

# AlGaAs HIGH POWER SIDE LOOK PACKAGE INFRARED EMITTING DIODE

## MIE-114H4

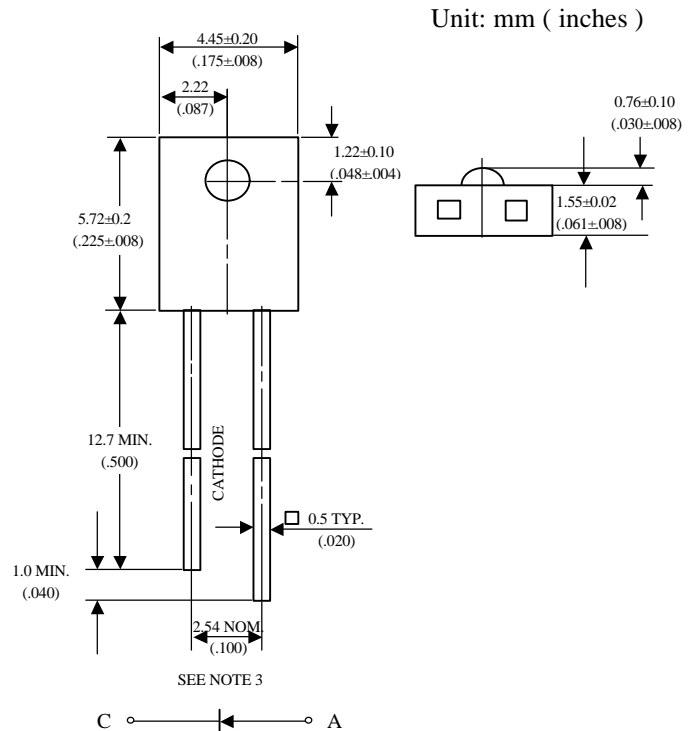
### Description

The MIE-114H4 is a AlGaAs infrared emitting diode molded in clear, lensed side looking package .  
The MIE-114H4 provides a broad range of intensity selection .

### Features

- High power
- Mechanically and spectrally matched to the MID-11422 of phototransistor .

### Package Dimensions



#### 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

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

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Incidence	$I_F=20\text{mA}$	Ee	-	1.0	-	$\text{mW}/\text{cm}^2$
Forward Voltage	$I_F=20\text{mA}$	$V_F$	-	1.5	1.6	V
Reverse Current	$V_R=5\text{V}$	$I_R$	-	-	100	$\mu\text{A}$
Peak Wavelength	$I_F=20\text{mA}$	$\lambda_p$	-	850	-	nm
Spectral Bandwidth	$I_F=20\text{mA}$	$\Delta\lambda$	-	30	-	nm
View Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$	-	80	-	deg .

## Typical Optical-Electrical Characteristic Curves

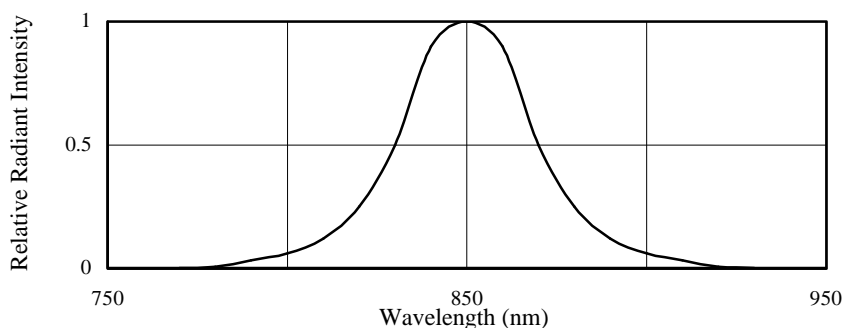


FIG.1 SPECTRAL DISTRIBUTION

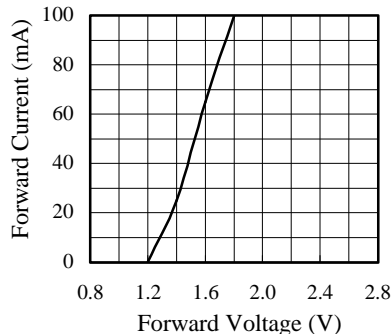


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

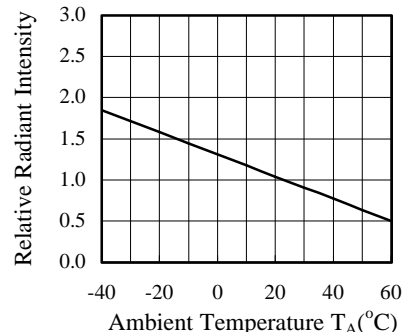


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

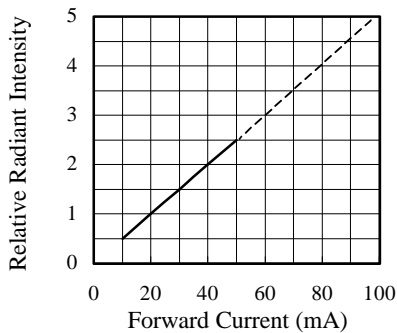


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

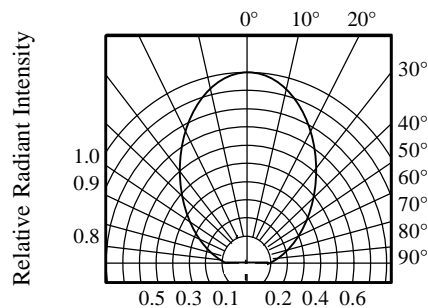


FIG.5 RADIATION DIAGRAM