

SG5311 / SG5311(B)

LED Lamp

Features

- Colorless transparency lens type
- φ5mm(T-13/4) all plastic mold type
- Low power consumption

Outline Dimensions unit: mm **STRAIGHT TYPE** STOPPER TYPE: (B) 4.80~5.20 4.80~5.20 8.40~8.80 8.40~8.80 0.05 Typ. 1.00 Max. 0.05 Typ. 1.00 Max 1.20 Min. 0.50 Max. 0.06 Max 26.00 Min. 26.00 Min. .50 Min. 2.54 Typ. 2.54 Typ. 5.50~6.00 5.60~6.00 55 Max. **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	${ m I}_{\sf F}$	30	mA	
*1Peak forward current	${ m I}_{\sf FP}$	50	mA	
Reverse voltage	V_R	4	V	
Operating temperature range	T_{opr}	-25~85	$^{\circ}$	
Storage temperature range	T_{stg}	-30~100	$^{\circ}$	
*2Soldering 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

 $(Ta=25^{\circ}C)$

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Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_{F}	I _F = 20mA	-	2.2	2.5	V
Luminous intensity	I_{V}	I _F = 20mA	27	-	155	mcd
Peak wavelength	λ_{P}	I _F = 20mA	-	557	-	nm
Spectrum bandwidth	Δ_{λ}	I _F = 20mA	-	25	-	nm
Reverse current	I_{R}	V _R =4V	10	-	-	uA
* ³ Half angle	θ1/2	I _F = 20mA	-	±11	-	deg

^{*3.} θ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

^{*4.} Luminous Intensity Classification

I	ј К		L	
27 ~ 43	43 ~ 68	68 ~ 100	100 ~ 155	

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^{*4.} Luminous intensity maximum tolerance for each grade classification limit is ±18%

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Characteristic Diagrams

Fig. 1 I_F - V_F

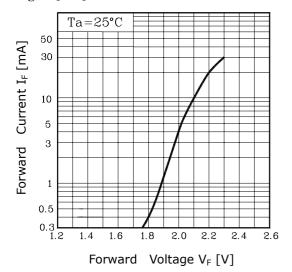


Fig. 2 I_V - I_F

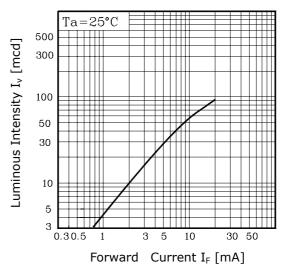


Fig. $3 I_F - Ta$

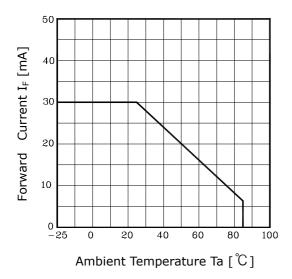


Fig.4 Spectrum Distribution

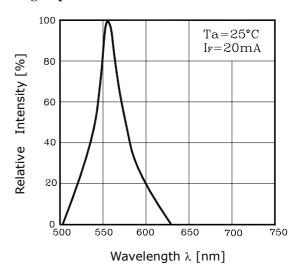
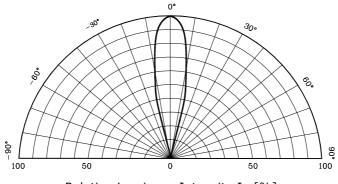


Fig. 5 Radiation Diagram



Relative Luminous Intensity Iv [%]

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