

GaAlAs HIGH POWER SIDE LOOK PACKAGE INFRARED EMITTING DIODE

MIE-144H4

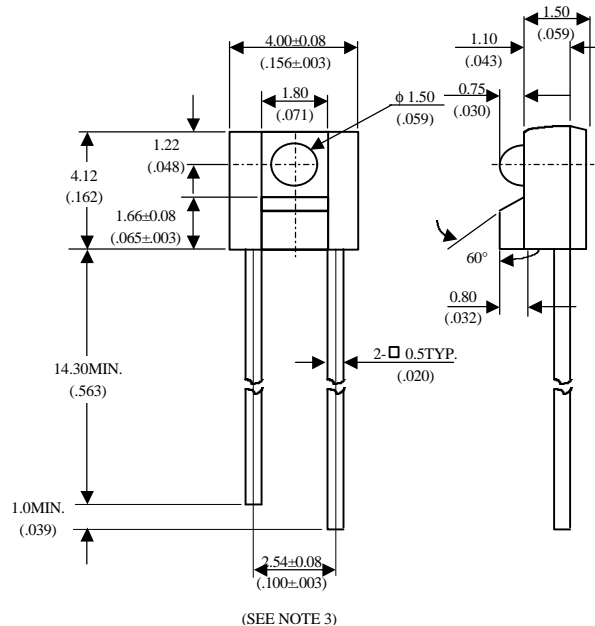
Description

The MIE-144H4 is a GaAlAs infrared emitting diode, molded in clear, lensed side looking package.

The MIE-144H4 provides a broad range of intensity selection.

Package Dimensions

Unit: mm(inches)



Features

- Selected to specific on-line intensity and radiant intensity ranges
- Low cost , plastic side looking package

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
Continuos 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°C for 5 seconds	

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Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Incidance	I _F =20mA	Ee	-	0.8	-	mW/cm ²
Forward Voltage	I _F =20mA	V _F	-	1.5	1.6	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Peak Wavelength	I _F =20mA	λ _p	-	850	-	nm
Spectral Bandwidth	I _F =20mA	Δλ	-	30	-	nm
Half View Angle	I _F =20mA	2θ _{1/2}	-	80	-	deg .

Typical Optical-Electrical Characteristic Curves

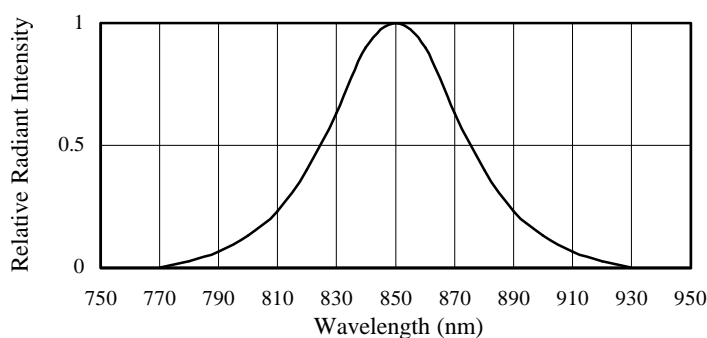


FIG.1 SPECTRAL DISTRIBUTION

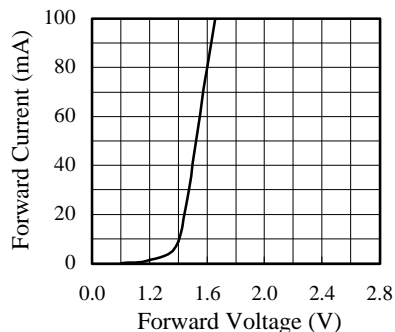


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

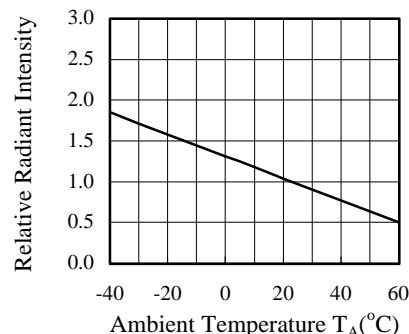


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

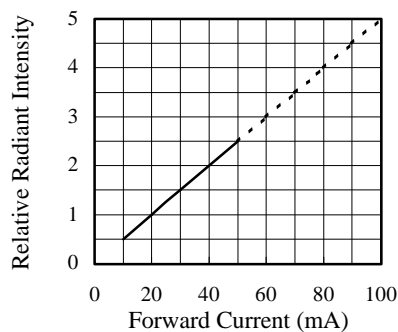


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

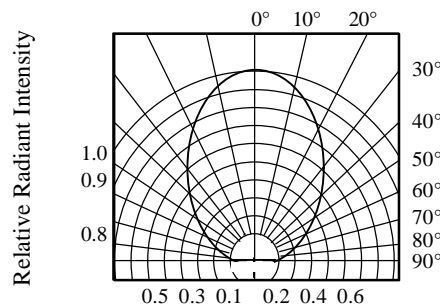


FIG.5 RADIATION DIAGRAM