AUK Semiconductor

SB5312 / SB5312(B)

LED Lamp

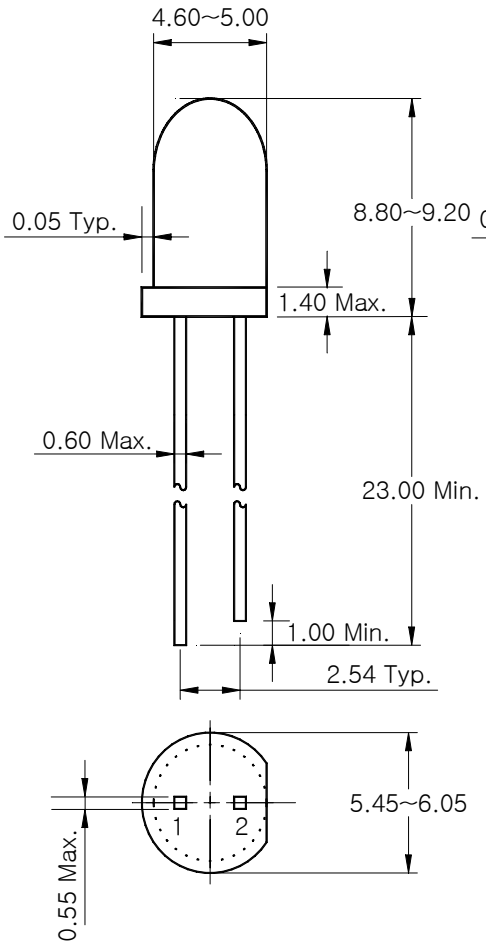
Features

- Colorless transparency lens type
- ϕ5mm(T-1¾) all plastic mold type
- **ESD Protected (±2.0KV, 3 Times @100pF, 1.5KΩ)**

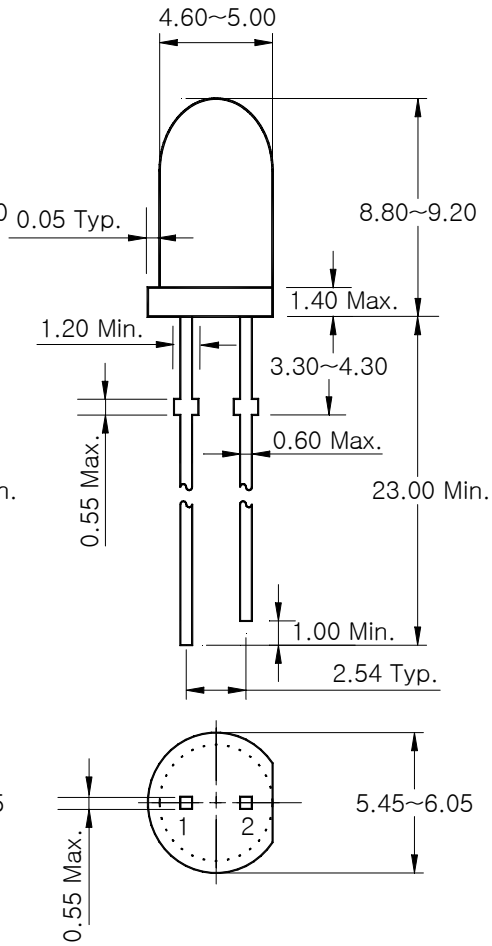
Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE : (B)



PIN Connections
1. Anode
2. Cathode

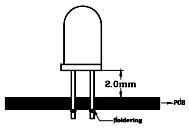
Absolute Maximum Ratings

(Ta=25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	90	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	℃
Storage temperature range	T_{stg}	-30～100	℃
*[2]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℃)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F= 20mA	-	3.7	4.5	V
*[4]Luminous intensity	I_V	I_F= 20mA	130	-	-	mcd
Peak wavelength	λ_P	I_F= 20mA	-	435	-	nm
Spectrum bandwidth	$\Delta\lambda$	I_F= 20mA	-	60	-	nm
Reverse current	I_R	V_R=4V	-	-	10	uA
*[3]Half angle	θ1/2	I_F= 20mA	-	±8	-	deg

*3. θ1/2 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 ±18%

Characteristic Diagrams

Fig. 1 I_F - V_F

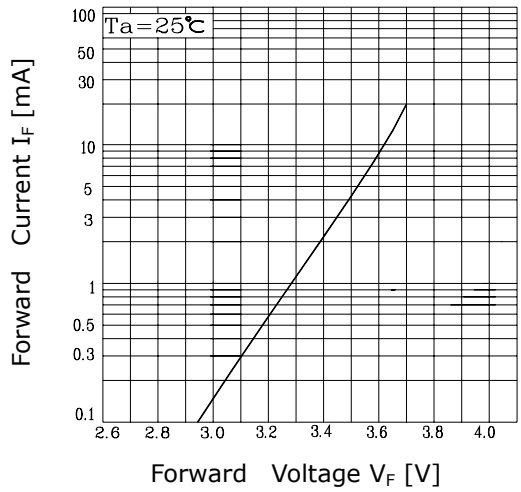


Fig. 2 I_V - I_F

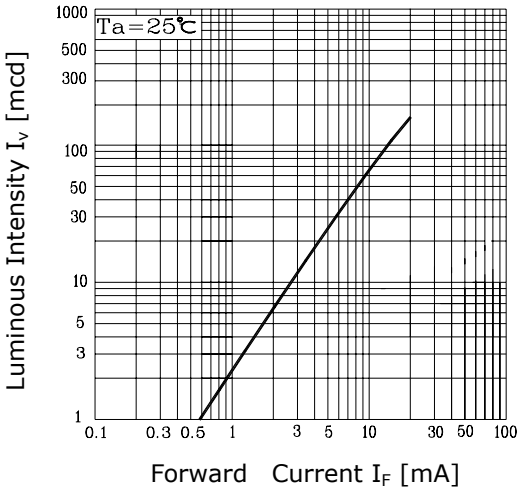


Fig. 3 I_F – Ta

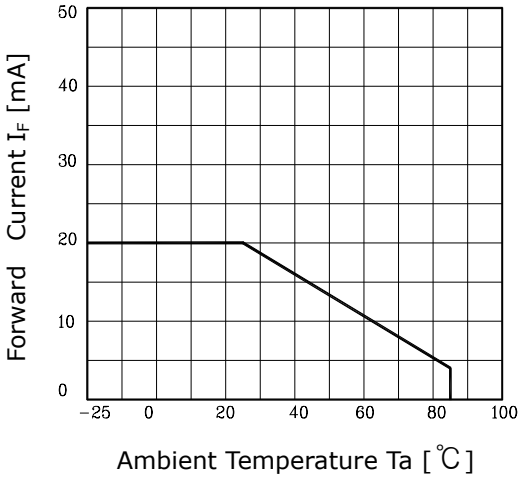


Fig.4 Spectrum Distribution

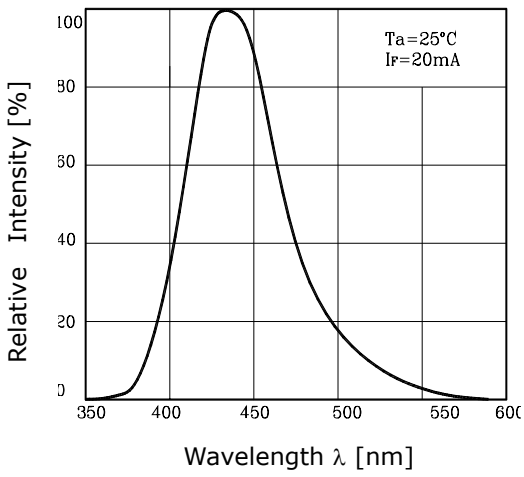
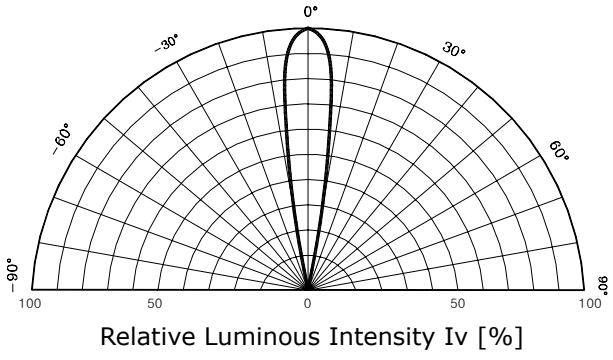


Fig. 5 Radiation Diagram



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