

# SHE164RC(B)

**High Efficiency LED Lamp** 

unit: mm

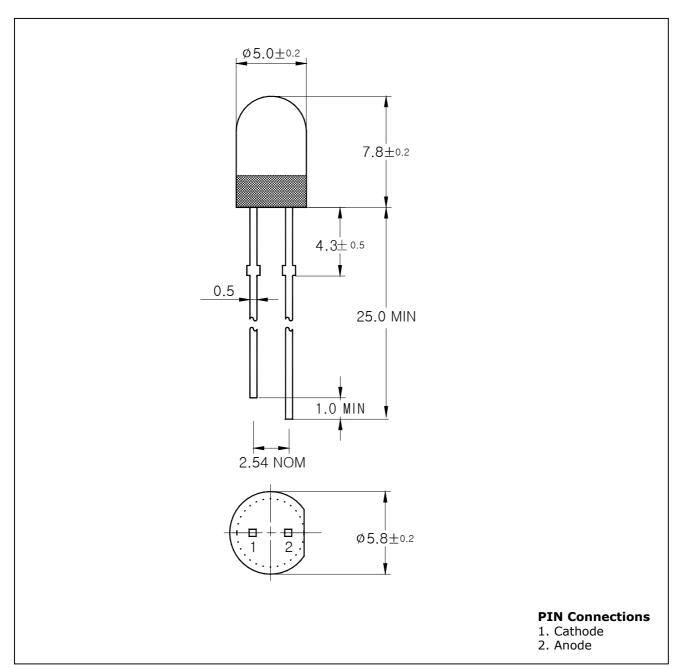
#### **Features**

- Red Colored transparency lens type
- φ5mm(T-13/4) all plastic mold type
- Super luminosity no flange type

## **Application**

• Message boards

#### **Outline Dimensions**

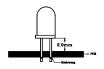


### Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	$P_D$	110	mW
Forward Current	${ m I}_{\sf F}$	40	mA
*1Peak Forward Current	${ m I}_{\sf FP}$	65	mA
Reverse Voltage	$V_R$	4	V
Operating Temperature	$T_{opr}$	-20~85	°C
Storage Temperature	T <sub>stg</sub>	-30~100	°C
*2Soldering Temperature	$T_{sol}$	260°C for 5 seconds	

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

<sup>\*2.</sup>Keep the distance more than 2.0mm from PCB to the bottom of LED package



#### **Electrical Characteristics**

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Forward Voltage	$V_{F}$	I <sub>F</sub> = 20mA	1.6	1.8	2.5	٧
* <sup>4</sup> Luminous Intensity	$I_{V}$	$I_F$ = 20mA	155	250	520	mcd
Peak Wavelength	$\lambda_{\mathrm{P}}$	I <sub>F</sub> = 20mA	-	660	-	nm
Spectrum Bandwidth	Δλ	I <sub>F</sub> = 20mA	-	20	-	nm
Reverse Current	<sub>R</sub>	$V_R=4V$	-	-	10	uA
* <sup>3</sup> Half Angle	θ1/2	I <sub>F</sub> = 20mA	-	±20	-	deg

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

<sup>\*4.</sup> Luminous Intensity classification

М	N	0
155~230	230~350	350~520

<sup>\*4.</sup> Luminous intensity maximum tolerance for each Grade Classification limit is  $\pm 18\%$ 

#### **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

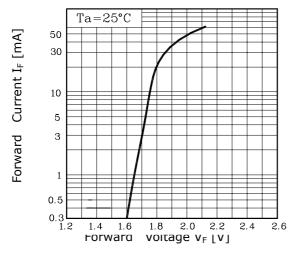


Fig.  $3 I_F - Ta$ 

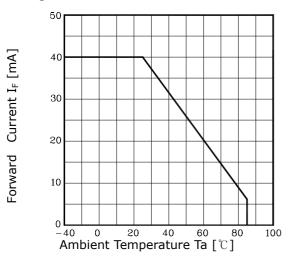


Fig. 2  $I_V$  -  $I_F$ 

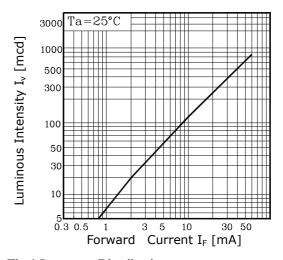


Fig.4 Spectrum Distribution

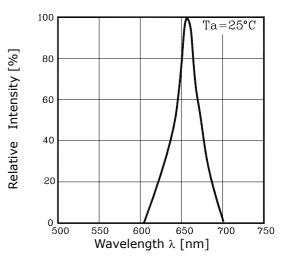
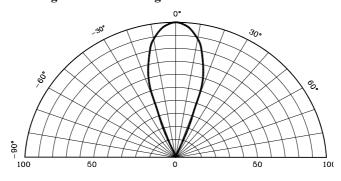


Fig. 5 Radiation Diagram



Relative Luminous Intensity Iv [%]

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