

# GaAs SIDE LOOK PACKAGE INFRARED EMITTING DIODE

## MIE-11RG1

### Description

The MIE-11RG1 is a GaAs infrared emitting diode molded in red transparent, lensed side looking package .

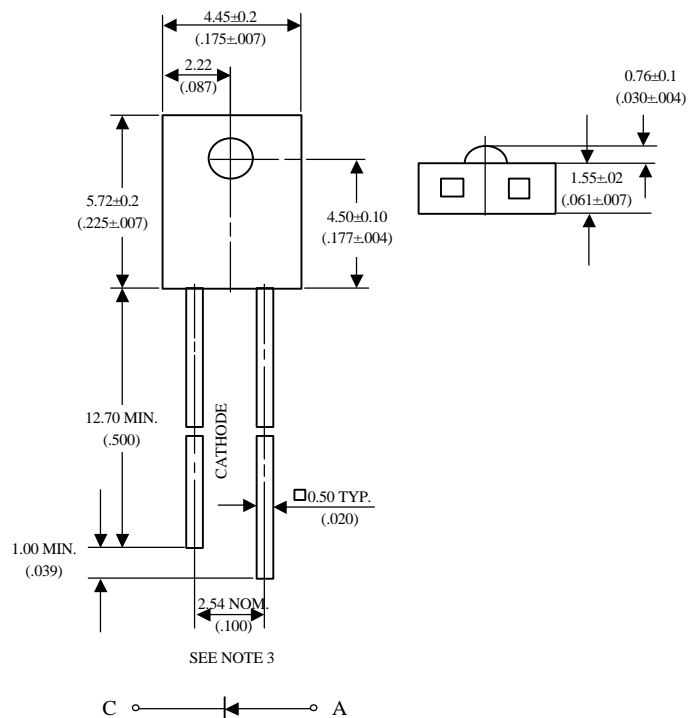
The MIE-11RG1 provides a broad range of intensity selection .

### Features

- Selected to specific on-line intensity and radiant intensity ranges
- Low cost, plastic side looking package
- Mechanically and spectrally matched to the MID-11422 of phototransistor .

### Package Dimensions

Unit: mm ( inches )



#### NOTES :

1. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
2. Lead spacing is measured where the leads emerge from the package.

### Absolute Maximum Ratings

@  $T_A = -25^\circ\text{C}$

Parameter	Maximum Rating	Unit
Power Dissipation	75	mW
Peak Forward Current	1	A
Continuous Forward Current	50	mA
Reverse Voltage	5	V
Operating Temperature Range	-55°C to +100°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature	260°C for 5 seconds	

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## Optical-Electrical Characteristics

@ T<sub>A</sub>=25°C

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Incidance	I <sub>F</sub> =20mA	Ee	-	0.6	-	mW/cm <sup>2</sup>
Forward Voltage	I <sub>F</sub> =20mA	V <sub>F</sub>	-	1.25	1.40	V
Reverse Current	V <sub>R</sub> =5V	I <sub>R</sub>	-	-	100	μA
Peak Wavelength	I <sub>F</sub> =20mA	λ	-	940	-	nm
Spectral Bandwidth	I <sub>F</sub> =20mA	Δλ	-	50	-	nm
Viewing Angle	I <sub>F</sub> =20mA	2θ <sub>1/2</sub>	-	80	-	deg .

## Typical Optical-Electrical Characteristic Curves

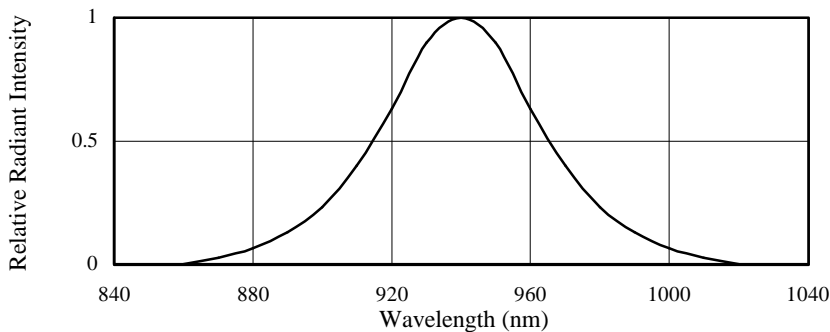


FIG.1 SPECTRAL DISTRIBUTION

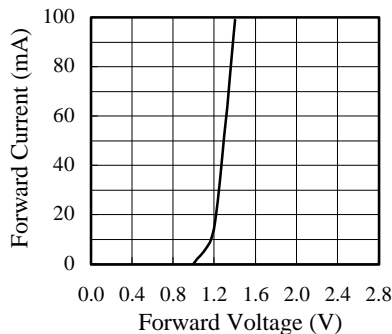


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

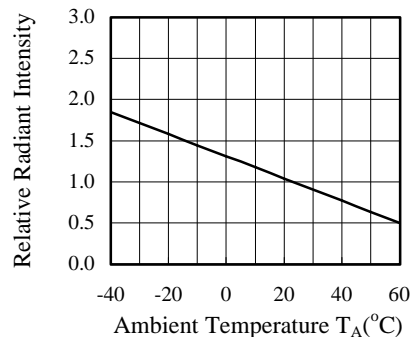


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

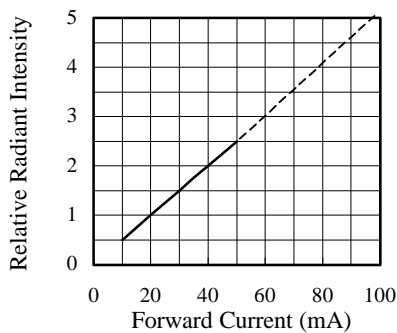


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

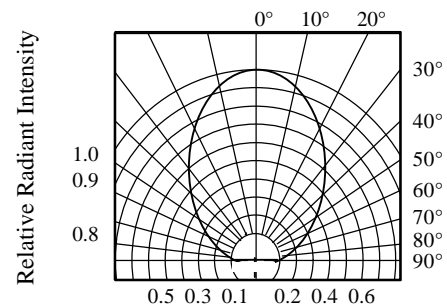


FIG.5 RADIATION DIAGRAM