

MODEL 產品型號：XL-IR324C

Features

- ◆ High radiant intensity
- ◆ Low forward voltage
- ◆ Good spectral matching to Si photo detector
- ◆ High reliability
- ◆ Pd free
- ◆ The product itself will remain within RoHS compliant version

Descriptions

- ◆ Infrared Emitting Diode (XL-IR324C) is a high intensity diode , molded in a water clear plastic package.
- ◆ The device is spectrally matched with phototransistor , photodiode and infrared receiver module.

Applications

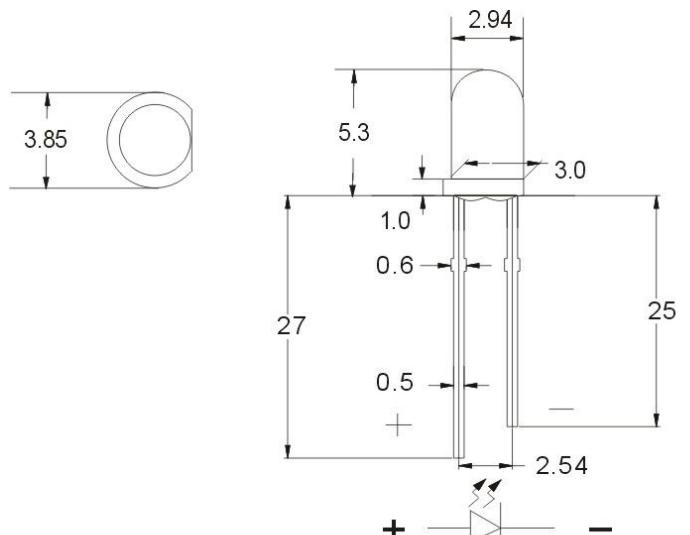
- ◆ Free air transmission system
- ◆ Smoke detector



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- ◆ Infrared applied system
- ◆ Optoelectronic switch
- ◆ Floppy disk drive

Package Dimension 外形尺寸圖



Notes:

All dimensions are in millimeters
Protruded resin under flange is 0.25mm Max.
Lead spacing is measure where the lead emerge from the package.

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Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I _F	100	mA
Peak Forward Current (Pulse width=100 μ s, Duty cycle=1%)	I _{FP}	1.0	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-40~+85	°C
Storage Temperature	T _{stg}	-40~+85	°C
Soldering Temperature*	T _{sol}	260	°C
Power Dissipation at(or below)25°C Free Air Temperature	P _d	150	mW

* 4mm from mold body less than 5 seconds

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Electrical Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	I _e	30	50		mW/sr	I _F =50mA
			500			I _F =100mA, t _p =100 μ s, t _p /T=0.01
			5000			I _F =1A, t _p =100 μ s, t _p /T=0.01
Peak Wavelength	λ _p		940		nm	I _F =20mA
Spectral Bandwidth	Δλ		50		nm	I _F =20mA
Forward Voltage	V _F		1.27	1.5	V	I _F =50mA
			1.6	1.8		I _F =100mA, t _p =100 μ s, t _p /T=0.01
			2.6	4.0		I _F =1A, t _p =100 μ s, t _p /T=0.01
Reverse Current	I _R			10	μ A	V _R =5V
Viewing Angle	2θ _{1/2}		30		deg	I _F =20mA

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Typical Electrical-Optical Characteristics Curves

Fig.1 Forward Current vs.
Ambient Temperature

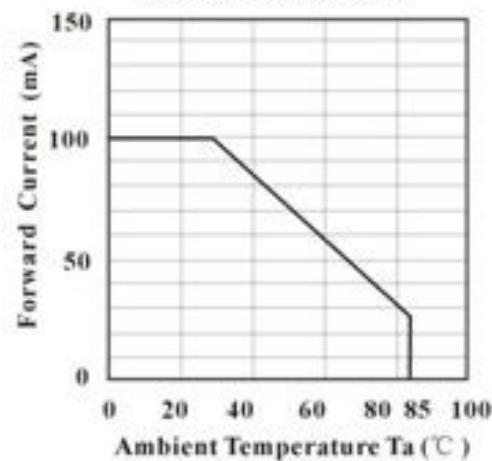


Fig.2 Spectral Sensitivity

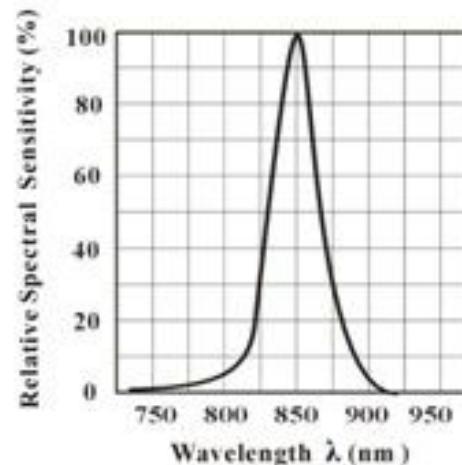


Fig.3 Peak Emission WaveLength vs.
Ambient Temperature

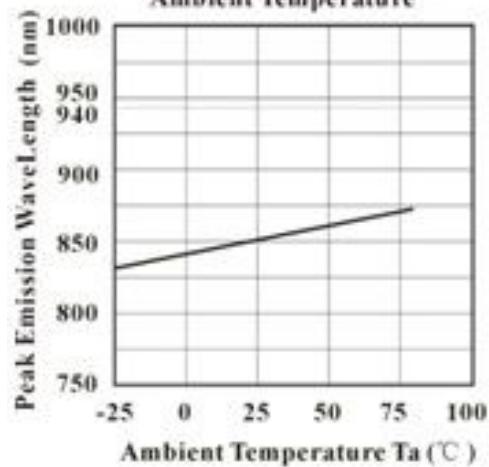
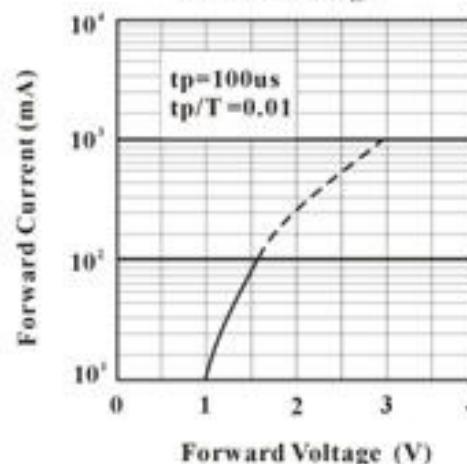


Fig.4 Forward Current vs.
Forward Voltage



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Fig. 5 Relative Intensity vs.
Forward Current

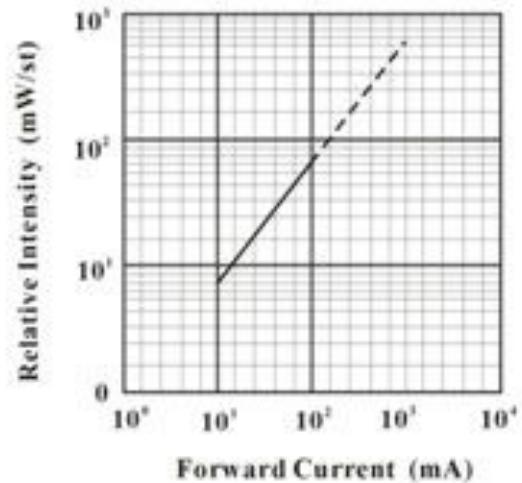


Fig. 7 Relative Intensity vs.
Ambient Temperature (°C)

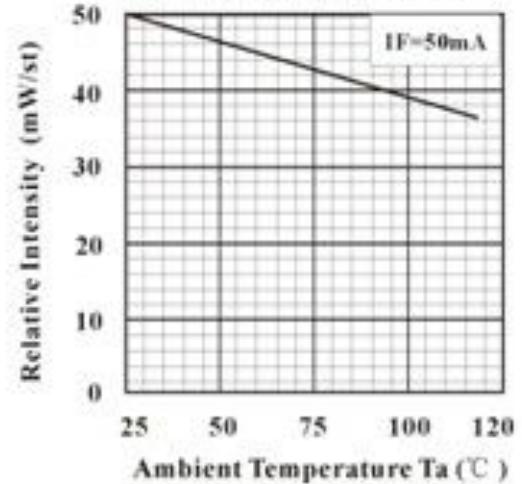
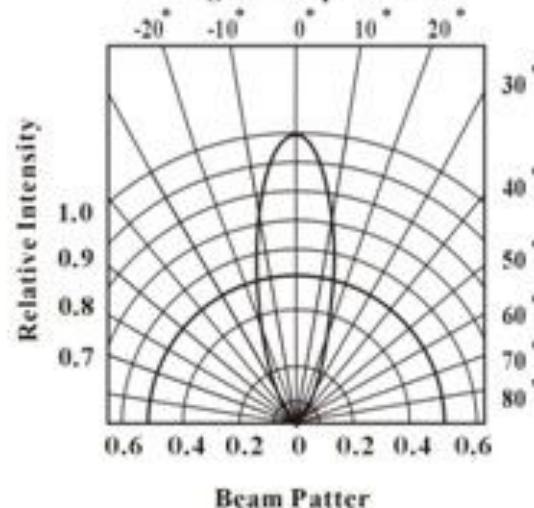


Fig.6 Relative Radiant Intensity vs.
Angular Displacement



Beam Patter

Fig.8 Forward Voltage vs.
Ambient Temperature (°C)

