



SG5312-V / SG5312-V(B)

High Brightness LED Lamp

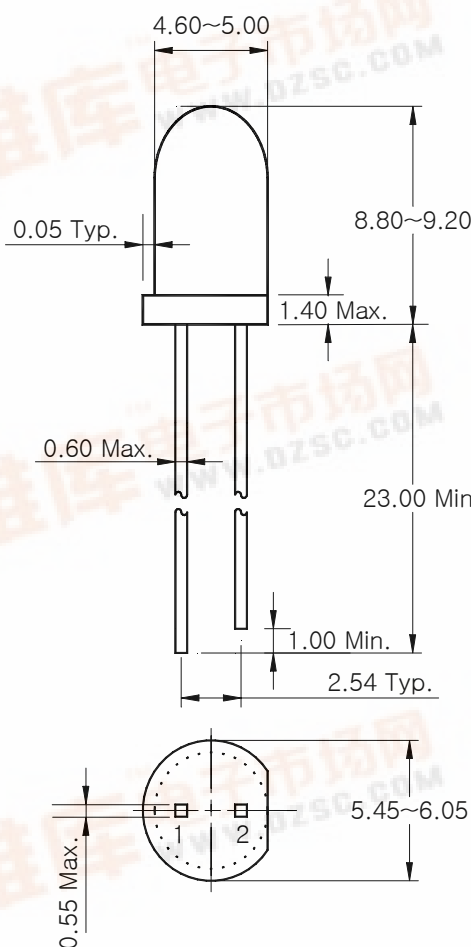
Features

- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Low power consumption

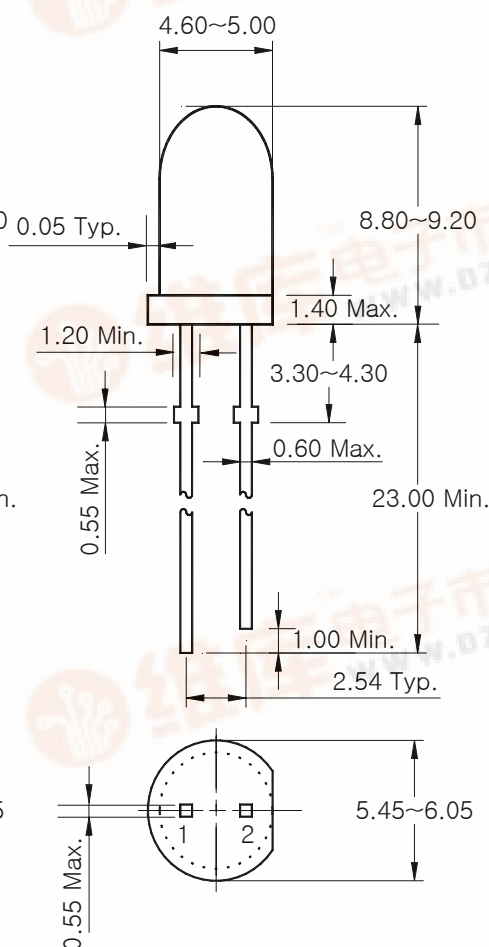
Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE : (B)



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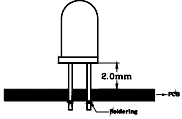
Absolute Maximum Ratings

(Ta=25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	125	mW
Forward current	I_F	30	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



Electrical / Optical Characteristics

(Ta=25℃)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$	-	3.5	4.2	V
Luminous intensity	I_V	$I_F = 20\text{mA}$	2400	4000	-	mcd
Peak wavelength	λ_p	$I_F = 20\text{mA}$	-	557	-	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	25	-	nm
Reverse current	I_R	$V_R = 4\text{V}$	10	-	-	uA
* ³ Half 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 ±18%

Characteristic Diagrams

Fig. 1 $I_F - V_F$

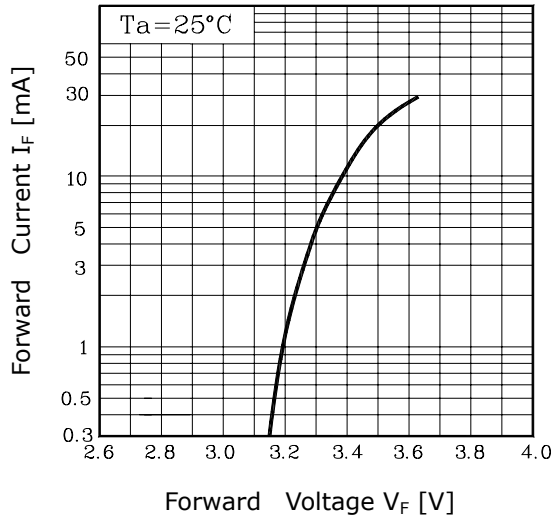


Fig. 2 $I_V - I_F$

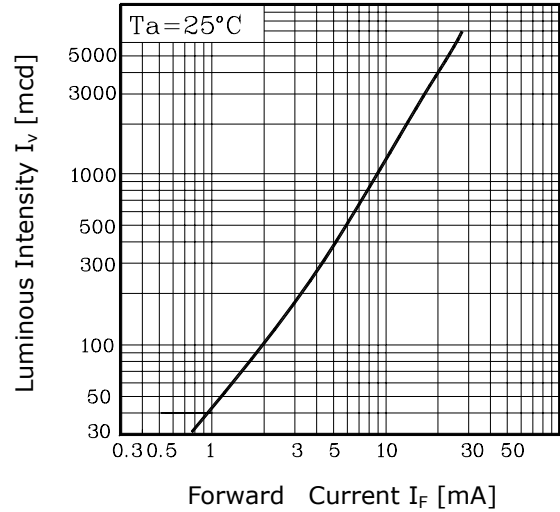


Fig. 3 $I_F - T_a$

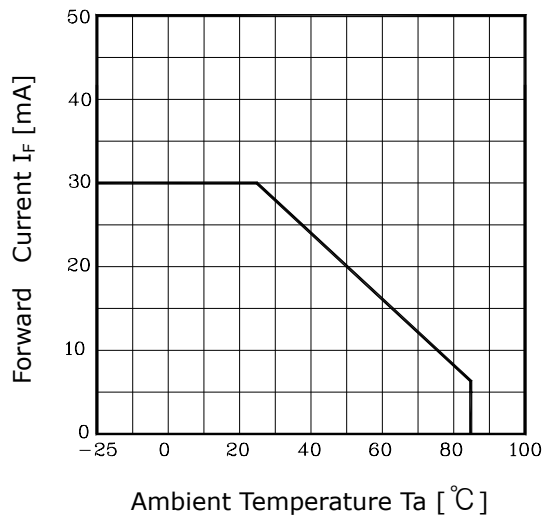


Fig. 4 Spectrum Distribution

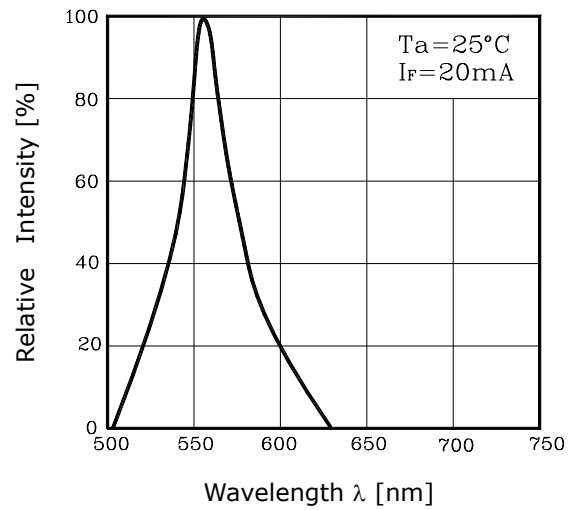
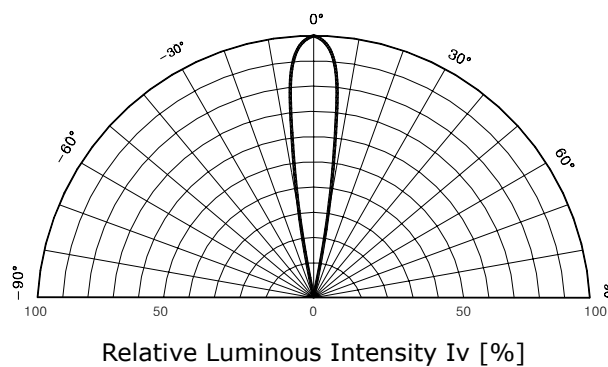


Fig. 5 Radiation Diagram



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