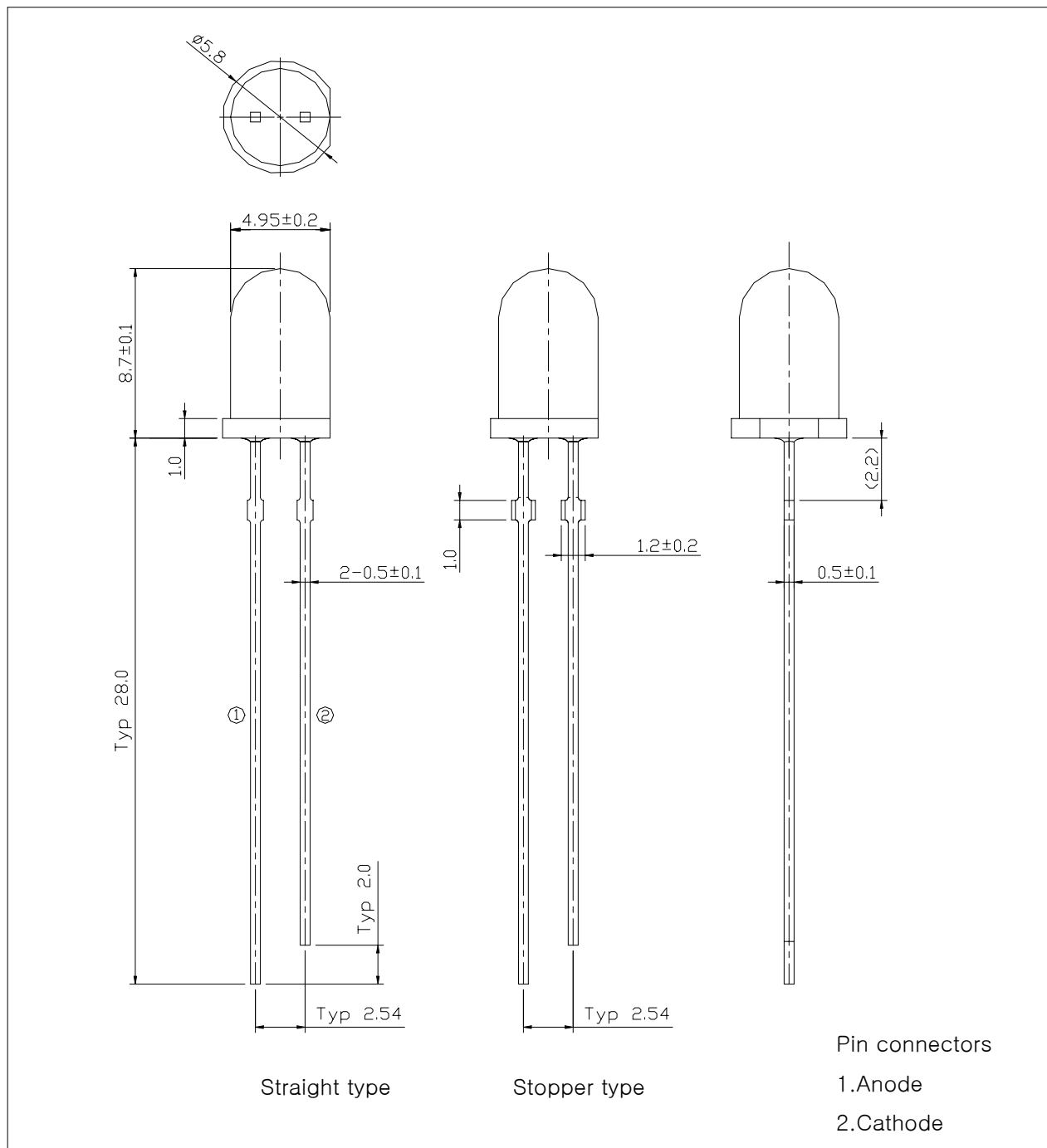


■ Features

- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-1 $\frac{3}{4}$) 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°C)

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	°C
Storage Temperature	T_{stg}	-40~100	°C
* ² Soldering Temperature	T_{sol}	260°C 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°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
ESD Check Forward Voltage	V_{F2}	$I_F = 10\mu A$	2.0	-	-	V
Reverse Current	I_R	$V_R = 5V$	-	-	50	μA
Dominant Wavelength	λ_d	$I_F = 20mA$	465	-	480	nm
Spectrum Bandwidth	$\Delta\lambda$	$I_F = 20mA$	-	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°C)

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°C)

I _v 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°C)

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

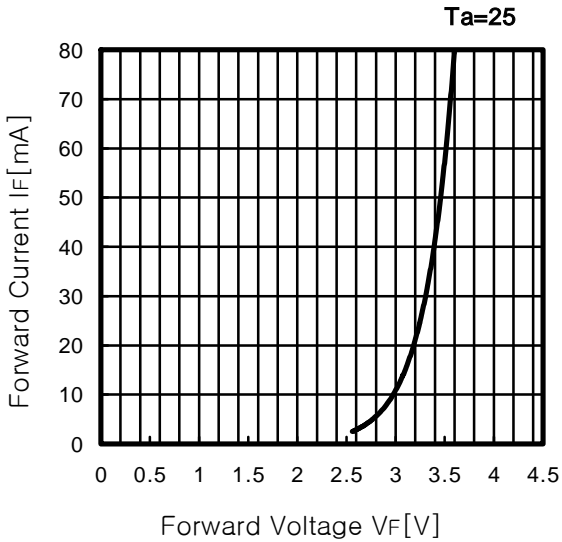


Fig. 2 I_V - I_F

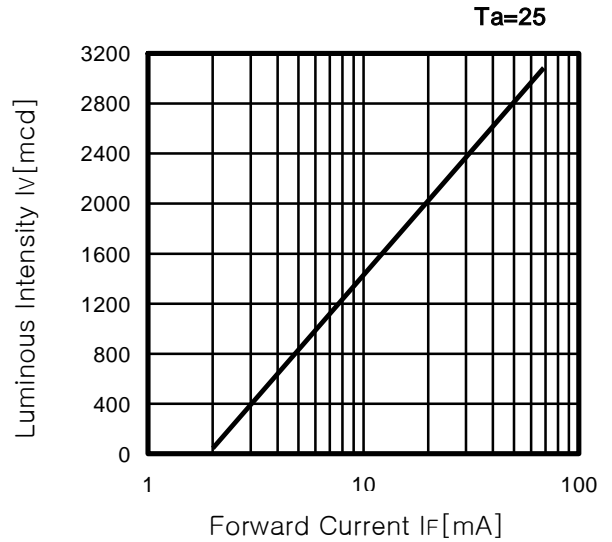


Fig. 3 I_F - T_a

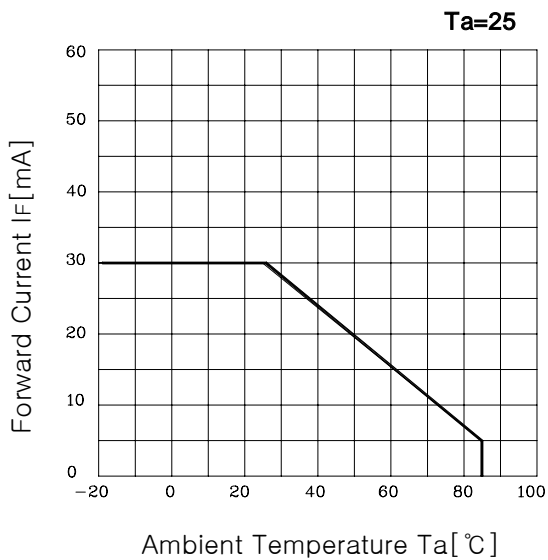


Fig. 4 Spectrum Distribution

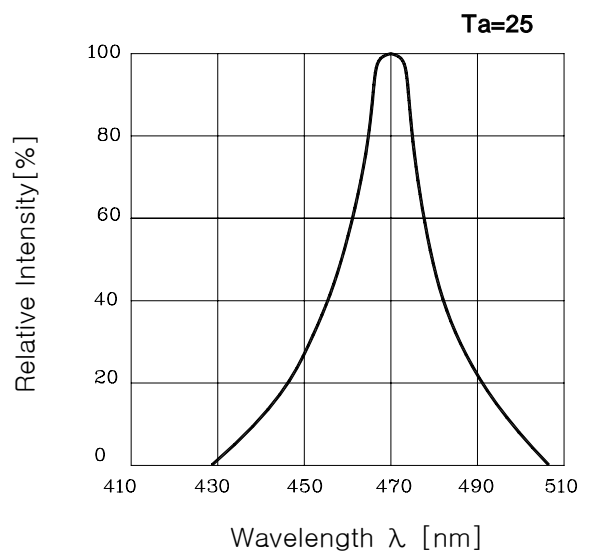
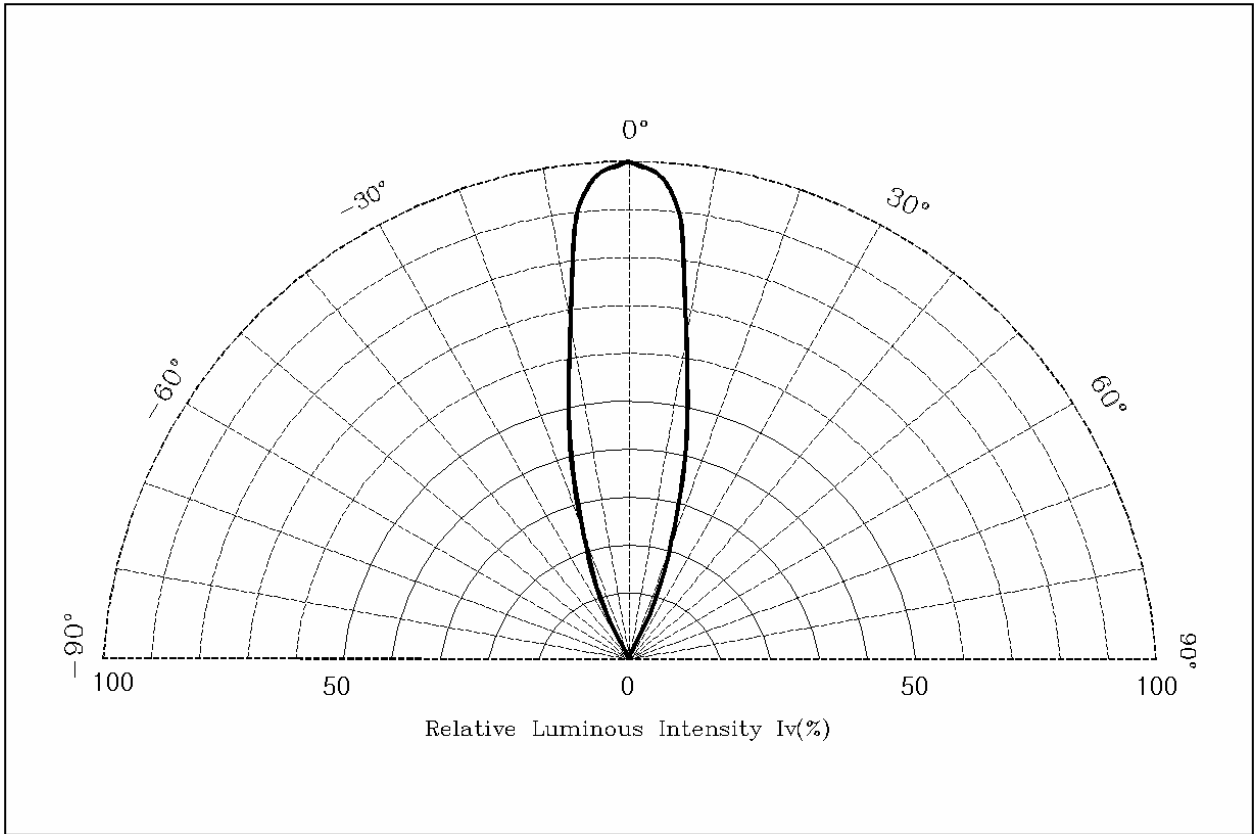


Fig. 5 Radiation Characteristics



■ 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	