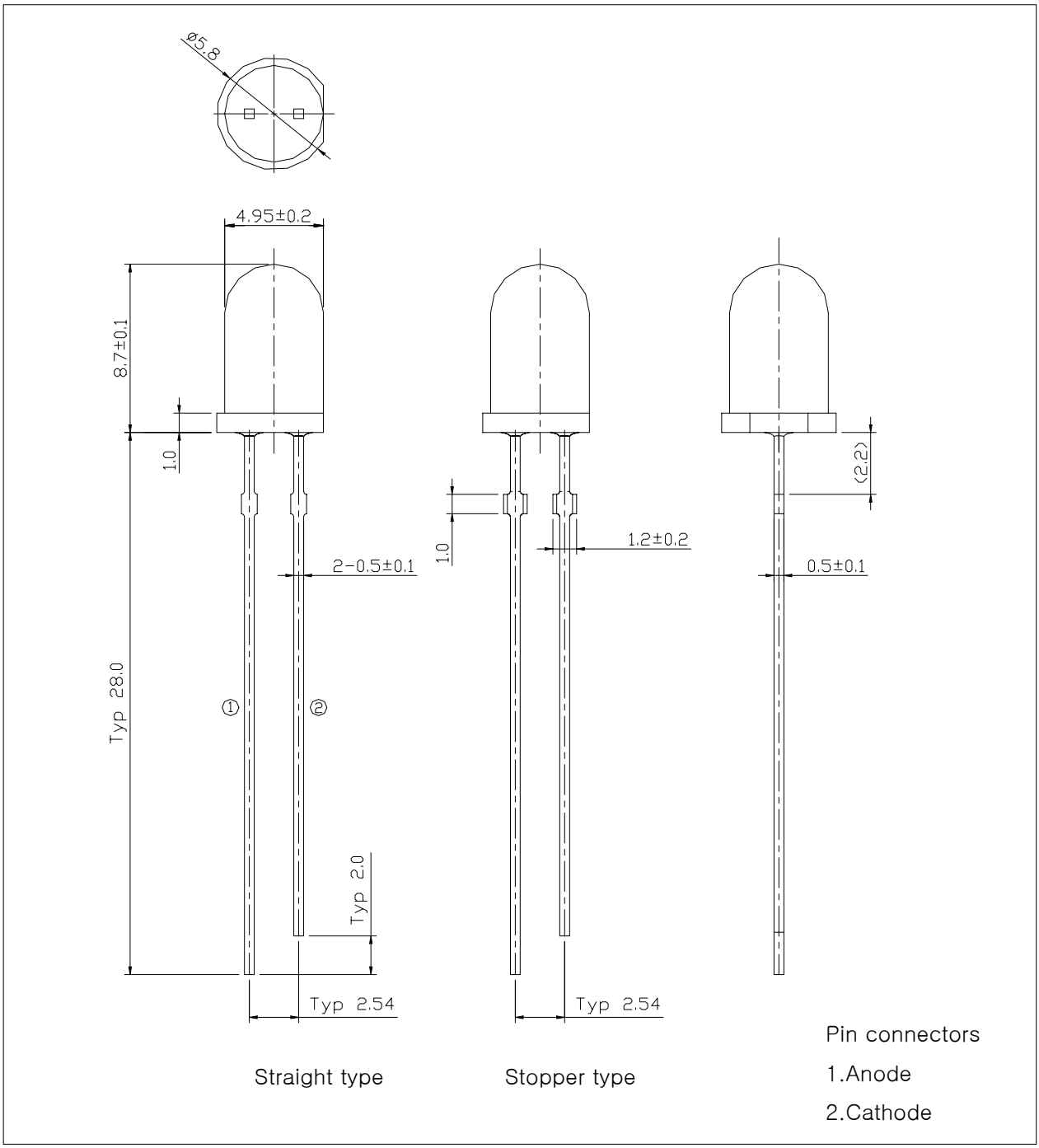
■ Features

- Colorless transparency lens type
- ϕ5mm(T-1¾) all plastic mold type
- High luminosity
- ESD Class(Mil Std-883d Method 3015.7) based on Human Body Model(HBM) : 950V

■ Outline dimensions

(unit : mm)



■ Absolute maximum ratings

(Ta=25℃)

Characteristic	Symbol	Ratings	Unit
Power dissipation	P_D	120	mW
Forward Current	I_F	30	mA
*[1]Peak Forward Current	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-30～85	℃
Storage Temperature	T_{stg}	-40～100	℃
*[2]Soldering Temperature	T_{sol}	260℃ for 3 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 - Optical characteristics

(Ta=25℃)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
ESD Check Forward Voltage	V_{F2}	I_F= 10㎂	2.0	-	-	V
Reverse Current	I_R	V_R=5V	-	-	50	uA
Dominant Wavelength	λ_d	I_F= 20mA	465	-	480	nm
Spectrum Bandwidth	Δ_λ	I_F= 20mA	-	35	-	nm
*[3]Half Angle	$\theta 1/2$	I_F= 20mA	-	±13	-	deg

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

■ Dominant Wavelength

(Ta=25℃)

W_D RANK	Test Condition	Min.	Typ.	Max.	Unit
A	I_F= 20mA	465	-	470	nm
B		470	-	475	
C		475	-	480	

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

■ Luminous intensity ranks

(Ta=25℃)

Iv RANK	Test Condition	Min.	Typ.	Max.	Unit
O	I_F= 20mA	850		1200	mcd
P		1200		1700	
Q		1700		2400	
R		2400		3400	

* 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℃)

V_F RANK	Test Condition	Min.	Typ.	Max.	Unit
1	I_F= 20mA	-	3.1	3.3	V
2		3.3	3.5	3.8	

* 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. 1 I_F-V_F

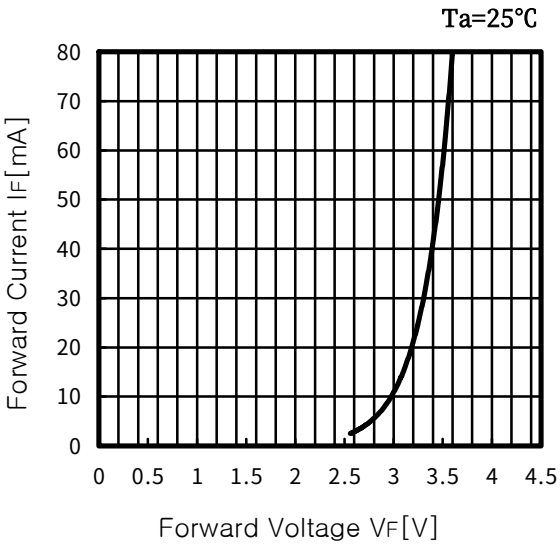


Fig. 2 I_V-I_F

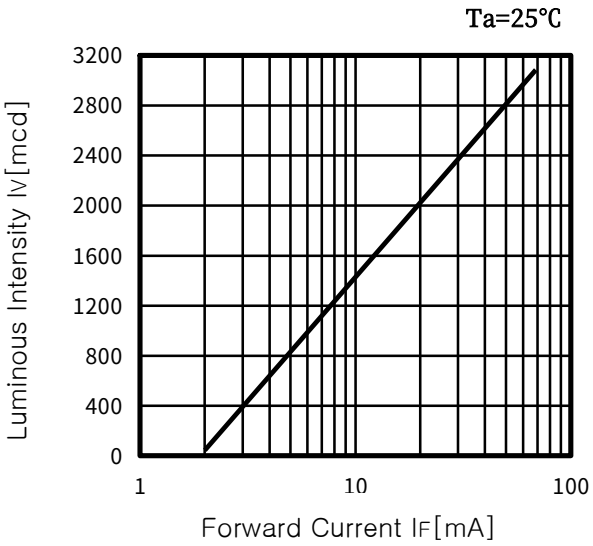


Fig. 3 I_F-Ta

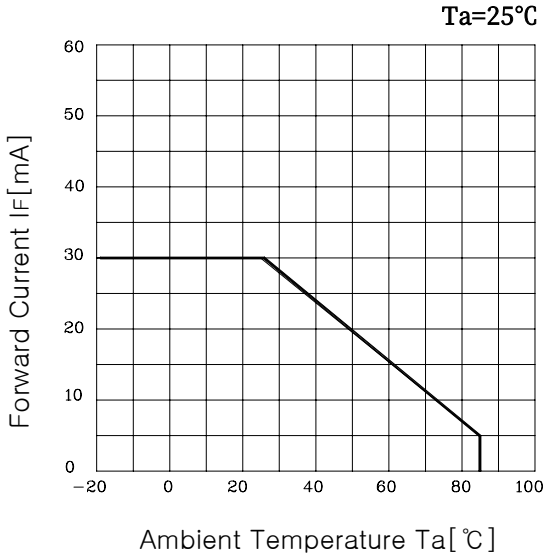


Fig. 4 Spectrum Distribution

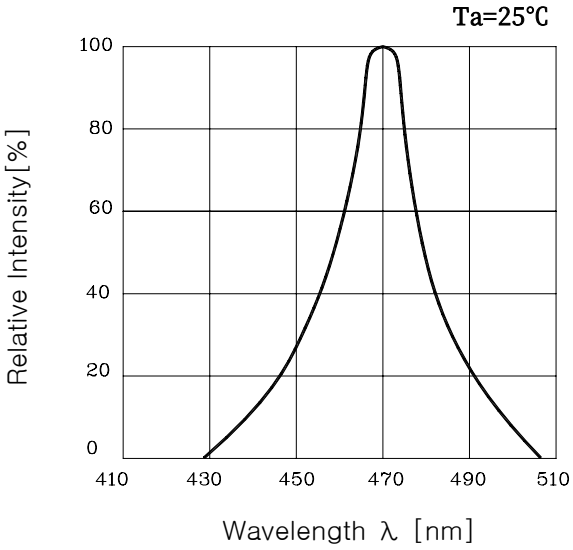
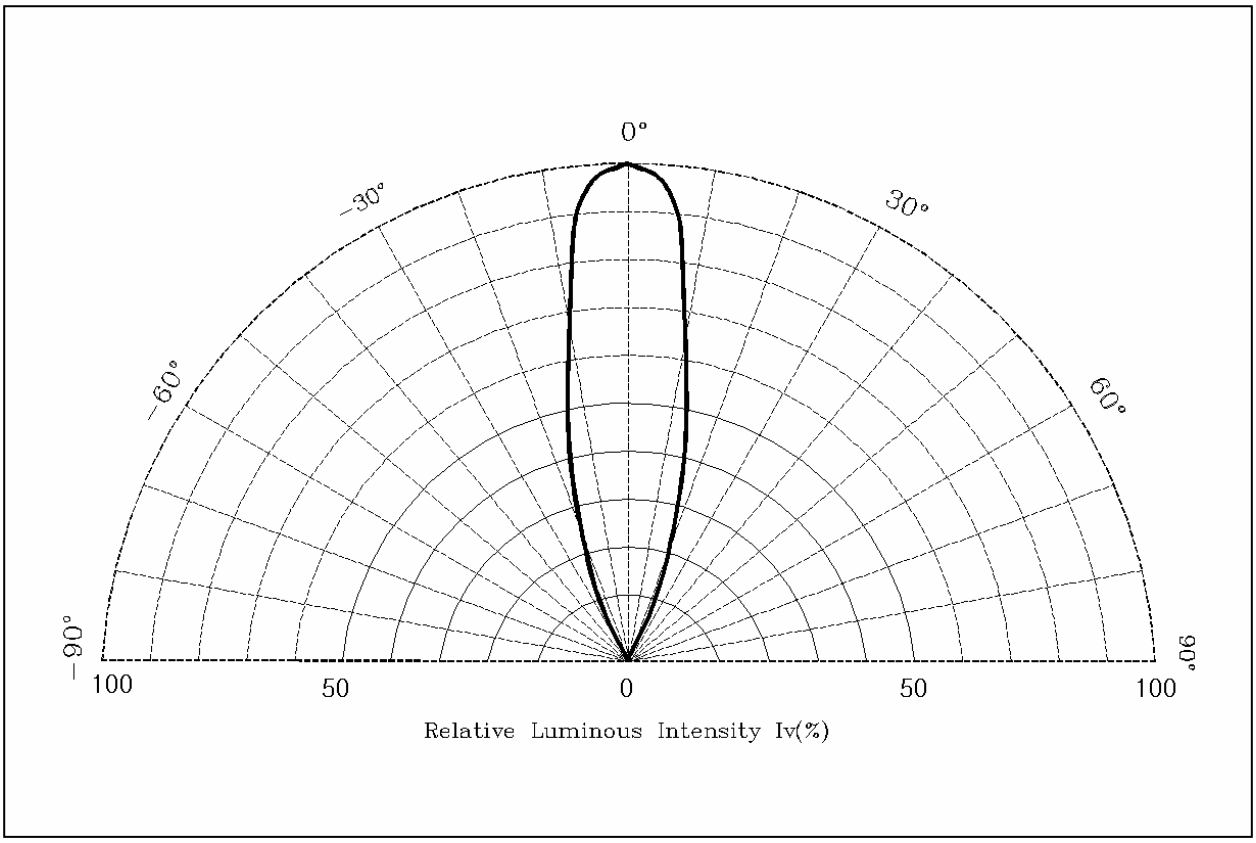


Fig. 5 Radiation Characteristics



■ 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	