



LBH5236

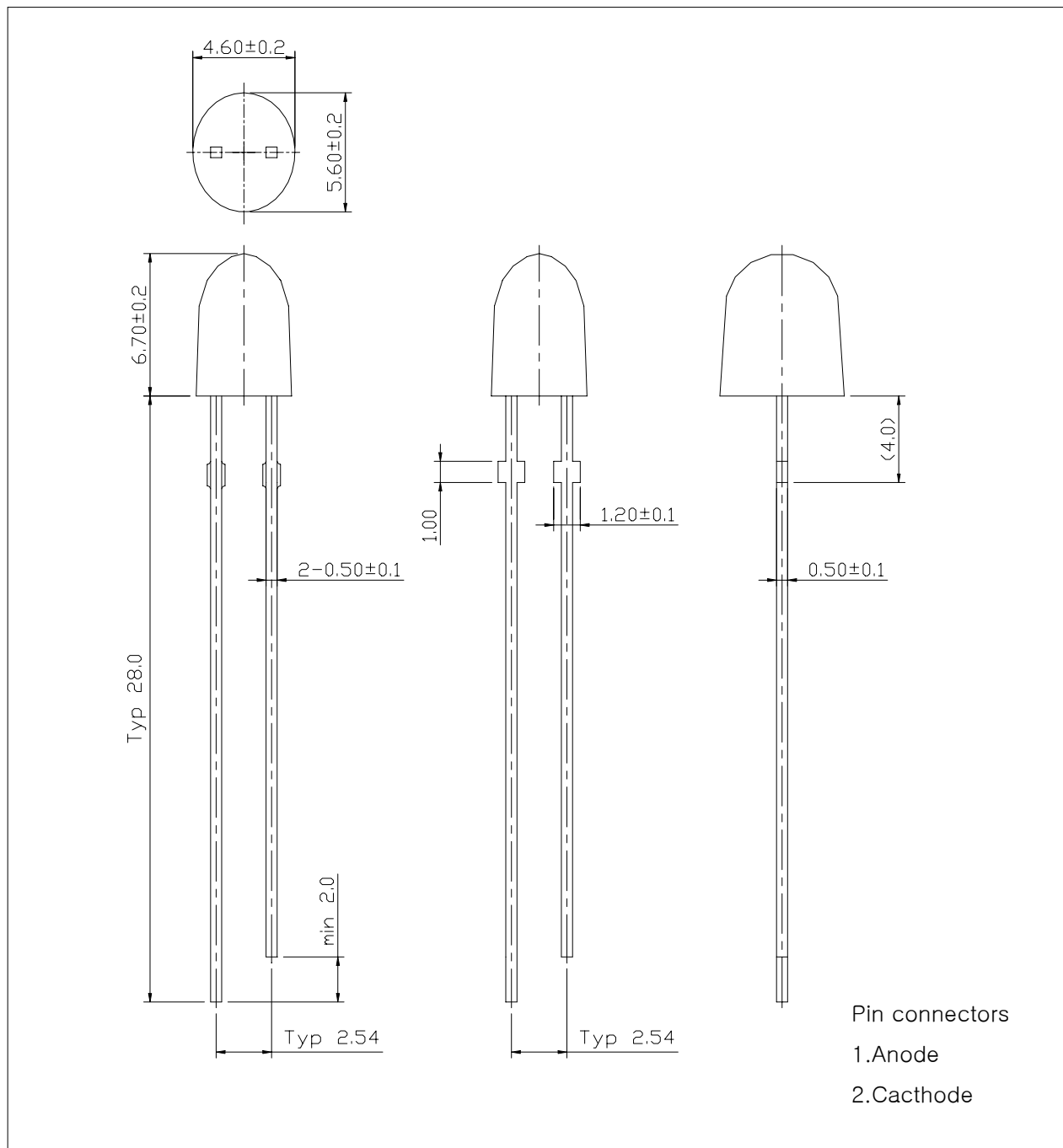
High Brightness LED Lamp

■ 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)



Different and Better

■ 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 5 seconds	

*1.Duty ratio $\leq 1/10$, Pulse Width $\leq 10\text{msec}$

*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_F	$I_F = 20\text{mA}$	–	3.4	3.9	V
Spectrum Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	–	35	–	nm
Reverse Current	I_R	$V_R = 5\text{V}$	–	–	10	uA
* ³ Half Angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	–	X : ± 17 Y : ± 34	–	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	

* 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
K	I _F = 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 _F RANK	Test Condition	Min.	Typ.	Max.	Unit
1	I _F = 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

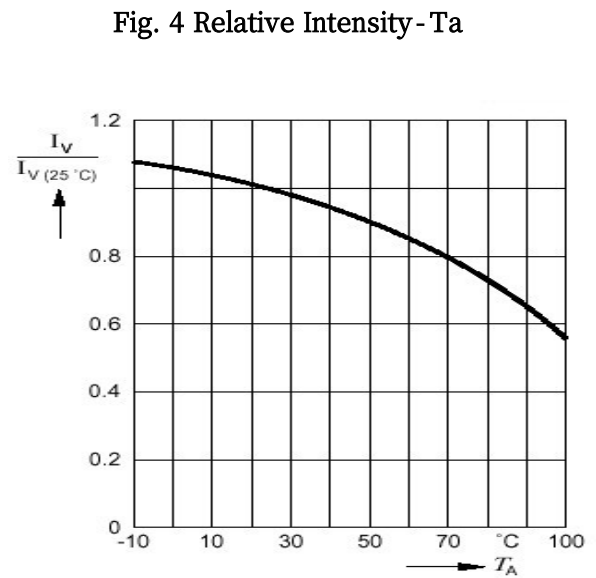
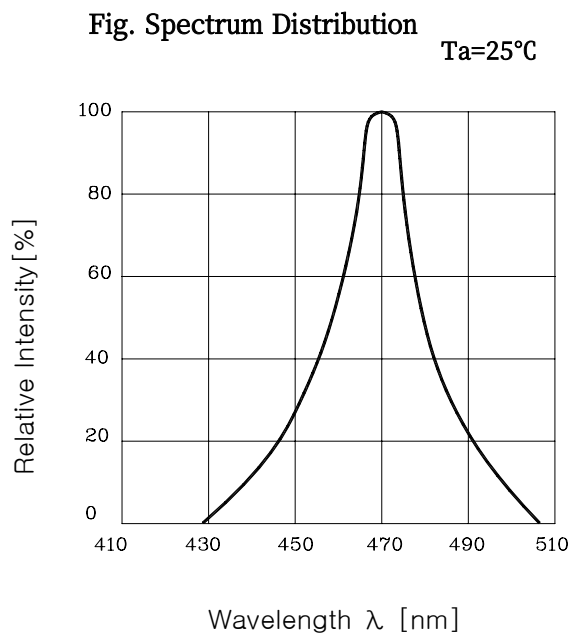
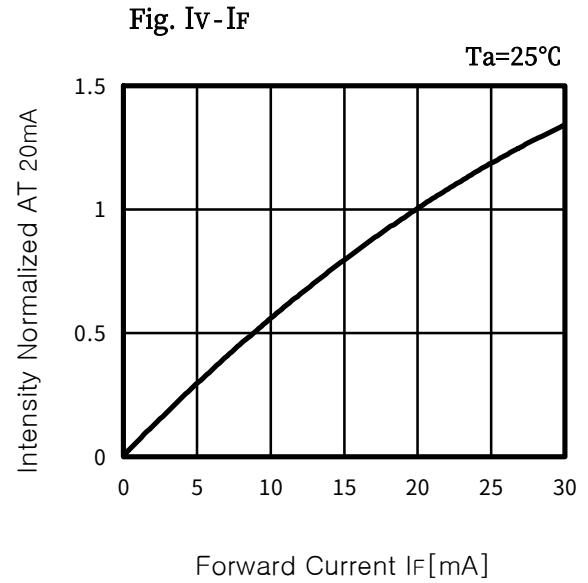
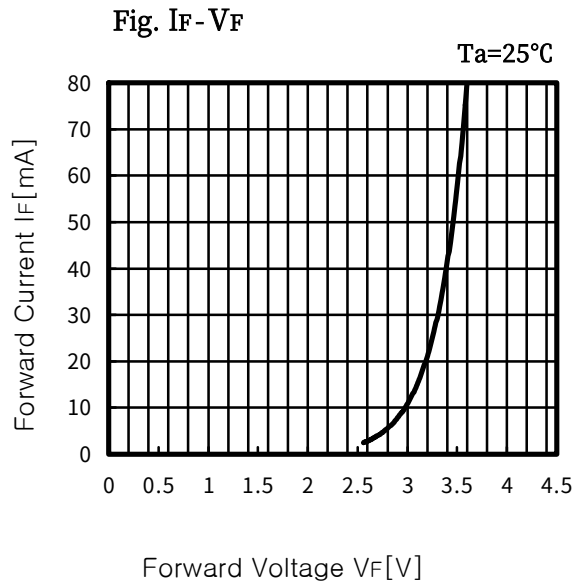
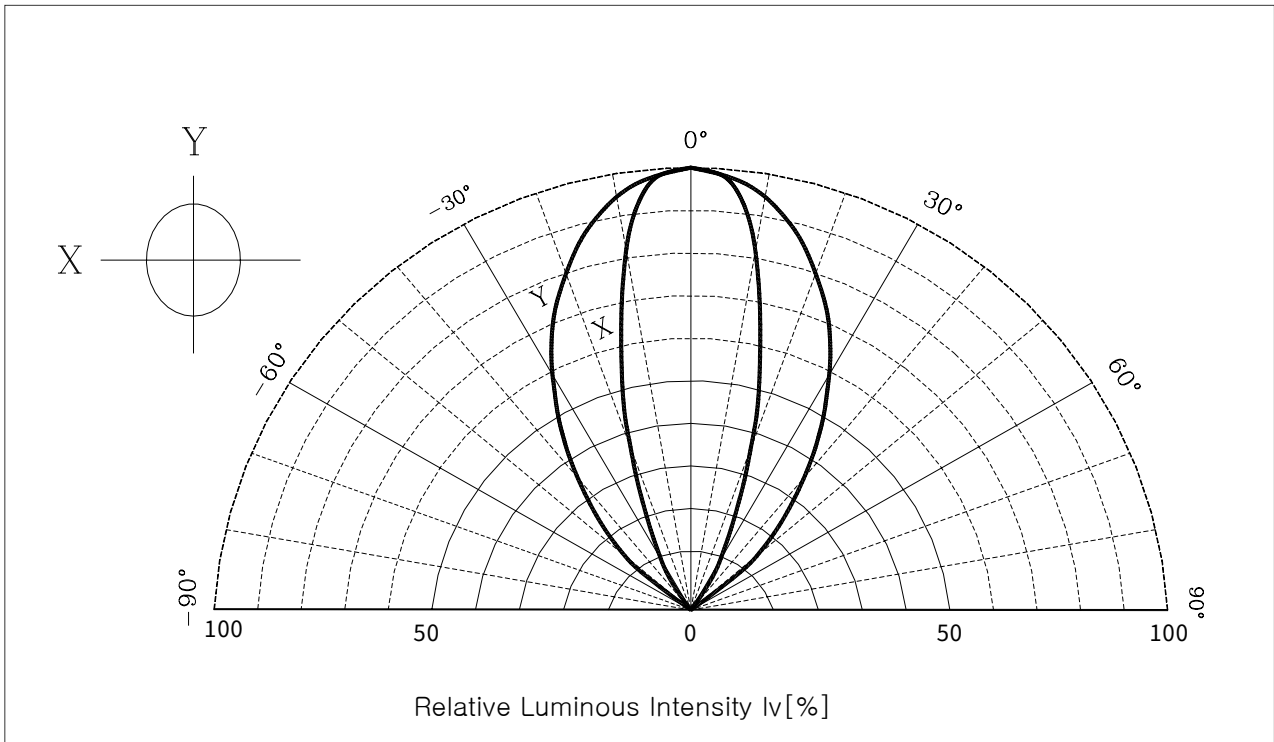


Fig. 5 Radiation Diagram



■ 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	lv Rank 변경	