

样品承认书

客户编号: _____

规格型号: EL-1BL3

样品编号: _____

认定盖章 Approved Signatures	
工程	审核

承认单位: _____

客户反馈意见: _____

认定盖章 Approved Signatures			
核准	品管	工程	采购

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Features

- ◆ High radiant intensity
- ◆ Peak wavelength= $\lambda_p=940\text{nm}$
- ◆ View angle 40°
- ◆ High reliability
- ◆ 2.54mm Lead spacing
- ◆ Low forward voltage
- ◆ Pb free
- ◆ The product itself will remain within RoHS compliant version.

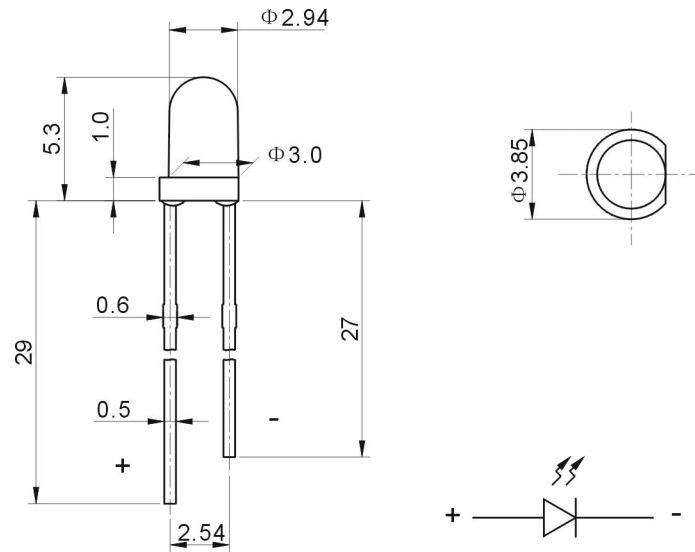
Descriptions

- ◆ Infrared Emitting Diode (EL-1BL3) 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
- ◆ Optoelectronic switch
- ◆ Floppy disk drive
- ◆ Infrared applied system
- ◆ Smoke detector

Package Dimension:



NOTE:TOLERANCE $\pm 0.5\text{mm}$

Part NO.	Material	Lens Color
EL-1BL3	AlGaAs	Blue Transparent

Notes:

1. All dimensions are in millimeters.
2. Tolerances unless dimensions $\pm 0.25\text{mm}$.

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Absolute Maximum Ratings at Ta=25°C

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

* 4mm from mold body less than 5 seconds

Electrical Optical Characteristics:

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	V _F	1.4	1.5		V	I _F =50mA
Radiant Intensity	I _e	28	45		mW/sr	I _F =50mA
Peak Wavelength	λ _P		940		nm	I _F =50mA
Reverse Current	I _R			10	μA	V _R =5V
Viewing Angle	θ		40		deg	I _F =50mA

Typical Electrical-Optical Characteristics Curves

Fig.1 Forward Current vs. Ambient Temperature

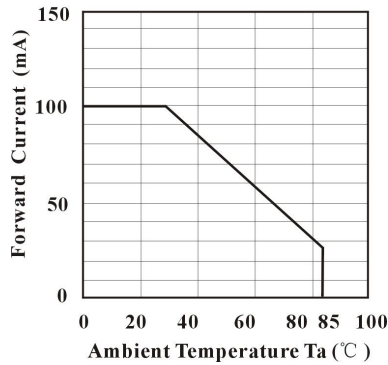


Fig.2 Spectral Sensitivity

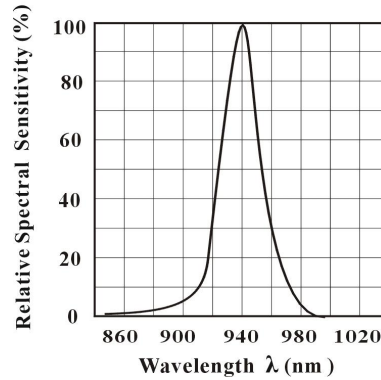


Fig.3 Peak Emission WaveLength vs Ambient Temperature

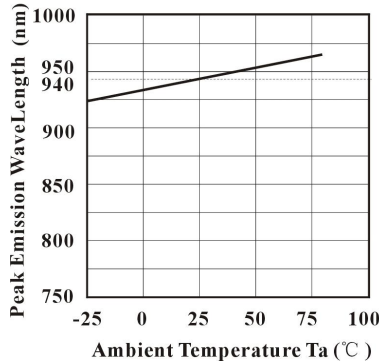


Fig.4 Forward Current vs. Forward Voltage

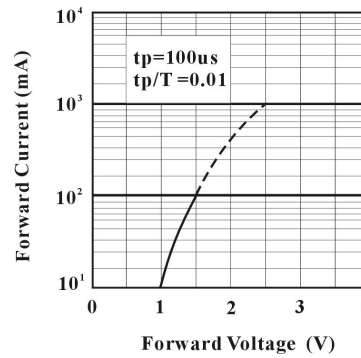
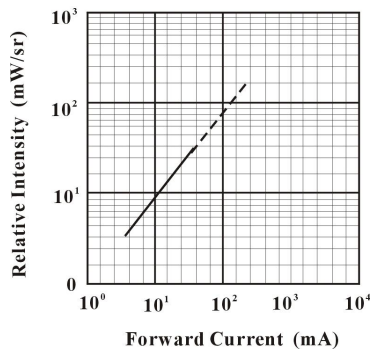


Fig.5 Relative Intensity vs. Forward Current



Beam Patter

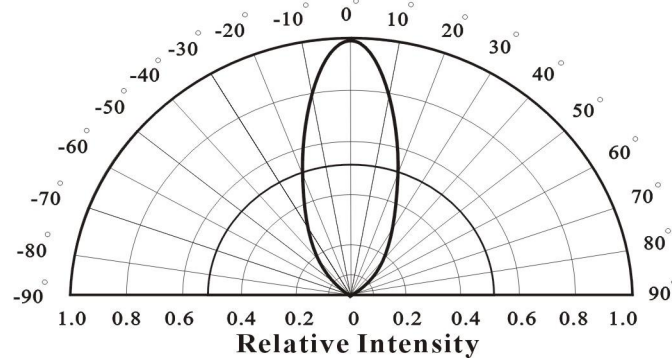


Fig.7 Relative Intensity vs. Ambient Temperature (°C)

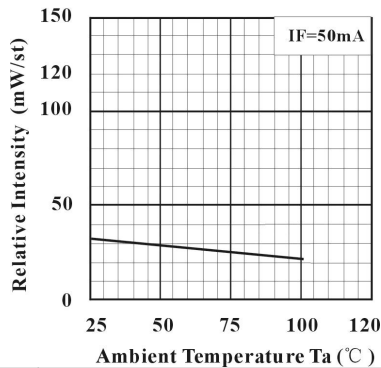


Fig.8 Forward Voltage vs. Ambient Temperature (°C)

