



Ningbo Junsheng Electronics Co., LTD.

Part No.: JSL-303IRC850

## Features:

- High reliability.
- Peak wavelength  $\lambda_p=850\text{nm}$
- Low forward voltage
- High radiant intensity
- Available on tape and reel.
- Compliance with EU REACH.

## Descriptions:

- The device is spectrally matched with phototransistor, photodiode and infrared receiver module.
- The Infrared Emitting Diode is a high intensity diode.
- Device Outline: 3mm Round With Flange Type.
- Lens Type: Water Clear

## Application:

- Industrial IR equipment.
- IR Touch-Panel.
- Optoelectronic switch.
- IR Communications.

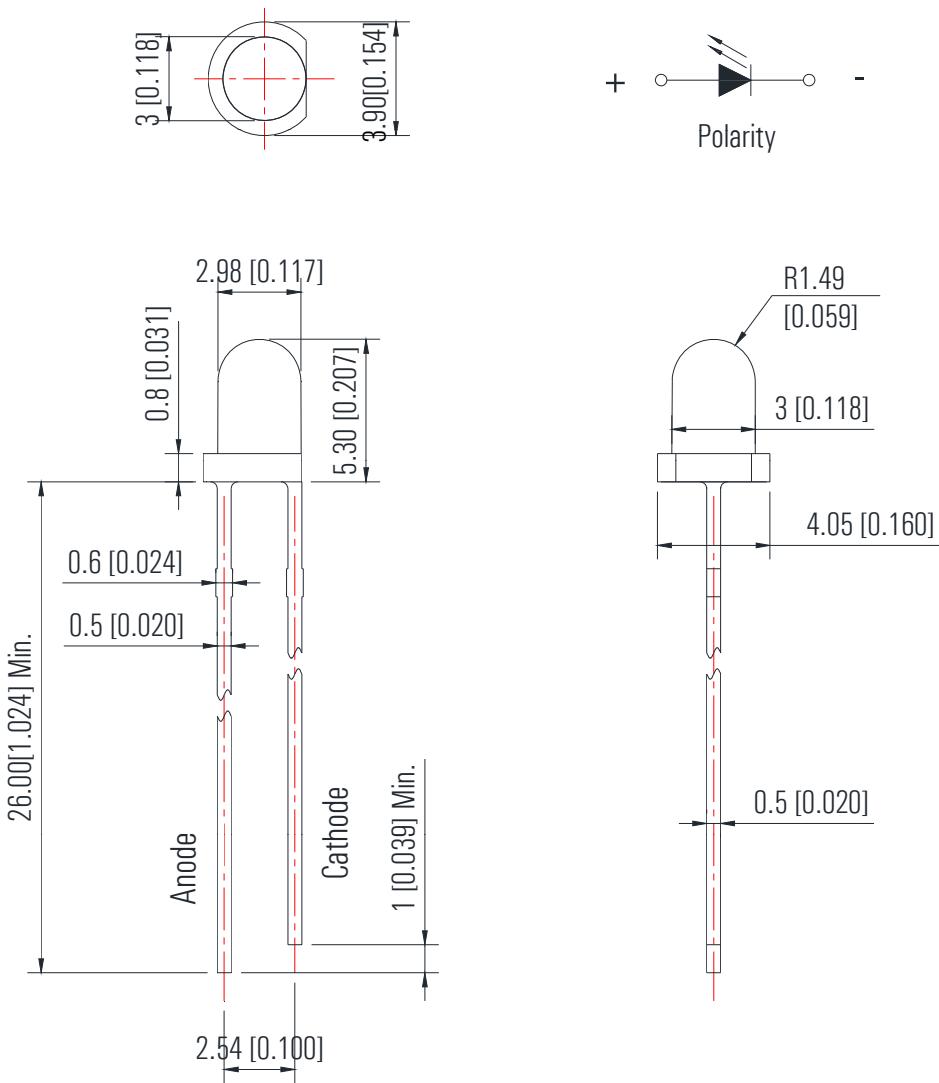


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**Package Dimension:**



**Notes:**

1. All dimensions are millimeters/单位: mm.
2. Tolerance is +/-0.25mm unless otherwise noted/  
没有标注的公差均为±0.25mm



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## Absolute maximum ratings ( $T_a = 25^\circ C$ )

Parameter	Symbol	Test Condition	Values		Unit
			Min.	Max.	
Reverse Voltage	$V_R$	$I_R = 30 \mu A$	----	5	V
Forward Current	$I_F$	----	----	100	mA
Power Dissipation	$P_d$	----	----	160	mW
Pulse Current	$I_{peak}$	Duty=0.1mS, 1kHz	----	800	mA
Operating Temperature	$T_{opr}$	----	-40	+85	°C
Storage Temperature	$T_{str}$	----	-40	+85	°C

## Electrical and optical characteristics ( $T_a = 25^\circ C$ )

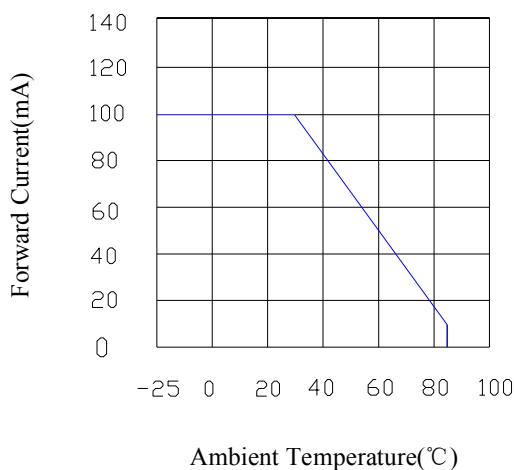
Parameter	Symbol	Test Condition	Values			Unit
			Min.	Typ.	Max.	
Forward Voltage	$V_F$	$I_F=20mA$	1.0	1.4	1.6	V
		$I_F=50mA$	1.2	1.5	1.8	
Peak Wavelength	$\lambda_p$	$I_F=20mA$	----	850	----	nm
Spectral Line half-width	$\Delta \lambda$	$I_F=20mA$	----	45	----	nm
Radiant Intensity	$E_e$	$I_F=20mA$	6	12	----	mW/sr
		$I_F=50mA$	20	45	----	
Reverse Current	$I_R$	$V_R=5V$	----	----	10	$\mu A$
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	----	30	----	deg.

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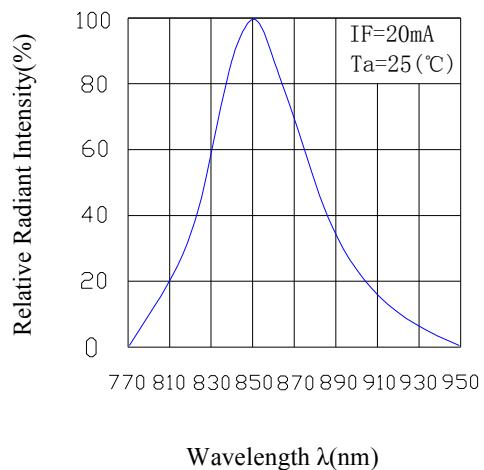
## Typical electrical/optical characteristic curves:

(25°C Ambient Temperature Unless Otherwise Noted)

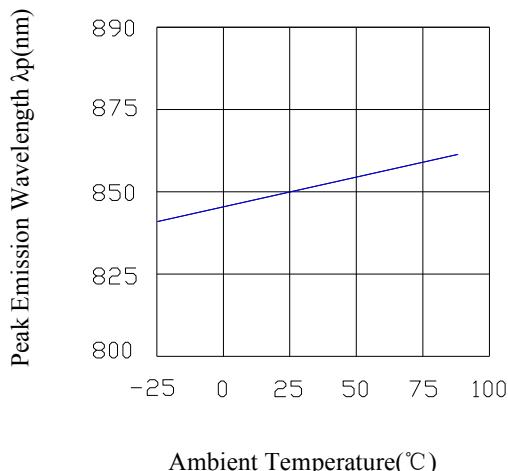
Forward Current &  
Ambient Temperature



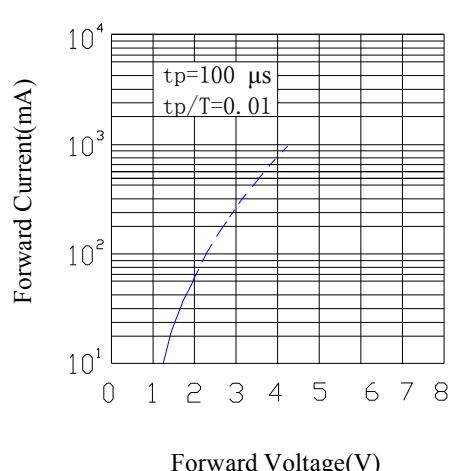
Spectral Distribution



Peak Emission Wavelength &  
Ambient Temperature



Forward Current &  
Forward Voltage





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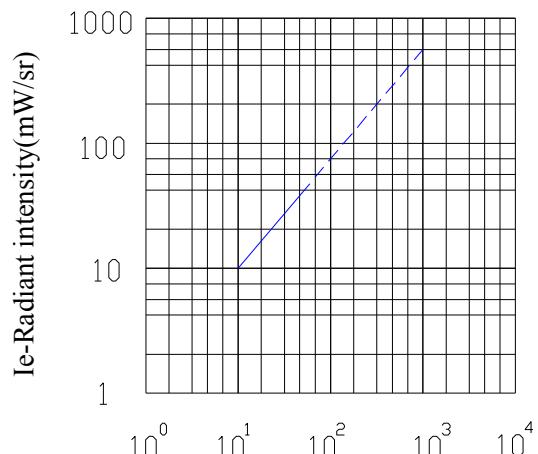
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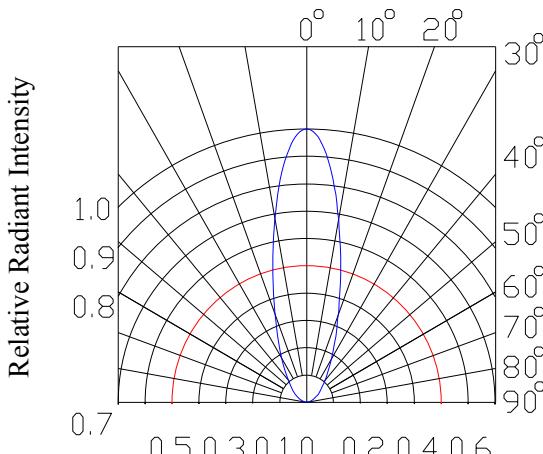
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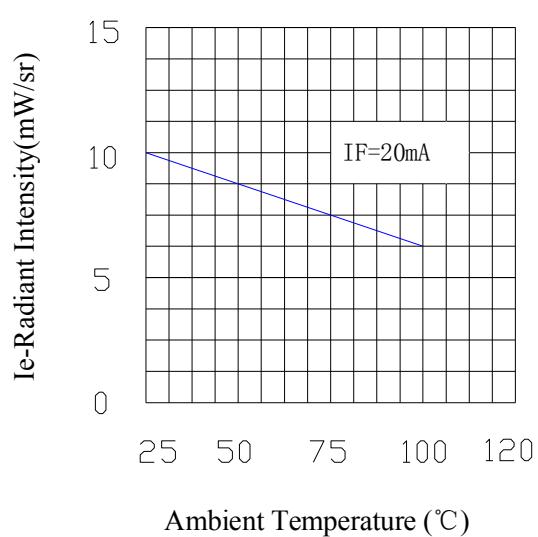
Relative Intensity &  
Forward Current



Relative Radiant Intensity &  
Angular Displacement



Relative Intensity &  
Ambient Temperature(°C)



Forward Voltage &  
Ambient Temperature(°C)

