difference, Please do not mix differently-ranked product.

## ■ Characteristic Diagrams

**Fig. IF - VF**

**Fig. Iv - If**

**Fig. Spectrum Distribution**

**Fig. 4 Relative Intensity - Ta**


**Fig. 5 Radiation Diagram**

## ■ Revision history sheet

Spec NO.			
Title	Specification for Approval		
Times	Date	Summary of revision	Remarks
1	2001. 07. 15	신규제정	
2	2003. 02. 26	Format 변경	
3	2004. 06. 03	Iv Rank 변경	