

SB3317E-G/SB3317E-G(B) *SB3317E-GHF/SB3317E-GHF(B)*1. Features**

- ◆ Colorless transparency lens type
- ◆ ϕ 3mm(T-1) all plastic mold type
- ◆ Super luminosity
- ◆ E ; ESD Protected (\pm 2.0KV, 3 times @100pF, 1.5K Ω)

2. Ordering information

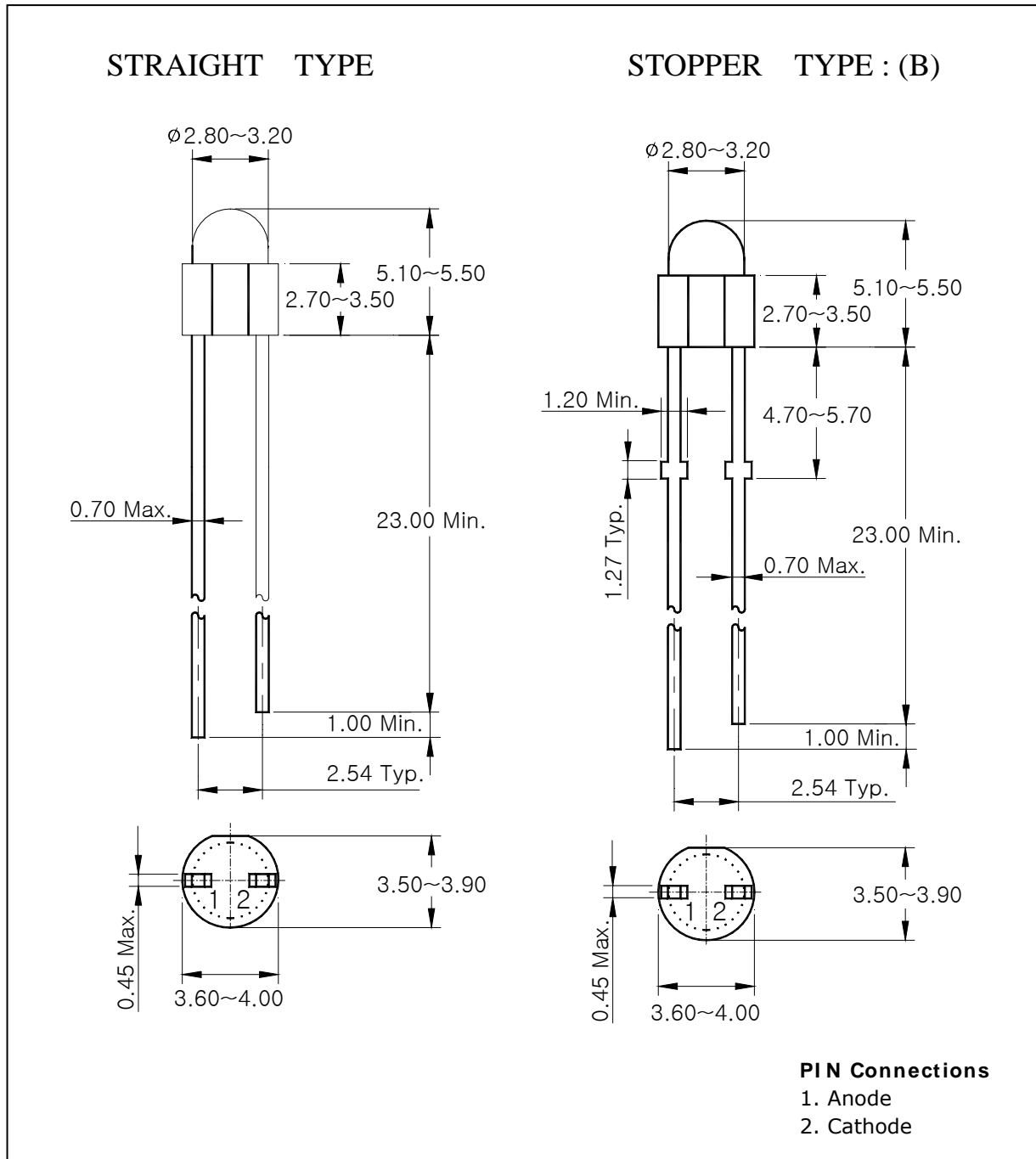
PART NO	Material	Emitting Color	Lens Color	Stopper type	ROHS Compliant
SB3317E-G	InGaN	Blue	Transparent	None	Pb free
SB3317E-G(B)	InGaN	Blue	Transparent	stopper	Pb free
SB3317E-GHF	InGaN	Blue	Transparent	None	Halogen free
SB3317E-GHF(B)	InGaN	Blue	Transparent	stopper	Halogen free

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***SB3317E-G/SB3317E-G(B) *SB3317E-GHF/SB3317E-GHF(B)**

3. Outline Dimensions

unit : mm



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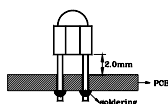
SB3317E-G/SB3317E-G(B) *SB3317E-GHF/SB3317E-GHF(B)*4. Absolute Maximum Ratings**

(Ta=25°C)

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

5. Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$	2.9	-	3.8	V
*4 Luminous intensity	I_V	$I_F = 20\text{mA}$	350	-	1760	mcd
Dominant wavelength	λ_D	$I_F = 20\text{mA}$	460	468	475	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	26	-	nm
Reverse current	I_R	$V_R = 4\text{V}$	-	-	10	uA
*3 Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	± 22	-	deg

*3. $\theta_{1/2}$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity*4. Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$

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***SB3317E-G/SB3317E-G(B) *SB3317E-GHF/SB3317E-GHF(B)**◆ $V_F / I_V / \lambda_D$ Grade Classification (Ta=25°C)

Test Condition @ $I_F = 20\text{mA}$		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]
1 : 2.9~3.2	O : 350~520	a : 460~465
	P : 520~780	
2 : 3.2~3.5	Q : 780~1170	b : 465~470
	R : 1170~1760	
3 : 3.5~3.8		c : 470~475

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

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6. Characteristic Diagrams

Fig. 1 $I_F - V_F$

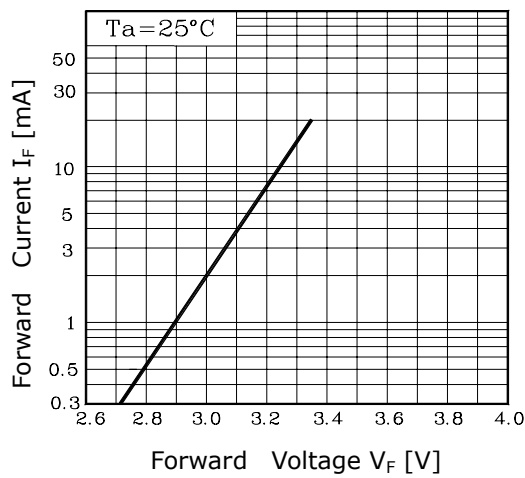


Fig. 2 $I_V - I_F$

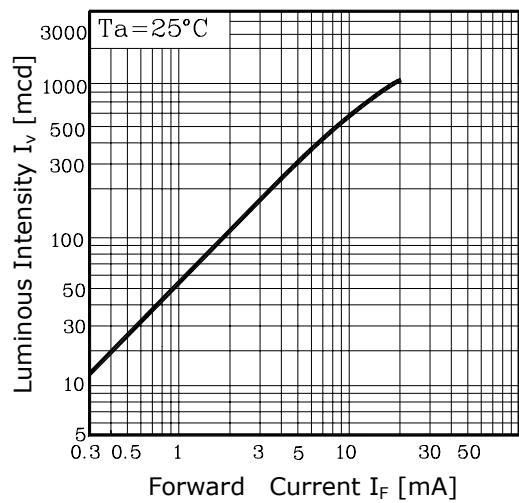


Fig. 3 $I_F - T_a$

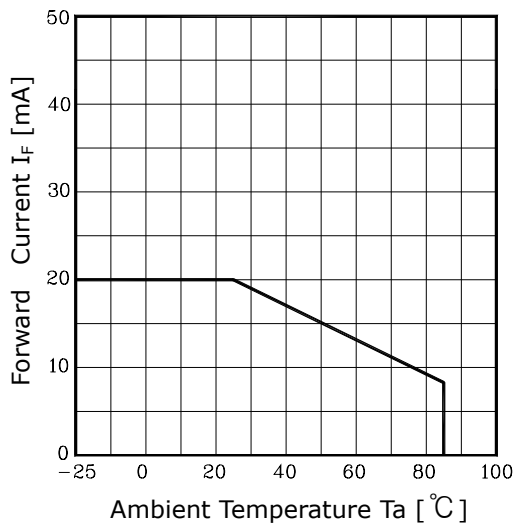


Fig.4 Spectrum Distribution

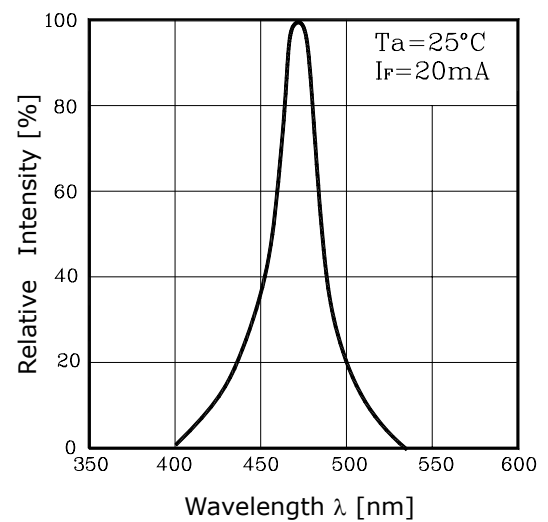
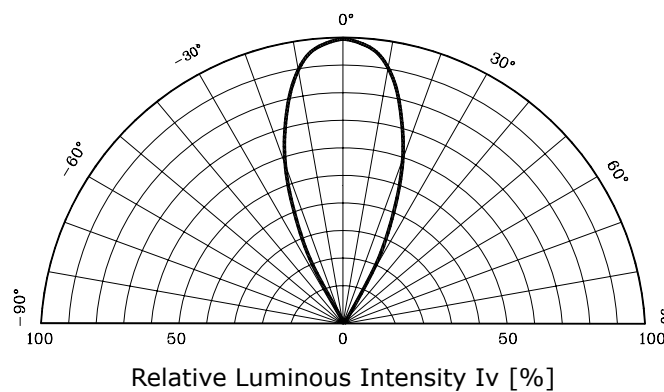


Fig. 5 Radiation Diagram



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