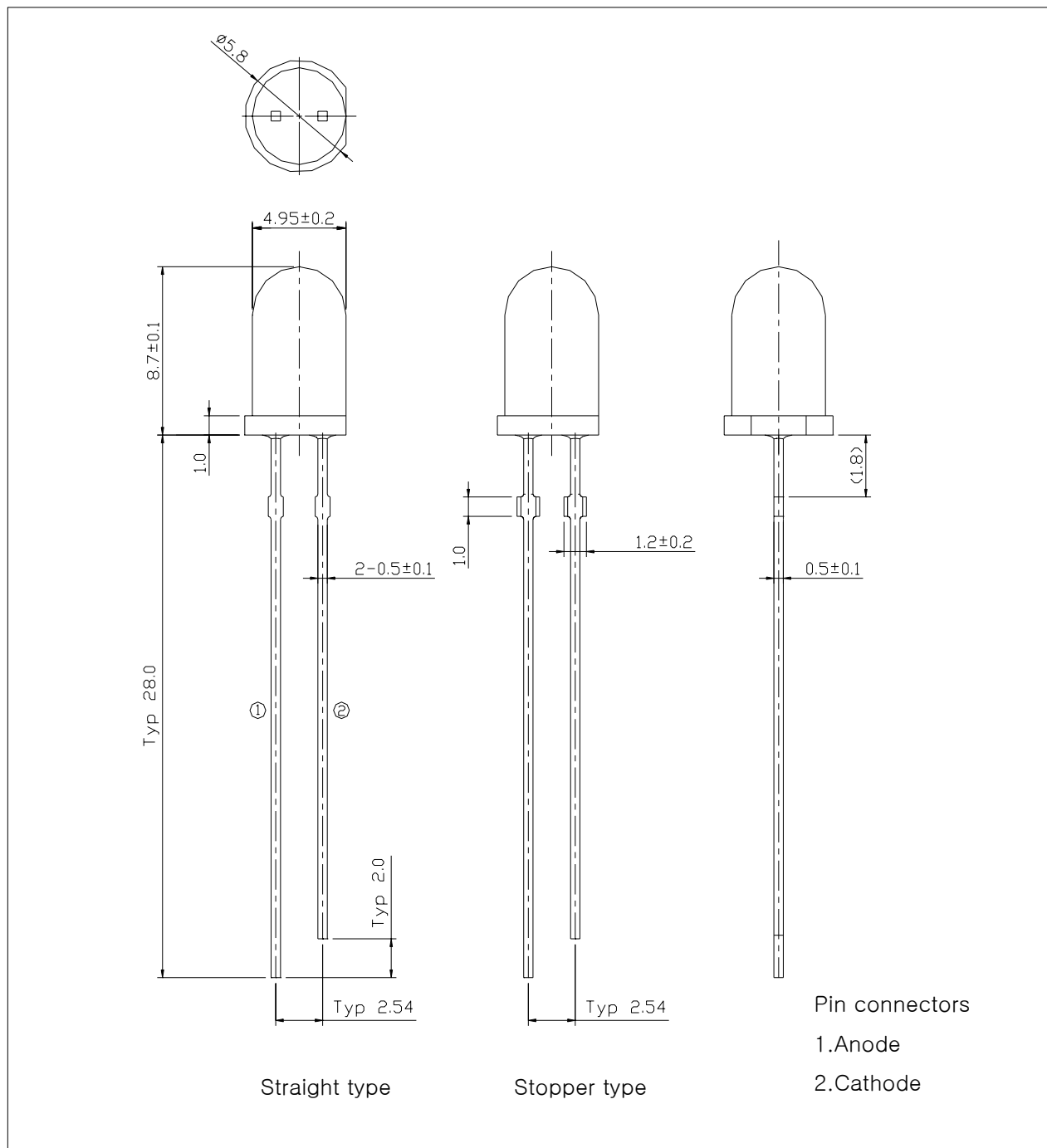


■ Features

- 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

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
* ³ Forward Voltage	V_F	$I_F = 20\text{mA}$	–	3.3	4.0	V
ESD Check Forward Voltage	V_{F2}	$I_F = 10\mu\text{A}$	2.0	–	–	V
Reverse Current	I_R	$V_R = 5\text{V}$	–	–	50	uA
* ⁴ Half Angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	–	±25	–	deg

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

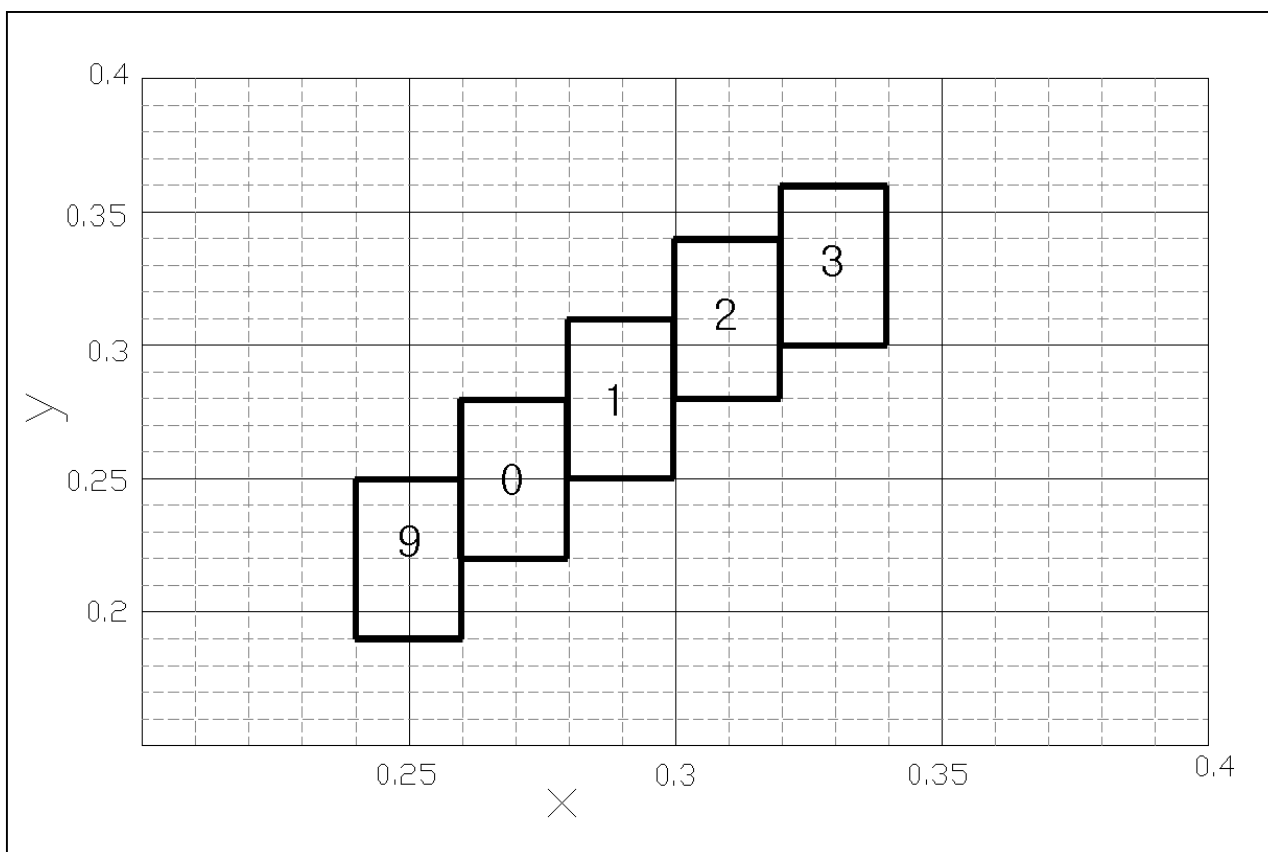
*4. $\theta_{1/2}$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity

■ Chromaticity Coordinates ranks

(Ta=25℃)

Color RANK		Test Condition	Min.	Typ.	Max.
9	x	$I_F = 20\text{mA}$	0.24	—	0.26
	y		0.19	—	0.25
0	x		0.26	—	0.28
	y		0.22	—	0.28
1	x		0.28	—	0.30
	y		0.25	—	0.31
2	x		0.30	—	0.32
	y		0.28	—	0.34
3	x		0.32	—	0.34
	y		0.30	—	0.36

* The CIE standard colorimetric system



■ Luminous intensity ranks

(Ta=25℃)

Iv RANK	Test Condition	Min.	Typ.	Max.	Unit
P	IF=20mA	1200		1700	mcd
Q		1700		2400	
R		2400		3400	
S		3400		4800	

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

* Intensity Measured : 0.01sr(CIE. LED_B)

■ Precautions On LED using

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

■ Characteristic Diagrams

Fig. 1 I_F - V_F

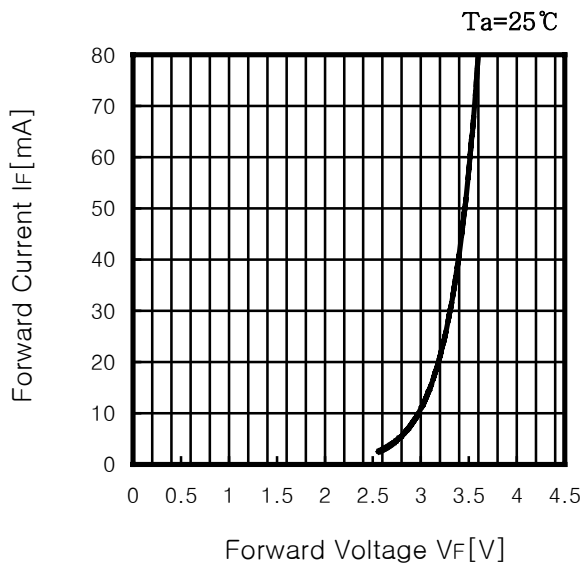


Fig. 2 I_v - I_F

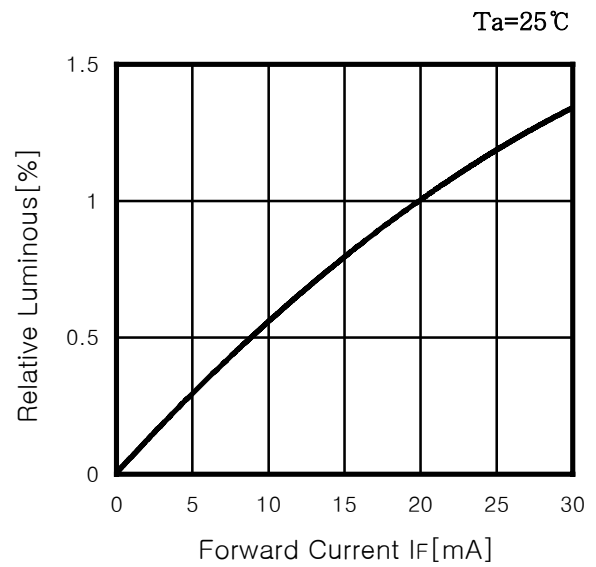


Fig. 3 I_F - T_a

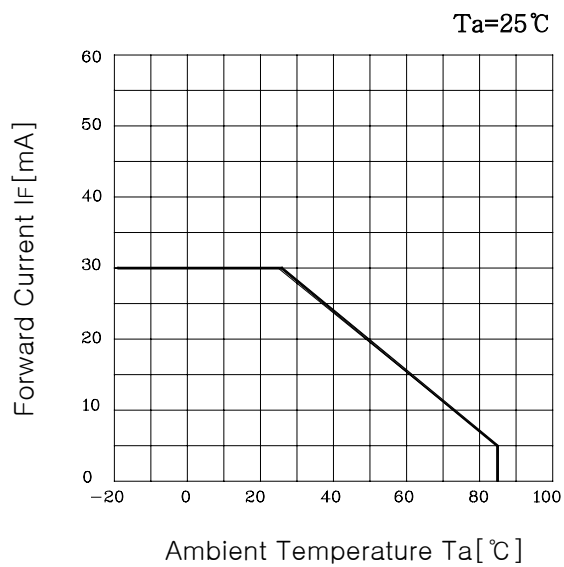


Fig. 4 Radiation Characteristics

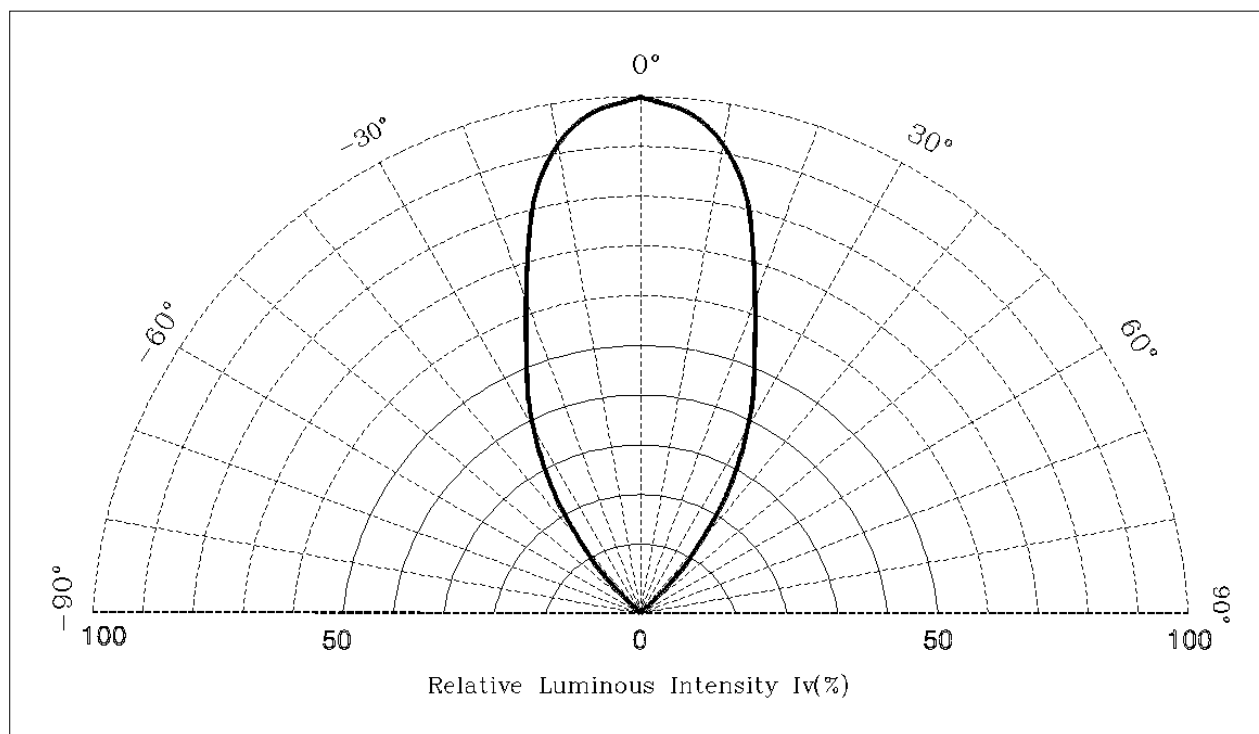
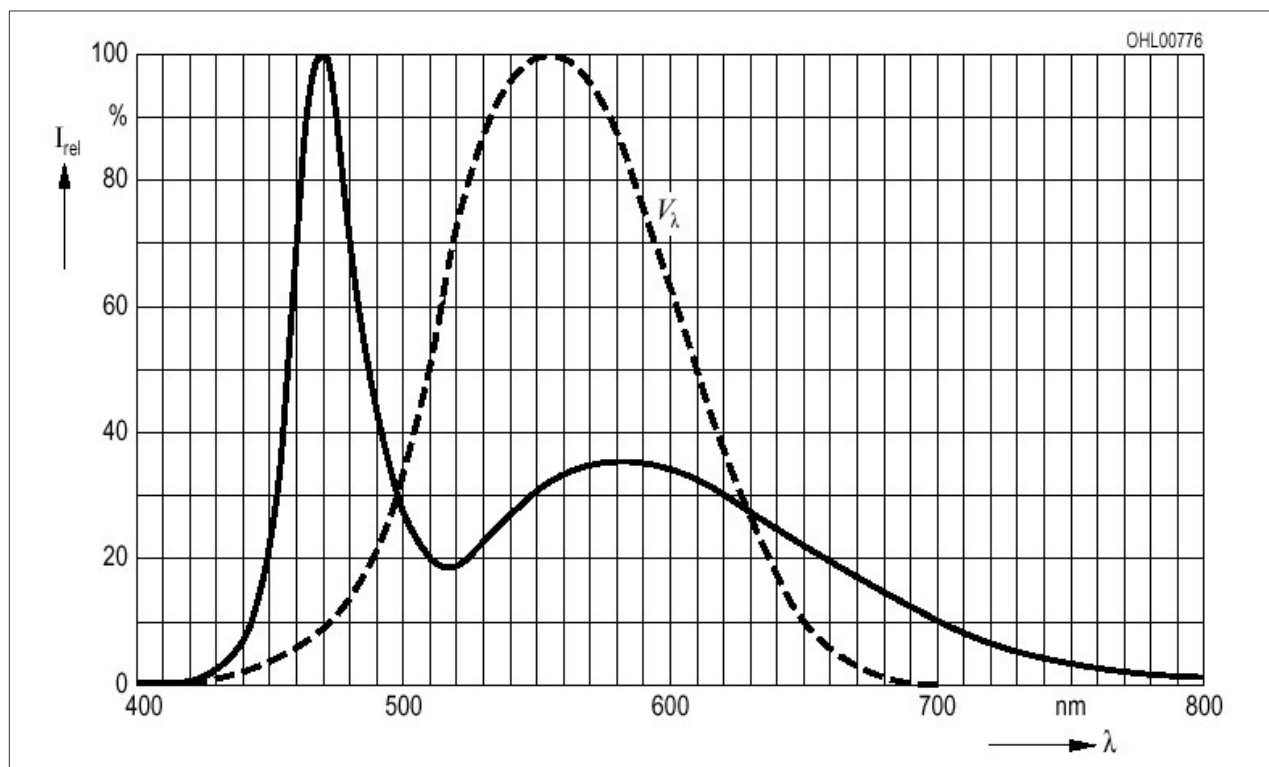


Fig. 5 Spectrum Characteristic

$T_A = 25^\circ\text{C}$, $I_F = 20\text{mA}$



■ Revision history sheet

[illegible]