



SG5311 / SG5311(B)

LED Lamp

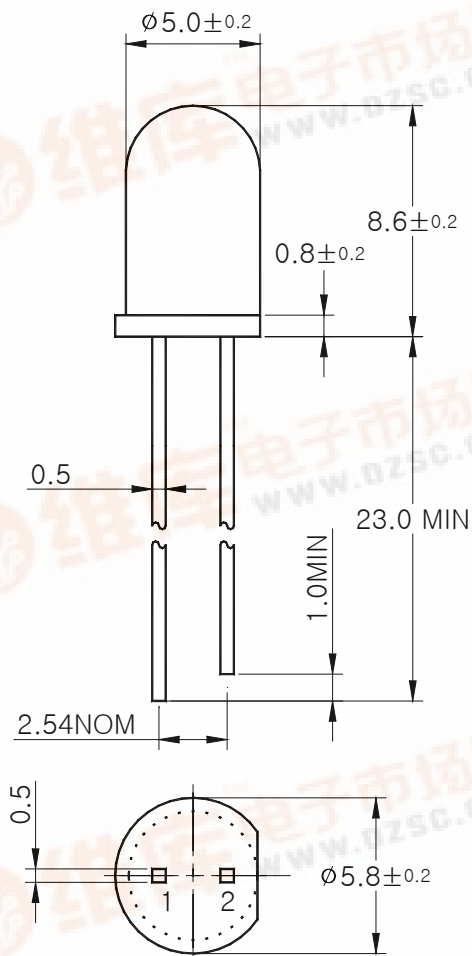
Features

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

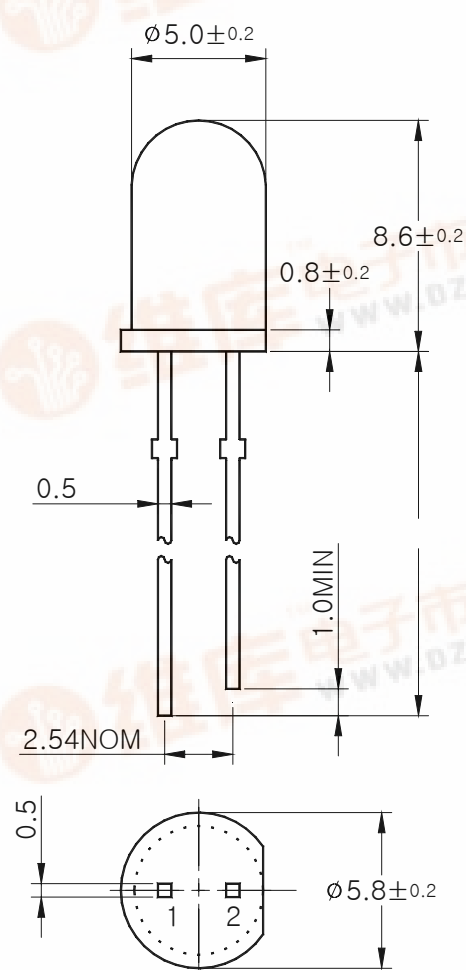
Outline Dimensions

unit : mm

STRAIGHT TYPE



STOPPER TYPE



PIN Connections

1. Anode
2. Cathode

SG5311 / SG5311(B)

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	80	mW
Forward Current	I_F	30	mA
*1Peak Forward Current	I_{FP}	50	mA
Reverse Voltage	V_R	4	V
Operating Temperature	T_{opr}	-25 ~ 85	°C
Storage Temperature	T_{stg}	-30 ~ 100	°C
*2Soldering Temperature	T_{sol}	260°C for 5 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 Characteristics

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	-	2.1	2.7	V
Luminous Intensity	I_V	$I_F = 20\text{mA}$	27	60	155	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
*3Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	± 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 $I_F - V_F$

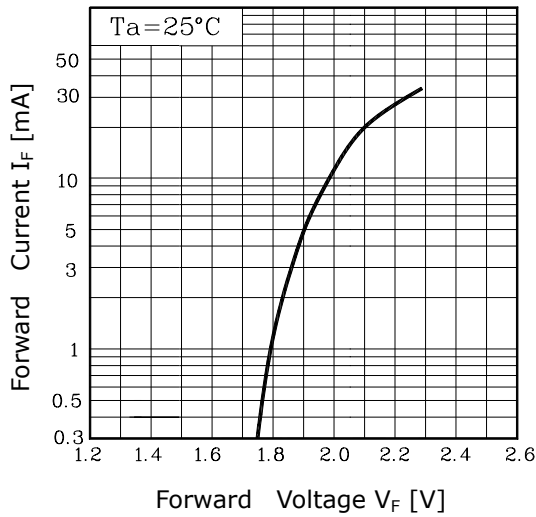


Fig. 2 $I_V - I_F$

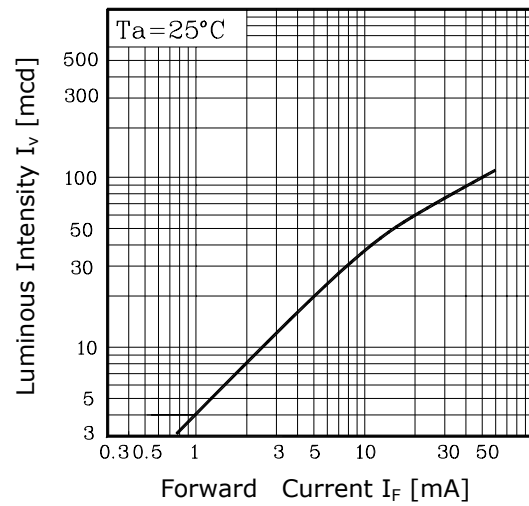


Fig. 3 $I_F - T_a$

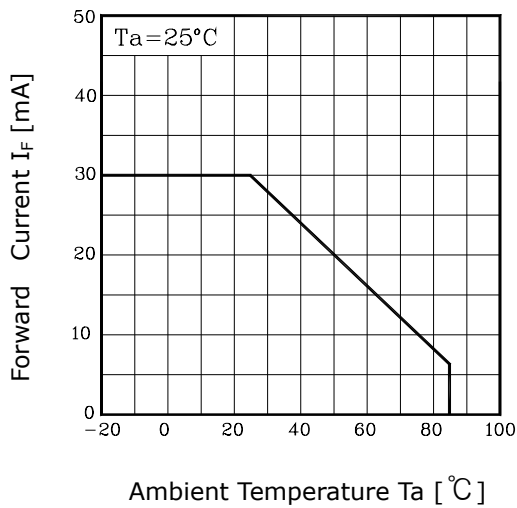


Fig.4 Spectrum Distribution

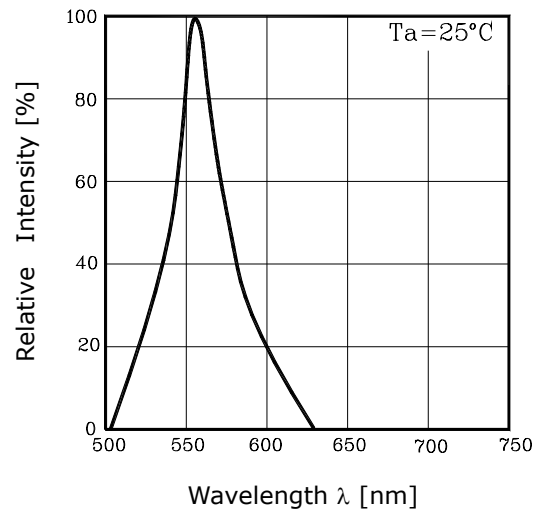


Fig. 5 Radiation Diagram

