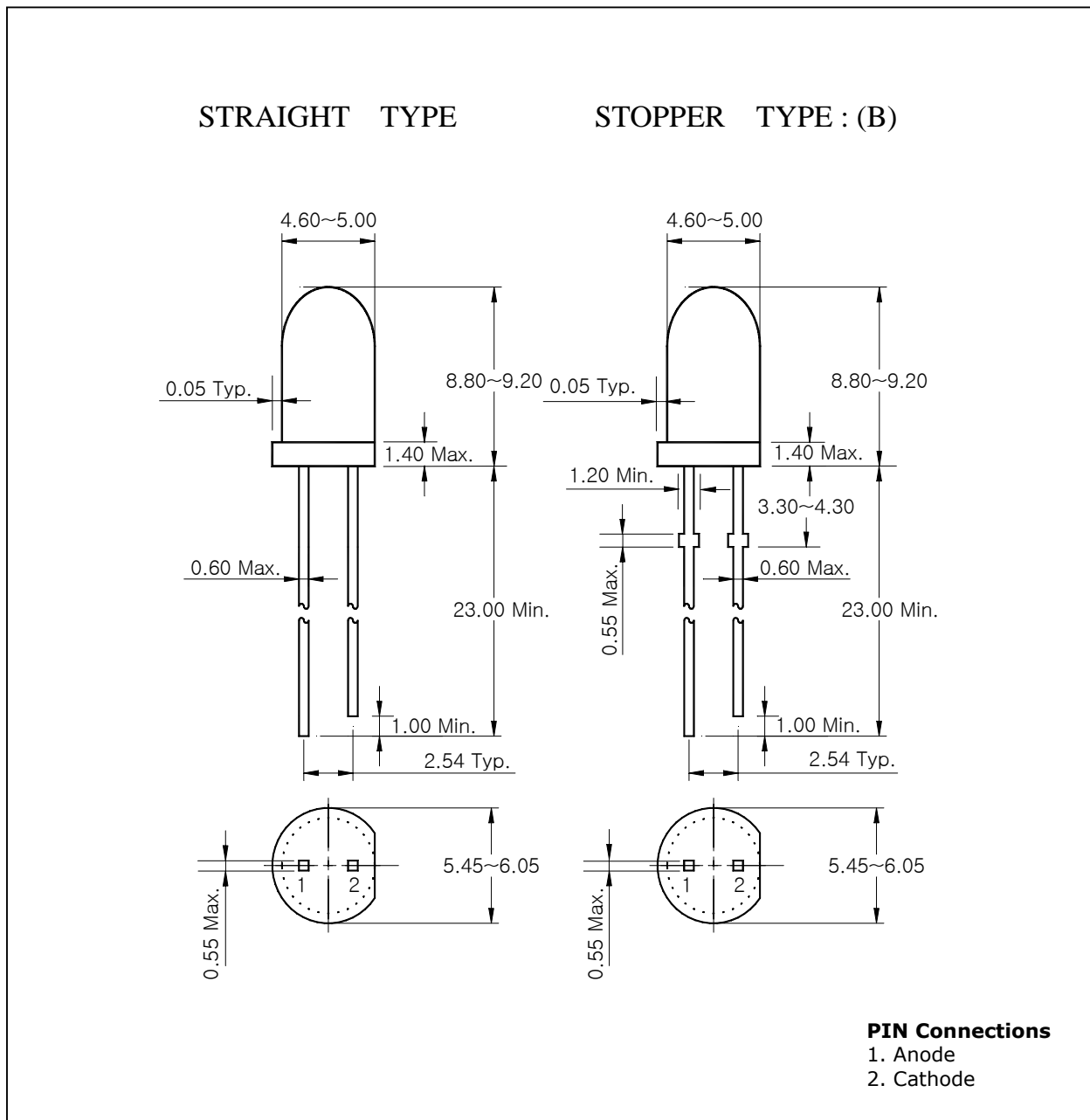


Features

- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- **ESD Protected ($\pm 2.0\text{KV}$, 3 Times @100pF, 1.5K Ω)**

Outline Dimensions

unit : mm



SB5312-H / SB5312-H(B)

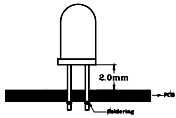
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	85	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	°C
Storage temperature range	T_{stg}	-30~100	°C
*2Soldering 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.

Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F=20\text{mA}$	-	3.5	4.2	V
*4Luminous intensity	I_v	$I_F=20\text{mA}$	350	-	1760	mcd
Peak wavelength	λ_p	$I_F=20\text{mA}$	-	435	-	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F=20\text{mA}$	-	60	-	nm
Reverse current	I_R	$V_R=4\text{V}$	-	-	10	uA
*3Half angle	$\theta_{1/2}$	$I_F=20\text{mA}$	-	± 8	-	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 $\pm 18\%$

*4. Luminous Intensity Classification

O	P	Q	R
350~520	520~780	780~1170	1170~1760

Characteristic Diagrams

Fig. 1 $I_F - V_F$

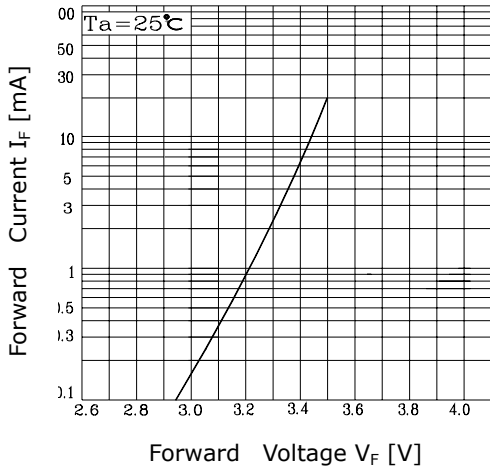


Fig. 2 $I_V - I_F$

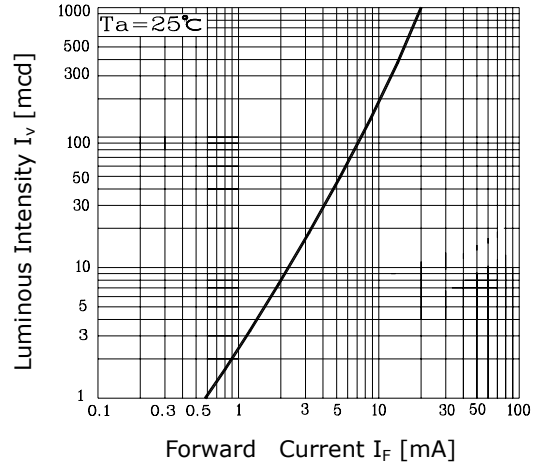


Fig. 3 $I_F - T_a$

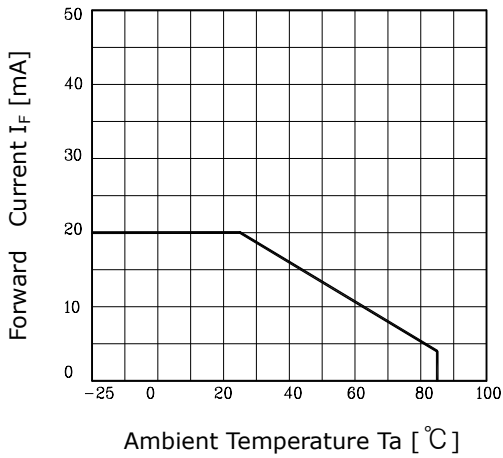


Fig.4 Spectrum Distribution

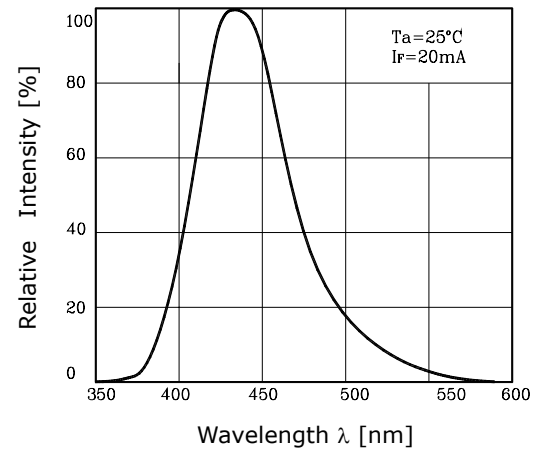
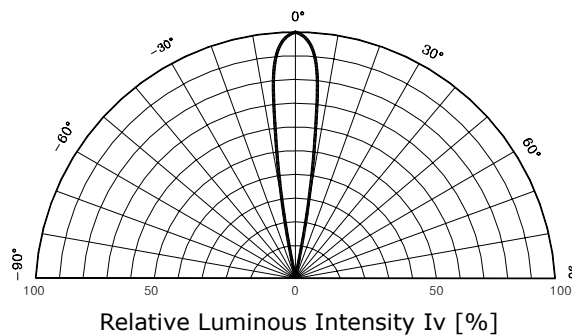


Fig. 5 Radiation Diagram



The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.