SB3318E-G / SB3318E-G(B)

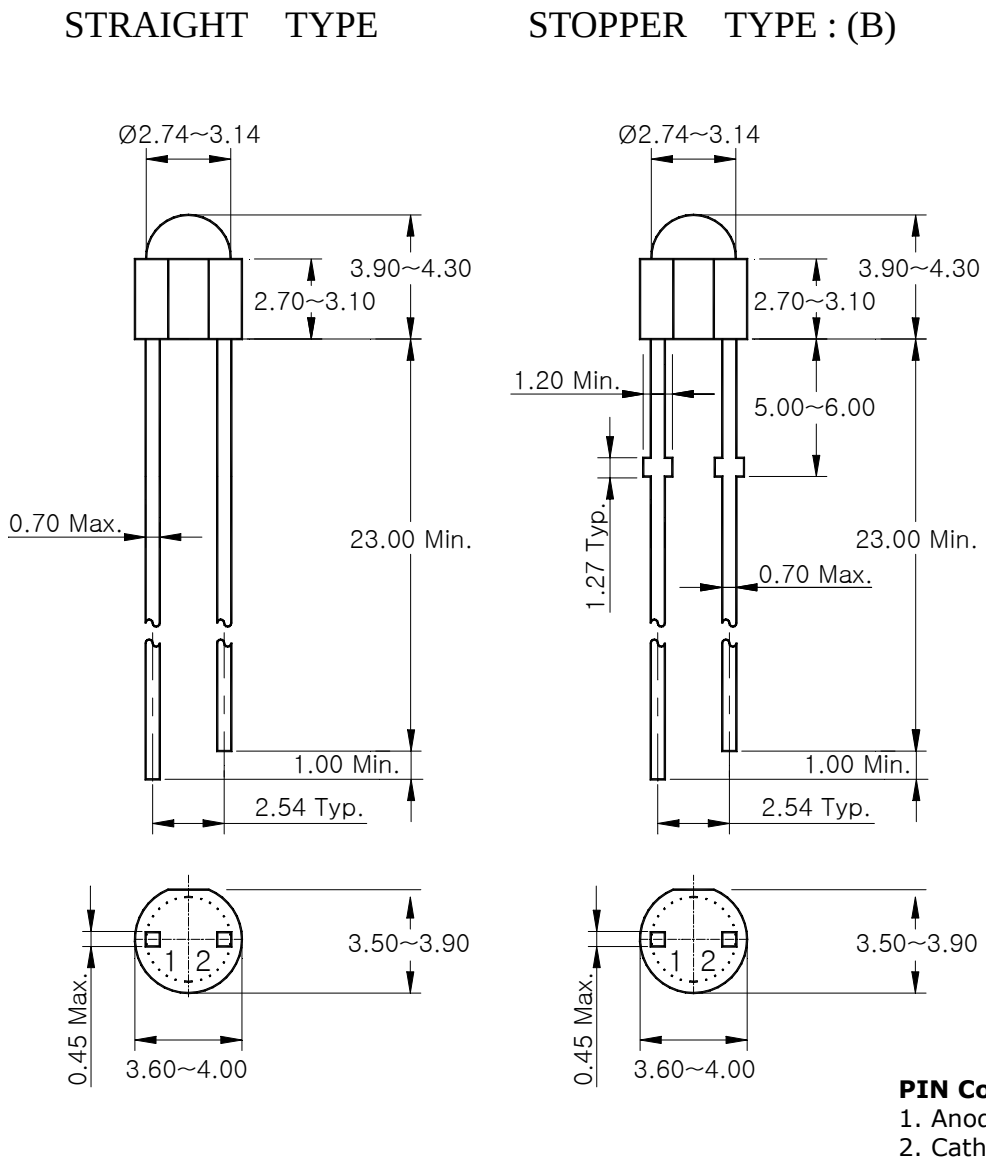
High Brightness LED Lamp

Features

- Colorless transparency lens type
- ϕ3mm(T-1) all plastic mold type
- Super luminosity
- **E ; ESD Protected (±2.0KV, 3 Times @100pF, 1.5KΩ)**

Outline Dimensions

unit : mm



PIN Connections
1. Anode
2. Cathode

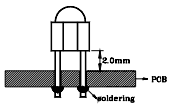
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	75	mW
Forward current	I_F	20	mA
*1Peak forward current	I_{FP}	50	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25～85	℃
Storage temperature range	T_{stg}	-30～100	℃
Soldering temperature	T_{sol}	260℃ for 10 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



※ Recommend document

-. LED is very sensitive to ESD.

Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F= 20mA	2.9	-	3.8	V
*2Luminous Intensity	I_V	I_F= 20mA	100	-	350	mcd
*3Dominant Wavelength	λ_D	I_F= 20mA	460	-	475	nm
Spectrum Bandwidth	$\Delta\lambda$	I_F= 20mA	-	26	-	nm
Reverse Current	I_R	V_R=4V	-	-	10	uA
*4Half angle	$\theta 1/2$	I_F= 20mA	-	±45	-	deg

*2. Luminous Intensity Maximum tolerance for each Grade Classification limit is ±18%

*3. Dominant Wavelength Maximum tolerance for each Grade Classification limit is ±1nm

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

• V_F / I_V / λ_D Grade Classification (Ta=25℃)

Test Condition @I_F = 20mA		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant eavelength [nm]
1 : 2.9~3.2	L : 100~155	a : 460~465
2 : 3.2~3.5	M : 155~230	b : 465~470
3 : 3.5~3.8	N : 230~350	c : 470~475

(Do not use to combine grade classification. It must be used separately grade classification)

Characteristic Diagrams

Fig. 1 I_F - V_F

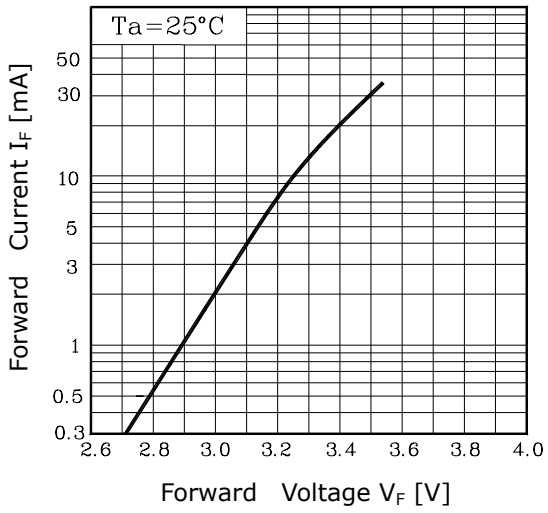


Fig. 2 I_V - I_F

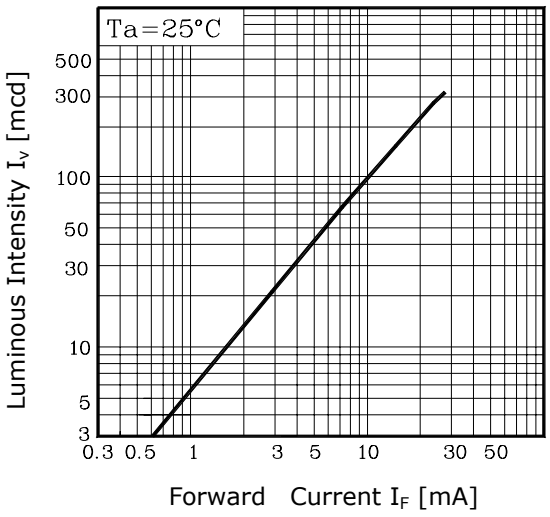


Fig. 3 I_F – Ta

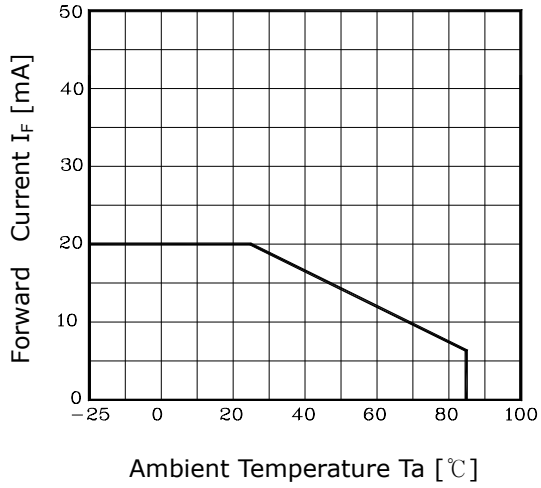


Fig.4 Spectrum Distribution

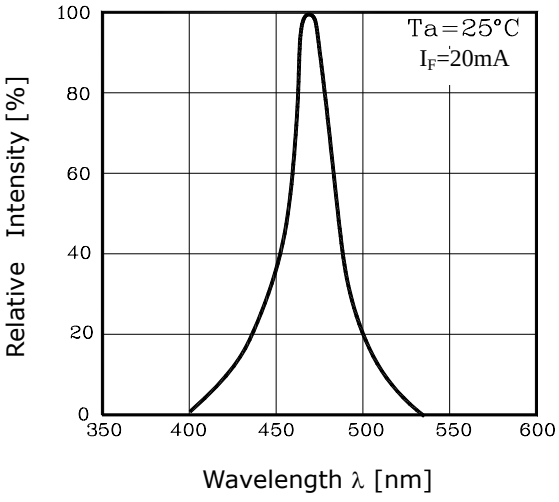
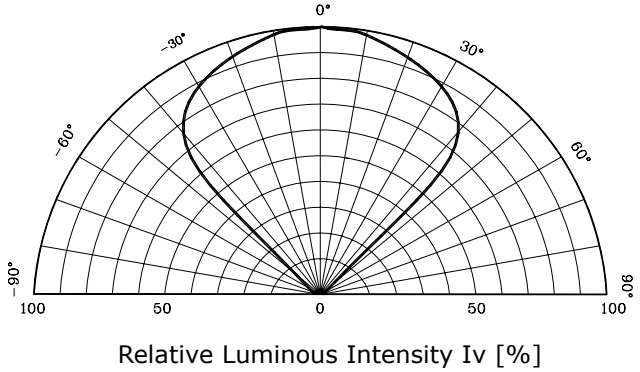


Fig. 5 Radiation Diagram



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