

# **SR1316-V**

unit: mm

**High Brightness Chip LED Lamp** 

#### **Features**

- 1.6mm(L)×0.8mm small size surface mount type
- Thin package of 0.55mm(H) thickness
- Transparent clear lens optic
- Super luminosity

## **Applications**

- LCD backlighting
- Keypad backlighting
- Symbol backlighting
- Front panel indicator lamp

### **Outline Dimensions**

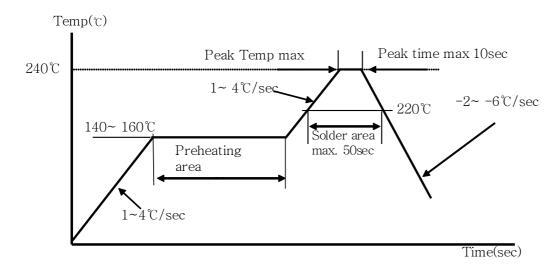
 $1.6 \pm 0.2$  - $1.2 \pm 0.2$  —  $0.8 \pm 0.2$  $0.39 \pm 0.05$  $0.16 \!\pm\! \scriptscriptstyle 0.05$ Cathade Anode

## Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit	
Power Dissipation	$P_D$	65	mW	
Forward Current	${ m I}_{\sf F}$	25	mA	
*1Peak Forward Current	${ m I}_{\sf FP}$	50	mA	
Reverse Voltage	$V_R$	4	V	
Operating Temperature	$T_{opr}$	-25~80	°C	
Storage Temperature	T <sub>stg</sub>	-30~100	°C	
*2Soldering Temperature	T <sub>sol</sub>	240°C for 5 seconds		

<sup>\*1.</sup>Duty ratio = 1/16, Pulse width = 0.1ms

<sup>\*2.</sup>Recommended soldering Temperature Profile



#### **Electrical Characteristics**

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Forward Voltage	$V_{F}$	I <sub>F</sub> = 20mA	1.6	-	2.4	V
Luminous Intensity	$I_{V}$	I <sub>F</sub> = 20mA	18	-	55	mcd
Peak Wavelength	$\lambda_{P}$	I <sub>F</sub> = 20mA	-	660	-	nm
Spectrum Bandwidth	$\Delta_{\lambda}$	I <sub>F</sub> = 20mA	-	20	-	nm
Reverse Current	$I_{R}$	V <sub>R</sub> =4V	-	-	10	uA
* <sup>3</sup> Half Angle	θ1/2 X	I <sub>F</sub> = 20mA	_	±65	-	- deg
	Y Y		-	±70	-	

<sup>\*3.</sup>  $\theta$ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

## **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

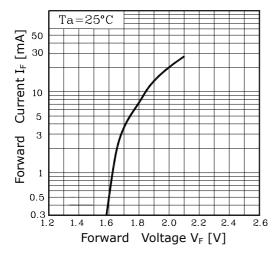


Fig.  $3 I_F - Ta$ 

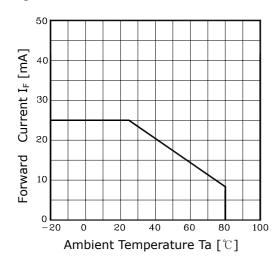
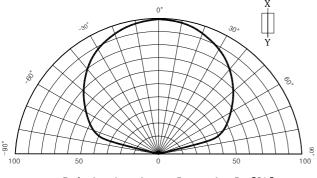
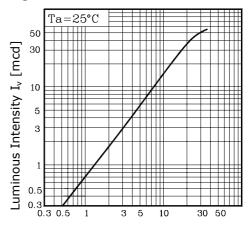


Fig. 5-1 Radiation Diagram(X)



Relative Luminous Intensity Iv [%]

Fig. 2  $I_V$  -  $I_F$ 



Forward Current I<sub>F</sub> [mA]

**Fig.4 Spectrum Distribution** 

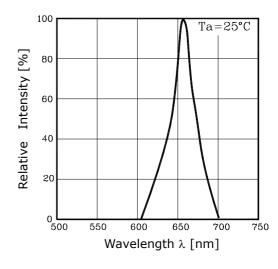
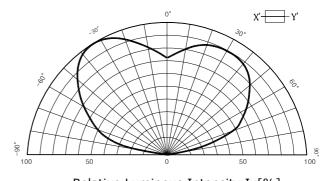


Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv[%]

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