

AlGaAs/GaAs High POWER SIDE LOOK PACKAGE INFRARED EMITTING DIODE

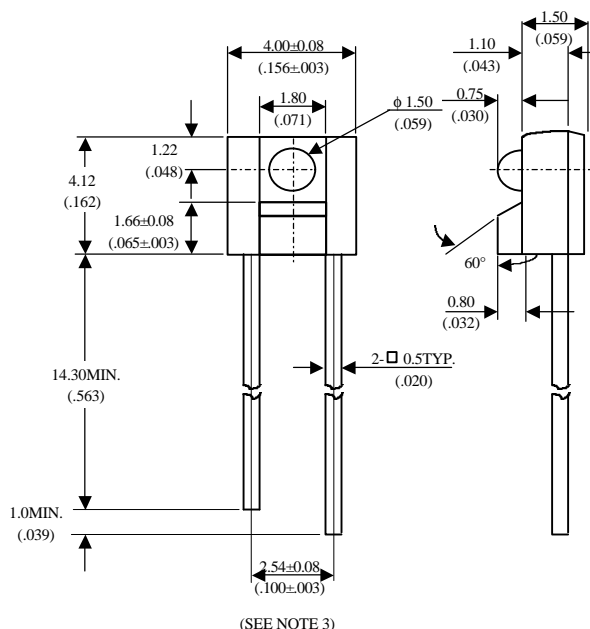
MIE-144A4

Description

The MIE-144A4 is a GaAs infrared emitting diode with AlGaAs window layer, molded in clear, lensed side looking package. The MIE-144A4 provides a broad range of intensity selection.

Package Dimensions

Unit: mm(inches)



C ← → A

Notes :

1. All dimensions are in millimeters.(inches).
2. Protruded resin under flange is 1.5 mm (0.059") max.
3. 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 $+100^\circ\text{C}$	
Storage Temperature Range	-55°C to $+100^\circ\text{C}$	
Lead Soldering Temperature	260 $^\circ\text{C}$ for 5 seconds	

UNI

Unity Opto Technology Co., Ltd.

02/04/2002

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Incidance	I _F =20mA	E _e	-	0.6	-	mW/cm ²
Forward Voltage	I _F =20mA	V _F	-	1.2	1.45	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Peak Wavelength	I _F =20mA	λ _p	-	940	-	nm
Spectral Bandwidth	I _F =20mA	Δλ	-	50	-	nm
Half View Angle	I _F =20mA	2θ _{1/2}	-	80	-	deg .

Typical Optical-Electrical Characteristic Curves

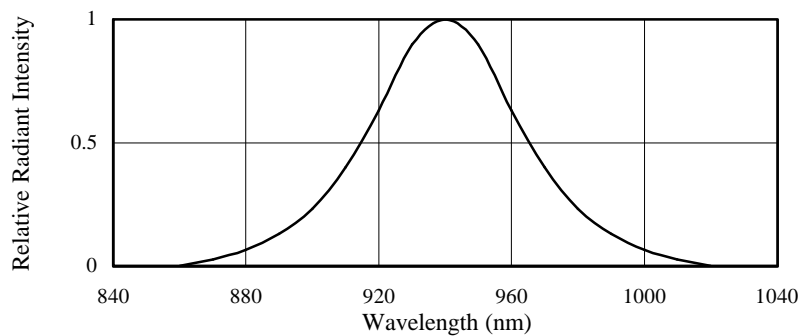


FIG.1 SPECTRAL DISTRIBUTION

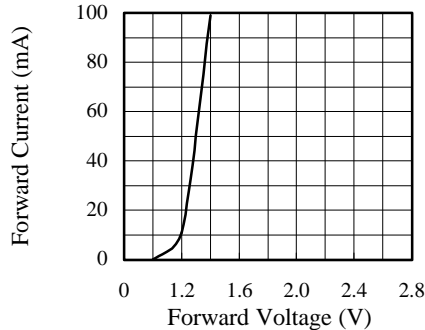


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

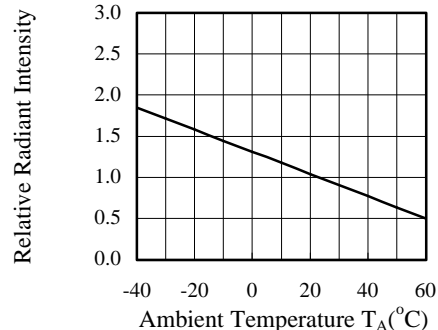


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

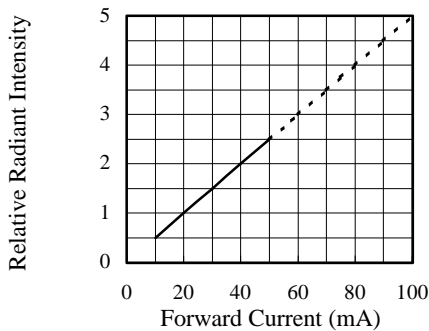


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

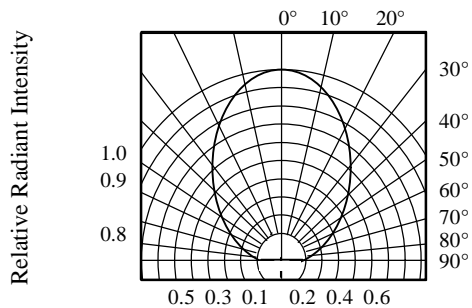


FIG.5 RADIATION DIAGRAM