



LRU5020

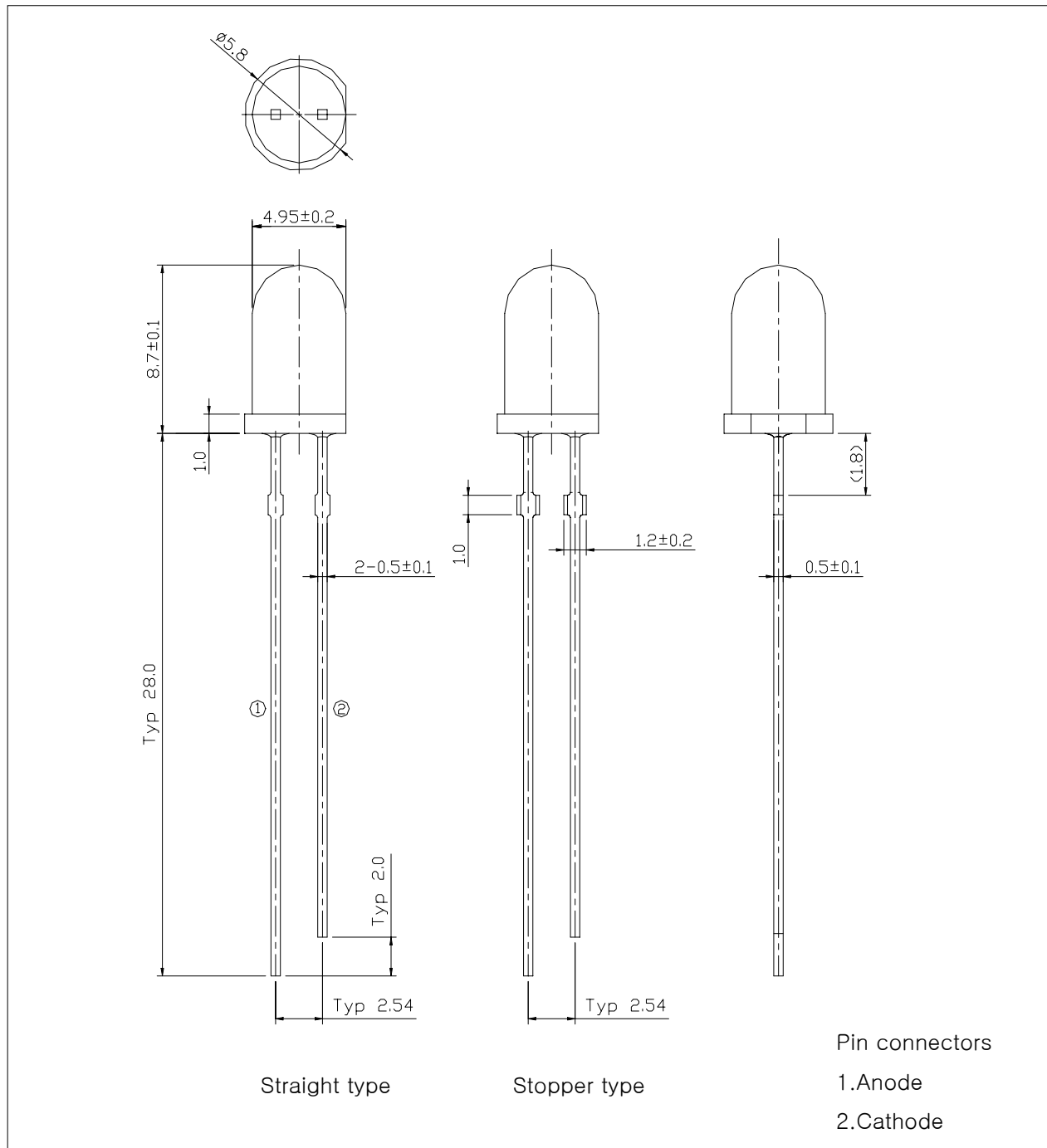
High Brightness LED Lamp

Features

- Colored transparency lens type
- $\phi 5\text{mm}$ (T-1 $\frac{3}{4}$) all plastic mold type
- High Luminosity

Outline dimensions

(unit : mm)



Different and Better

■ Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	75	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 $\leq 1/10$, 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

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	–	1.9	2.2	V
Dominant Wavelength	λ_D	$I_F = 20\text{mA}$	–	645	–	nm
Spectrum Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	–	20	–	nm
Reverse Current	I_R	$V_R = 5\text{V}$	–	–	10	Ua
* ³ Half Angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	–	± 20	–	deg

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

■ Luminous intensity ranks

(Ta=25℃)

Iv RANK	Test Condition	Min.	Typ.	Max.	Unit
M	I _F = 20mA	420	–	600	mcd
N		600	–	850	
O		850	–	1200	
P		1200	–	1700	

* 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 $I_F - V_F$

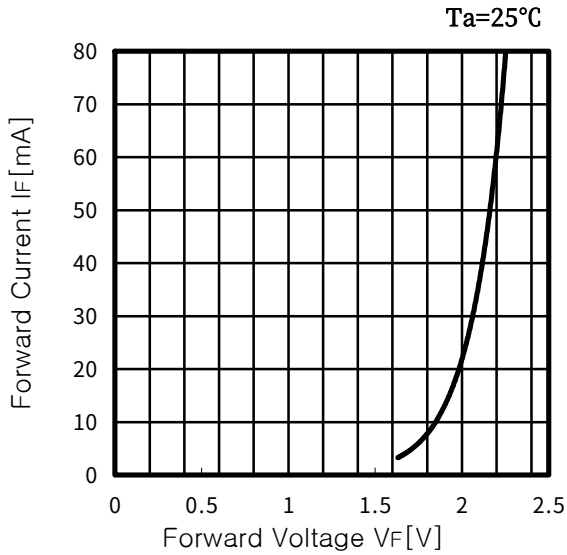


Fig. 2 $I_v - I_F$

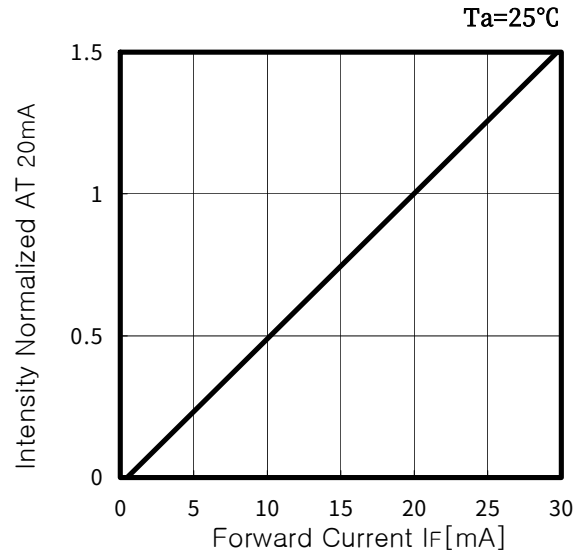


Fig. 3 $I_F - T_a$

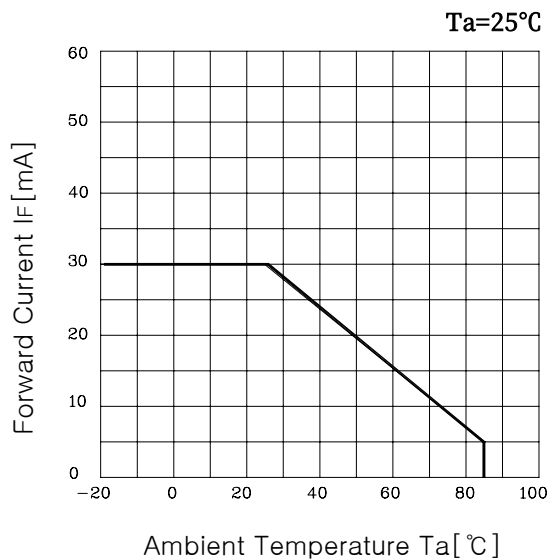


Fig. 4 Spectrum Distribution

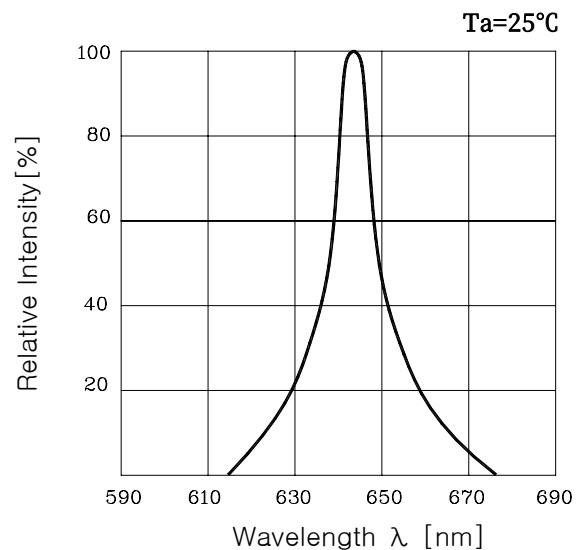
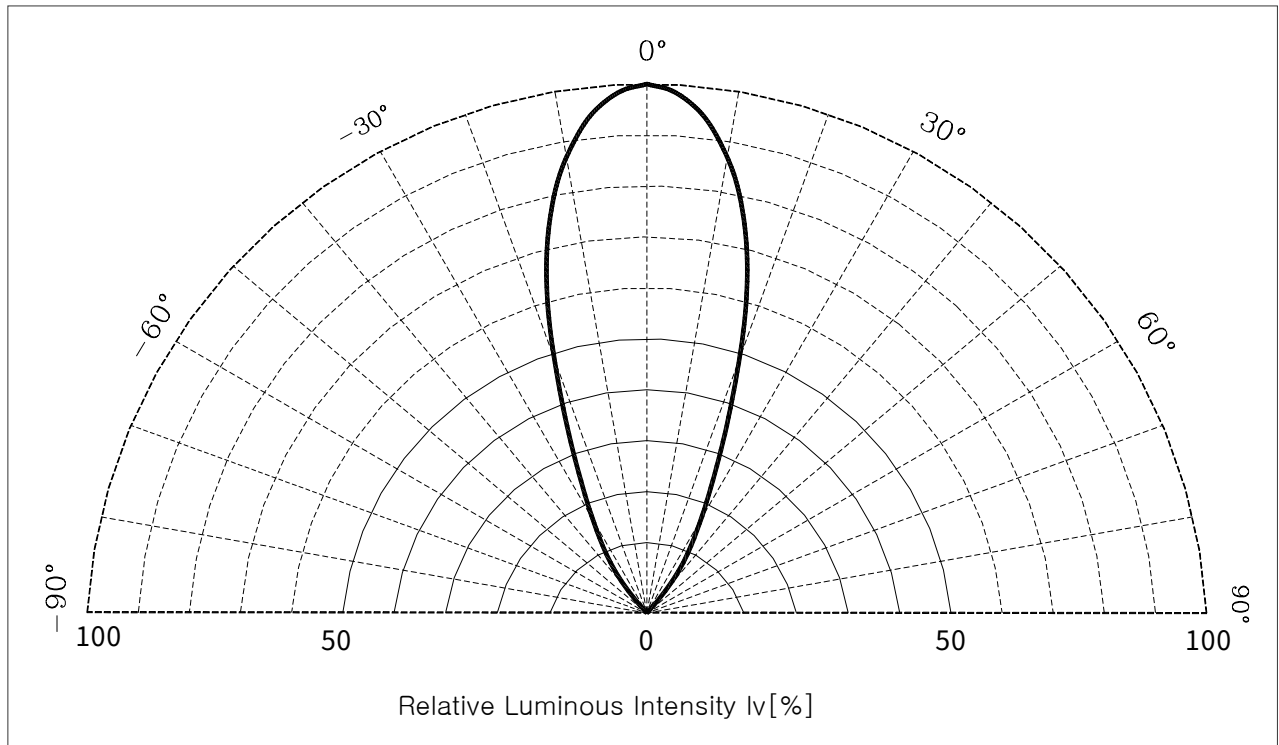


Fig. 4 Radiation Characteristics



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