

# PRODUCT SPECIFICATION

## Model No.: FYL-5013IRBC1C

Descriptions:
■ Dice material: AlGaAs.
■ Emitting Color: Infrared.
■ Device Outline: Φ5mm round type.
■ Lens Type: Water clear.



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

**NINGBO FORYARD OPTOELECTRONICS CO.,LTD.**

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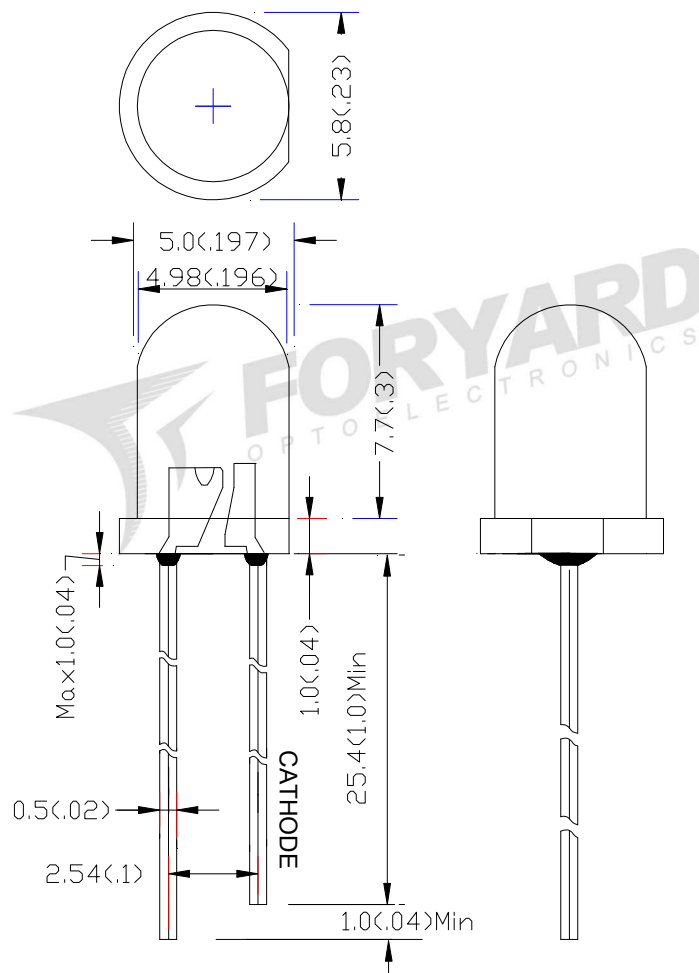
**E-mail:** Sales@foryard.com (General)

[Http://www.foryard.com](http://www.foryard.com)

## ■ Applications

1. PCB mounted infrared sensor.
2. Infrared emitting for miniature light barrier.
3. Floppy disk drive.
4. Optoelectronic switch.
5. Smoke detector.

## ■ Package configuration



### Notes:

1. All dimensions are millimeters (inches)
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

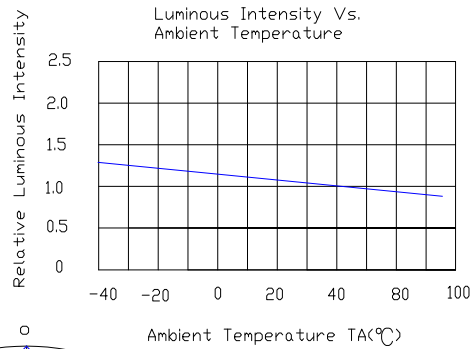
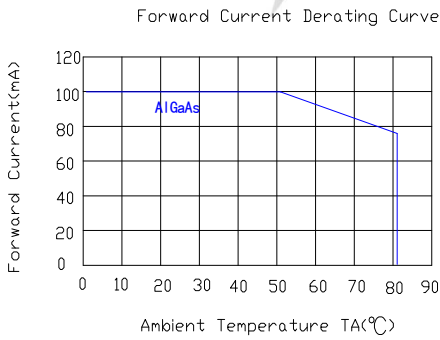
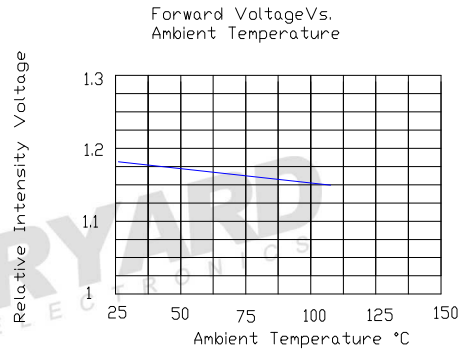
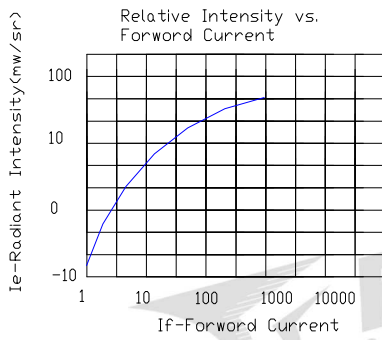
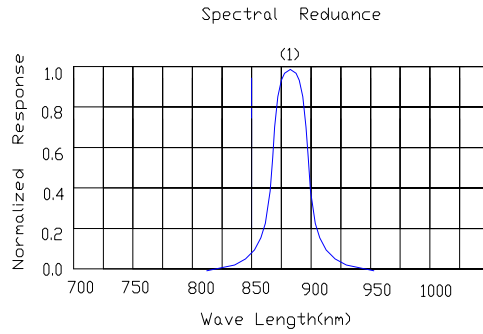
■ Absolute maximum ratings( $T_a=25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Test Condition	MAX.	Unit
Power Dissipation	Pd	-	100	mW
Forward Current	IFM	Duty=0.01ms 1khz	1000	mA
Reverse Voltage	VR	IR=10UA	9	V
Operating Temperature Range			-40 $^\circ\text{C}$ to +85 $^\circ\text{C}$	
Storage Temperature Range			-40 $^\circ\text{C}$ to +100 $^\circ\text{C}$	
Lead Soldering Temperature[4mm(.157") From Body]			260 $^\circ\text{C}$ for 5 Seconds	

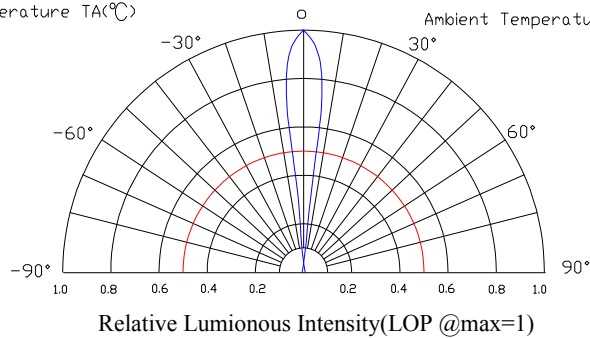
■ Electrical and optical characteristics( $T_a=25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	Ee	40	70	-	mW/sr	IF=50mA
Viewing Angle	2 $\theta$ 1/2	-	15	-	Deg	
Peak Emission Wavelength	$\lambda_p$	-	880	-	nm	
Spectral Line Half-Width	$\Delta\lambda$	40	45	50	nm	
Forward Voltage	VF	-	1.5	1.7	V	
Reverse Current				10	uA	5 V

■ **Typical Electrical Characteristics Curves**  
**(25 °c Ambient Temperature Unless Otherwise Noted)**

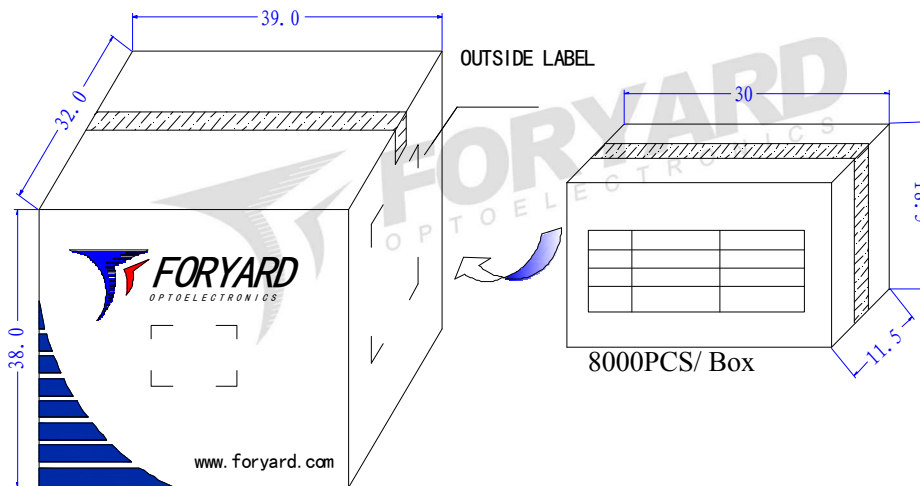
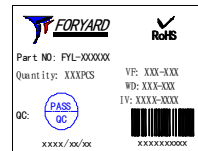


**Radiation pattern.**



<b>Model. No.</b>	FYL-5013IRBC1C
<b>Rev.</b>	A

■ LAMP PACKING.



48000PCS/ Carton



OUTSIDE LABEL