



MODEL 產品型號 : XL-IR324-N

Features

- ◆ **High radiant intensity**
- ◆ **Peak wavelength= λ P=940nm**
- ◆ **View angle 40°**
- ◆ **High reliability**
- ◆ **2.54mm Lead spacing**
- ◆ **Low forward voltage**
- ◆ **Pb free**
- ◆ **The product itself will remain within RoHS compliant**

Descriptions

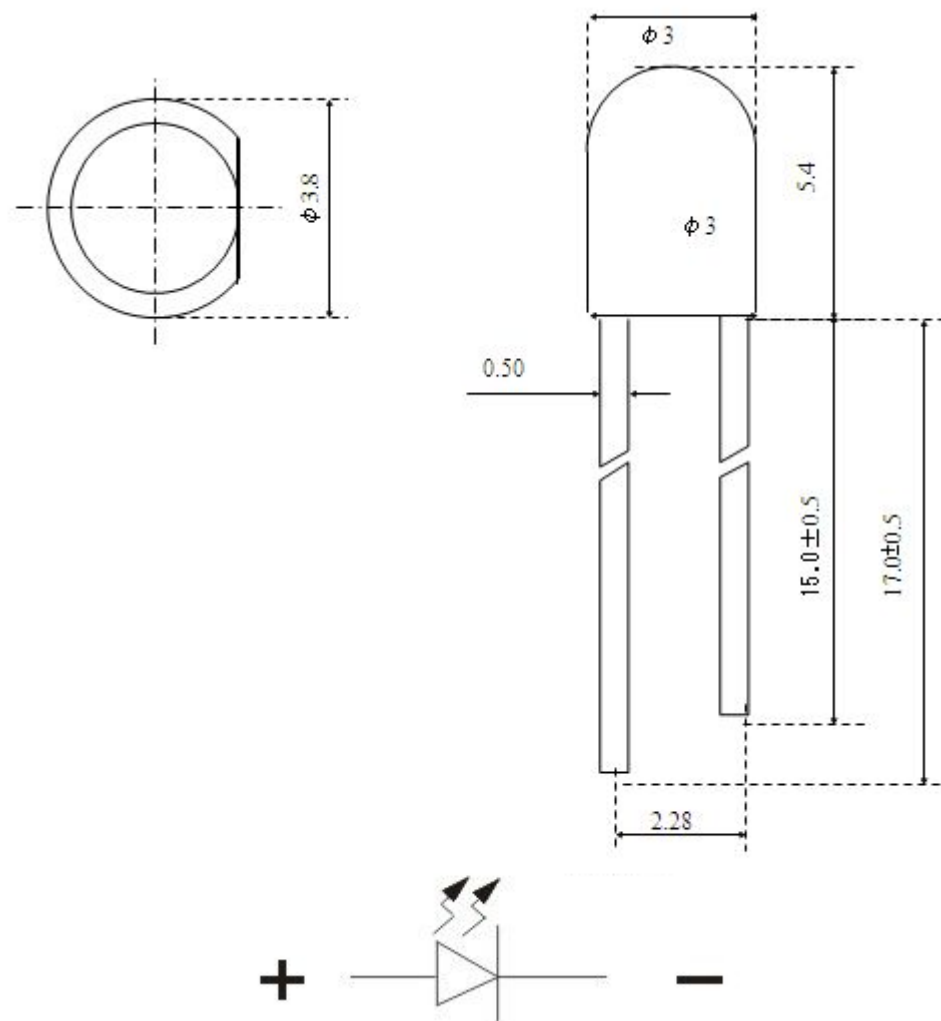
- ◆ **Infrared Emitting Diode (XL-IR324-N) is a high intensity diode , molded in a water clear plastic package.**
- ◆ **The device is spectrally matched with phototransistor , photodiode and infrared receiver module**

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Package Dimension

Applications

- ◆ Free air transmission system
- ◆ Smoke detector
- ◆ Infrared applied system
- ◆ Optoelectronic switch
- ◆ Floppy disk drive



Part NO.	Material	Lens Color
XL-IR324-N	AlGaAs	Water Clear

Notes:

1. All dimensions are in millimeters.
2. Tolerances unless dimensions ± 0.25 mm.

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Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	Rating	Unit
Continuous Forward Current	IF	100	mA
Power Dissipation at (or below) 25℃ Free Air Temperature	Pd	150	mW
Transient Peak Current (Pulse width=100 μ s, Duty cycle=1%)	IFP	200	mA
Reverse Voltage	VR	5	V
Operating Temperature	Topr	-40~+85	℃
Storage Temperature*	Tstg	-40~+85	℃
Soldering Temperature	Tsol	260	℃

* 4mm from mold body less than 5 secon

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Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	VF	1.3	1.4		V	IF=50mA
Radiant Intensity	Ie	45	50		mW/sr	IF=50mA
Peak Wavelength	λ P		940		nm	IF=50mA
Reverse Current	IR			10	μ A	VR=5V
Viewing Angle	θ		40		deg	IF=50mA

Electrical Optical Characteristics

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Typical Electrical-Optical Characteristics Curves

Fig.1 Forward Current vs. Ambient Temperature

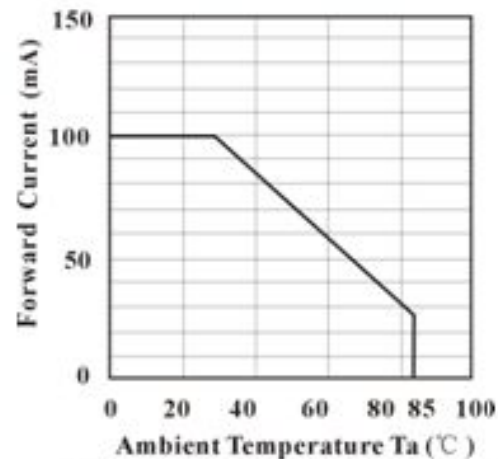


Fig.3 Peak Emission WaveLength vs Ambient Temperature

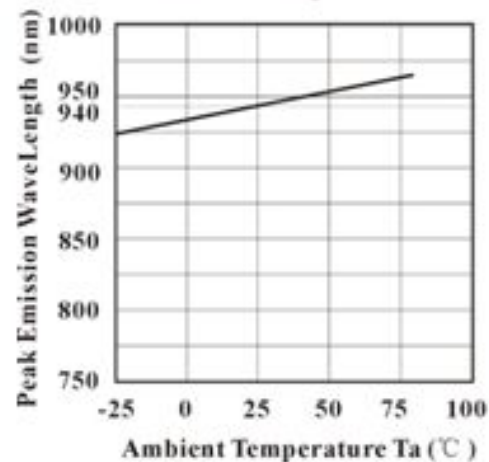


Fig.2 Spectral Sensitivity

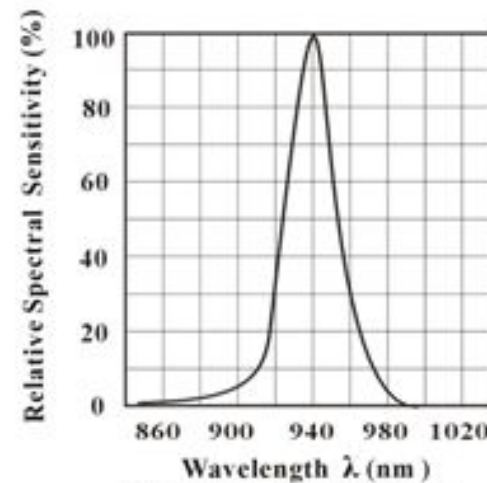
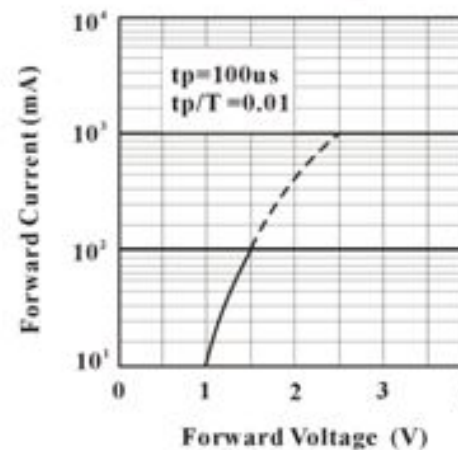


Fig.4 Forward Current vs. Forward Voltage



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Fig. 5 Relative Intensity vs.
Forward Current

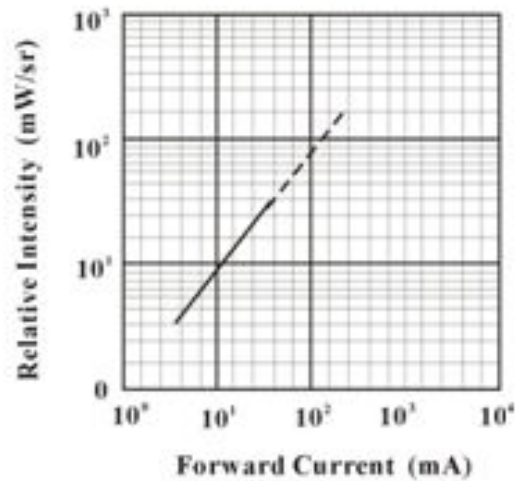
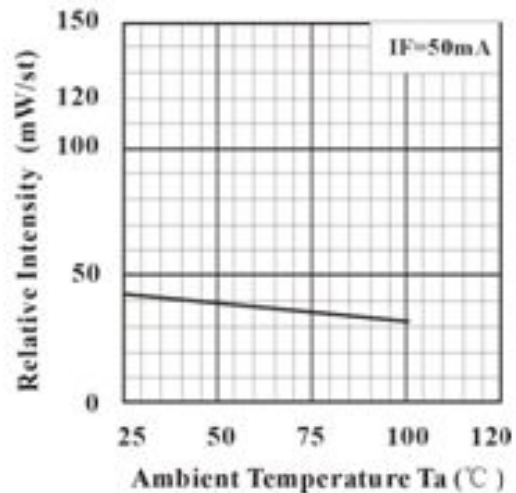


Fig.7 Relative Intensity vs.
Ambient Temperature ($^{\circ}\text{C}$)



Relative Radiant Intensity vs.
Angular Displacement

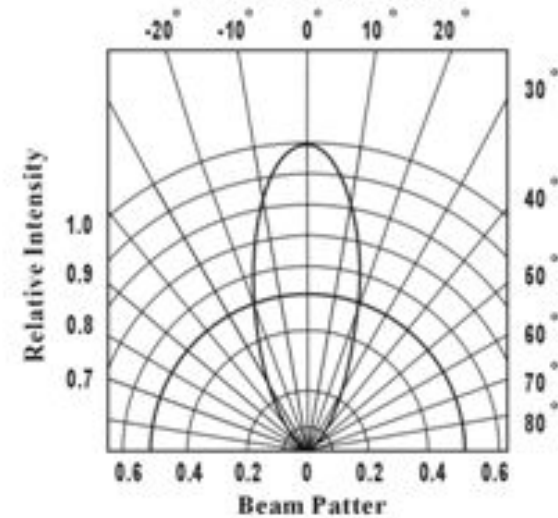


Fig.8 Forward Voltage vs.
Ambient Temperature ($^{\circ}\text{C}$)

