



# SG5311 / SG5311(B)

LED Lamp

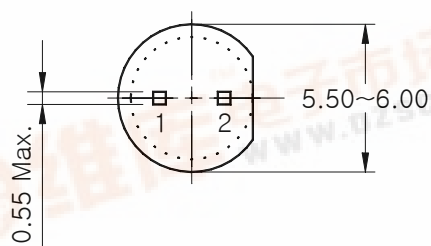
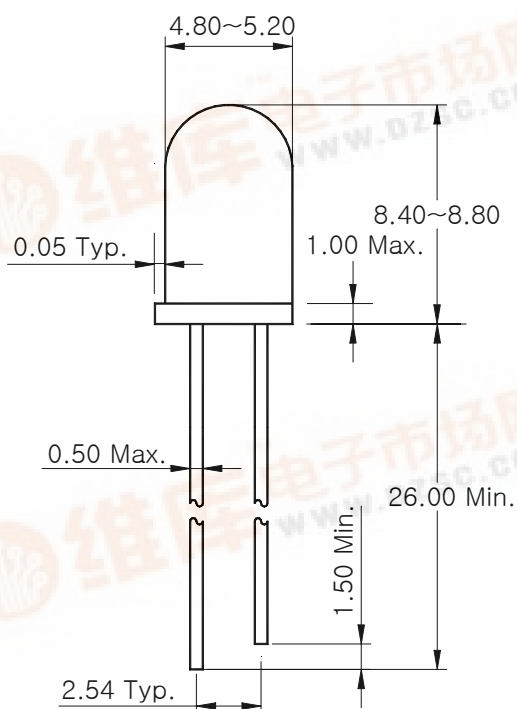
## Features

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

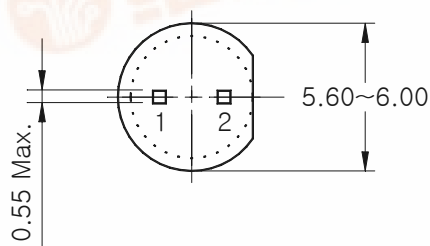
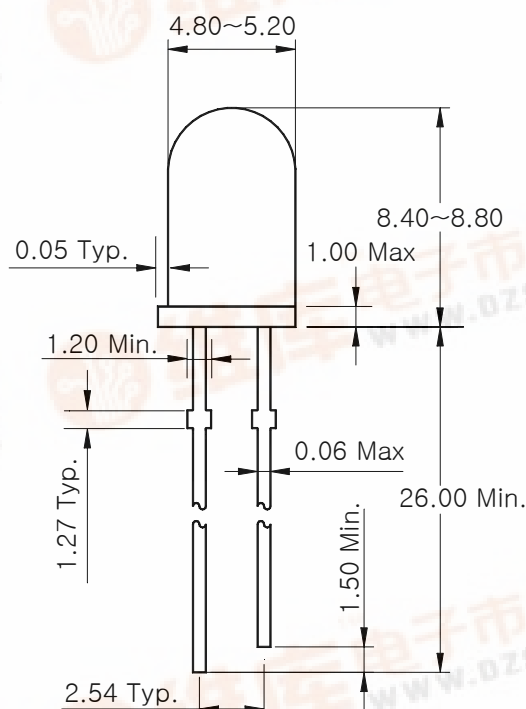
## Outline Dimensions

unit : mm

### STRAIGHT TYPE



### STOPPER TYPE : (B)



### PIN Connections

1. Anode
2. Cathode

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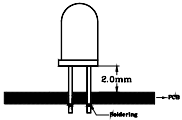
## Absolute Maximum Ratings

(Ta=25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	$P_D$	75	mW
Forward current	$I_F$	30	mA
* <sup>1</sup> 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	℃
* <sup>2</sup> 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	$V_F$	$I_F = 20\text{mA}$	-	2.2	2.5	V
Luminous intensity	$I_V$	$I_F = 20\text{mA}$	27	-	155	mcd
Peak wavelength	$\lambda_p$	$I_F = 20\text{mA}$	-	557	-	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	25	-	nm
Reverse current	$I_R$	$V_R = 4\text{V}$	10	-	-	uA
* <sup>3</sup> Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	$\pm 11$	-	deg

\*3.  $\theta_{1/2}$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity

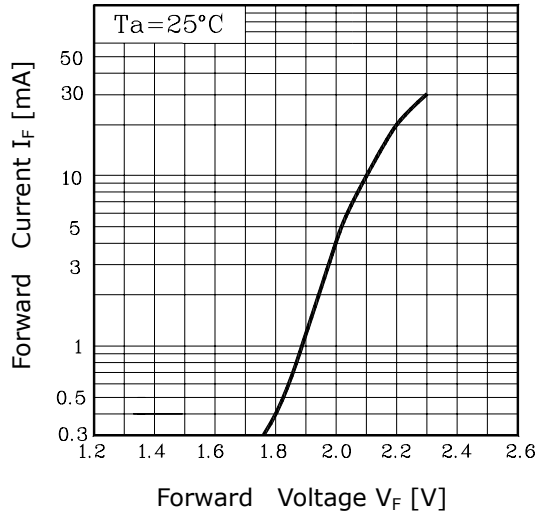
\*4. Luminous intensity maximum tolerance for each grade classification limit is  $\pm 18\%$

\*4. Luminous Intensity Classification

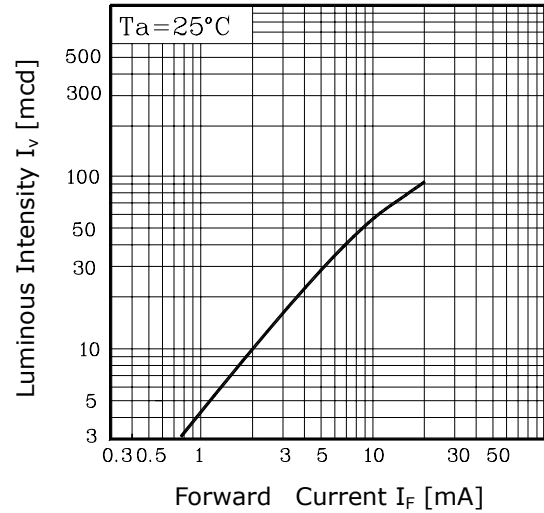
I	J	K	L
27 ~ 43	43 ~ 68	68 ~ 100	100 ~ 155

## Characteristic Diagrams

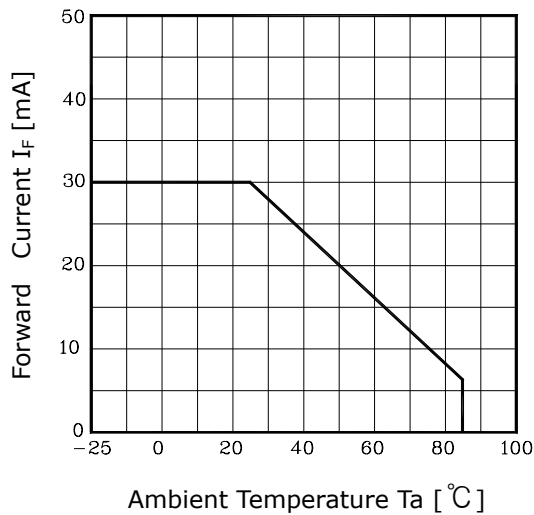
**Fig. 1  $I_F - V_F$**



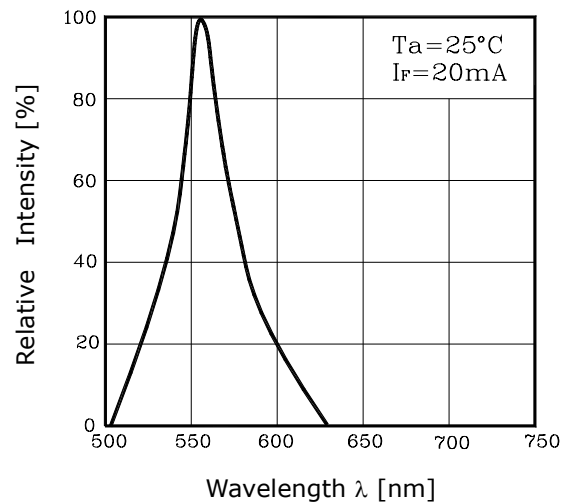
**Fig. 2  $I_V - I_F$**



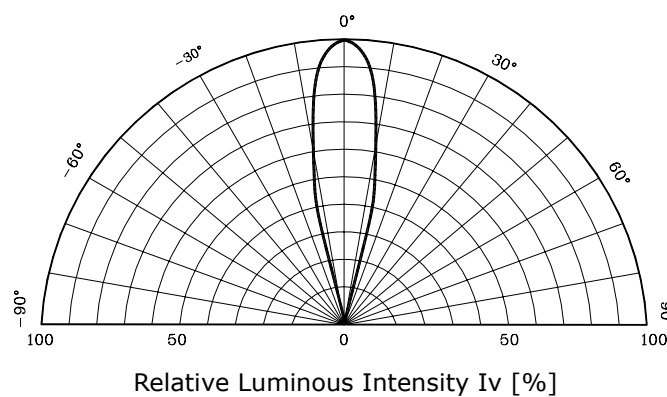
**Fig. 3  $I_F - T_a$**



**Fig.4 Spectrum Distribution**



**Fig. 5 Radiation Diagram**



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