

Part No.: JSL-502IRC850D45

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: 5mm Round With Flange Type.
- Lens Type: Water Clear

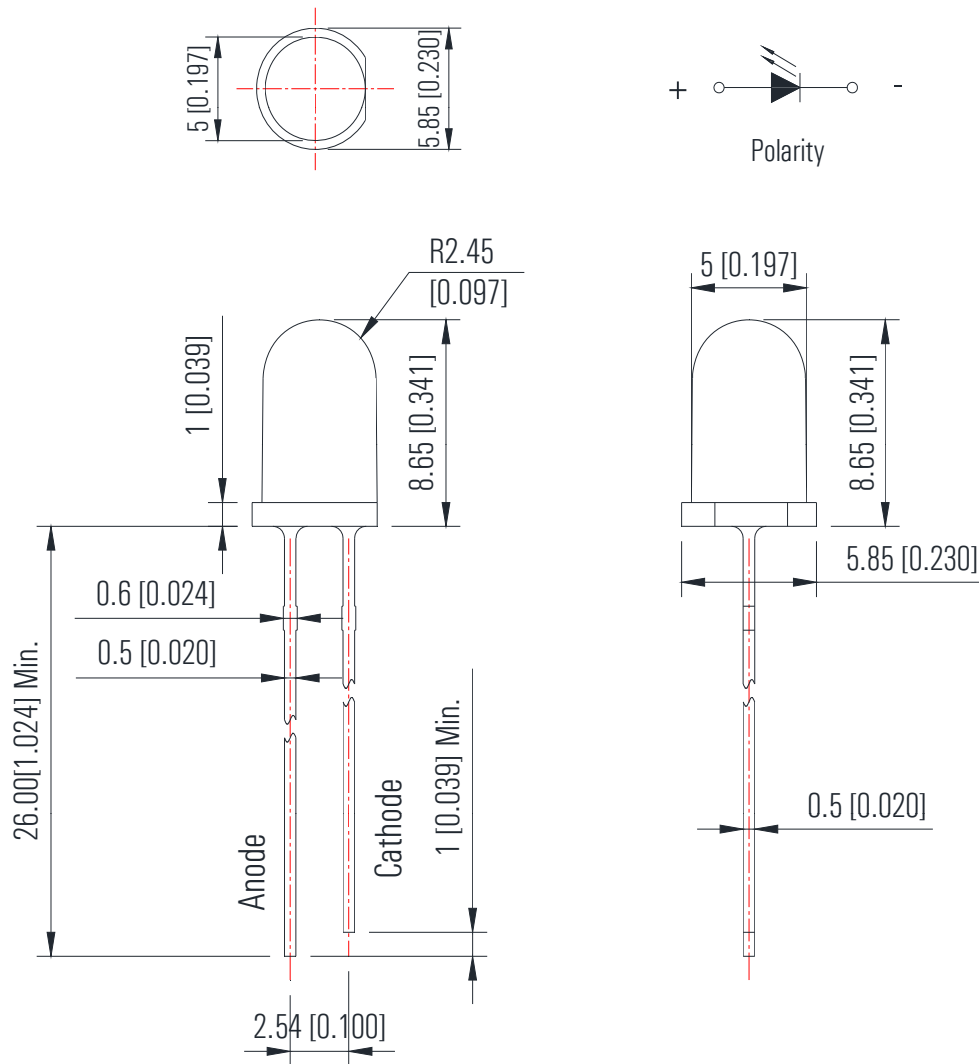
Application:

- 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 (Ta = 25°C)

Parameter	Symbol	Test Condition	Values		Unit
			Min.	Max.	
Reverse Voltage	V _R	I _R = 30 μA	----	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 (Ta = 25°C)

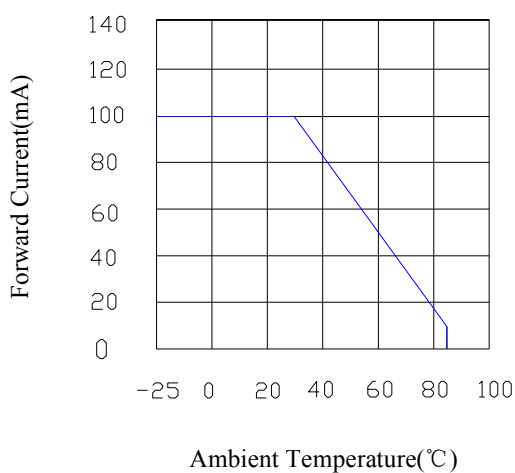
Parameter	Symbol	Test Condition	Values			Unit
			Min.	Typ.	Max.	
Forward Voltage	V _F	I _F =20mA	1.0	1.4	1.6	V
		I _F =50mA	1.2	1.5	1.8	
Peak Wavelength	λ _p	I _F =20mA	----	850	----	nm
Spectral Line half-width	Δλ	I _F =20mA	----	45	----	nm
Radiant Intensity	E _e	I _F =20mA	7	15	----	mW/sr
		I _F =50mA	20	45	----	
Reverse Current	I _R	V _R =5V	----	----	10	μA
Viewing Angle	2θ _{1/2}	I _F =20mA	----	45	----	deg.

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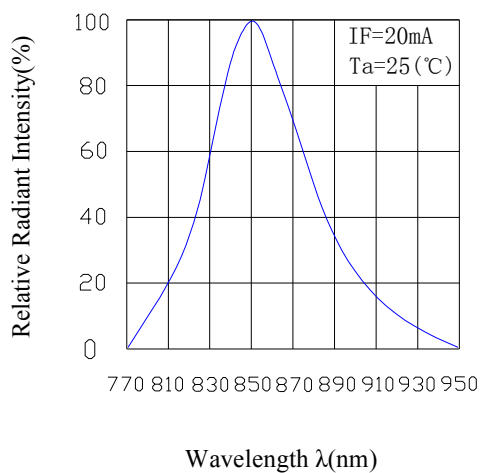
Typical electrical/optical characteristic curves:

(25°C Ambient Temperature Unless Otherwise Noted)

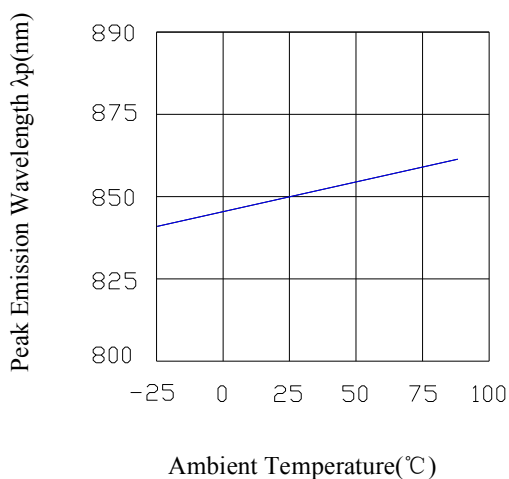
Forward Current &
Ambient Temperature



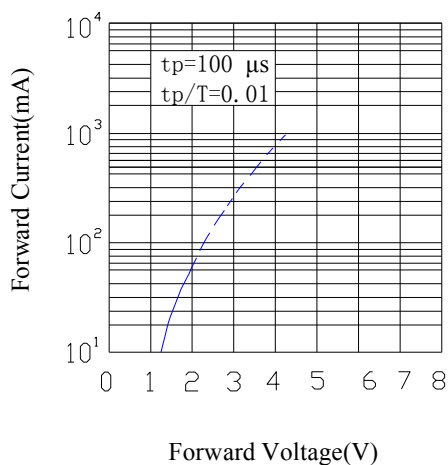
Spectral Distribution



Peak Emission Wavelength &
Ambient Temperature



Forward Current &
Forward Voltage

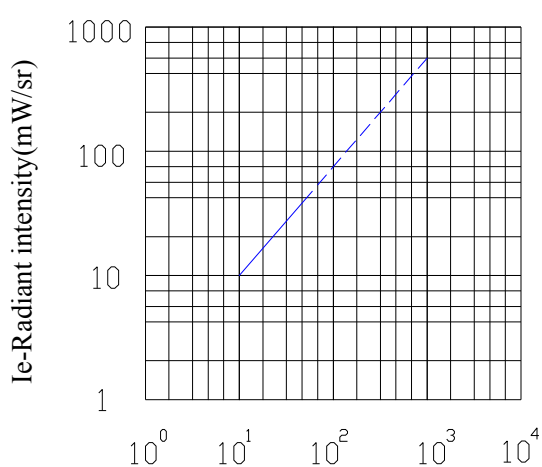


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Typical electrical/optical characteristic curves:

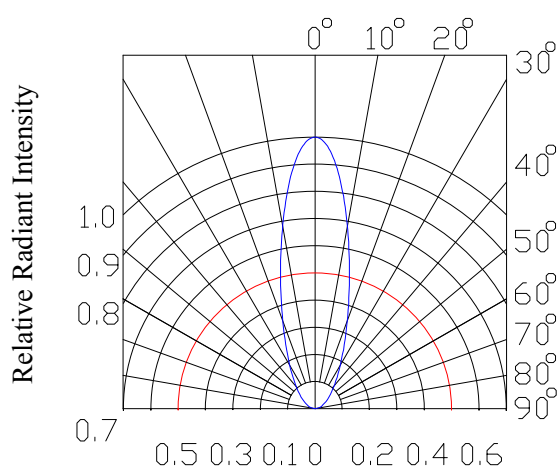
(25°C Ambient Temperature Unless Otherwise Noted)

Relative Intensity &
Forward Current

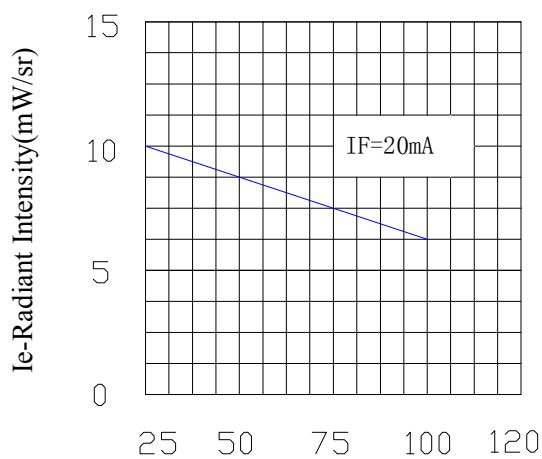


IF-Forward Current(mA)

Relative Radiant Intensity &
Angular Displacement

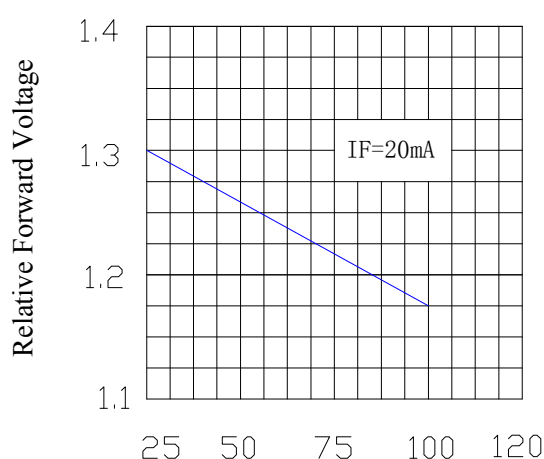


Relative Intensity &
Ambient Temperature(°C)



Ambient Temperature (°C)

Forward Voltage &
Ambient Temperature(°C)



Ambient Temperature (°C)