

# **GaAlAs T-1 PACKAGE INFRARED EMITTING DIODE**

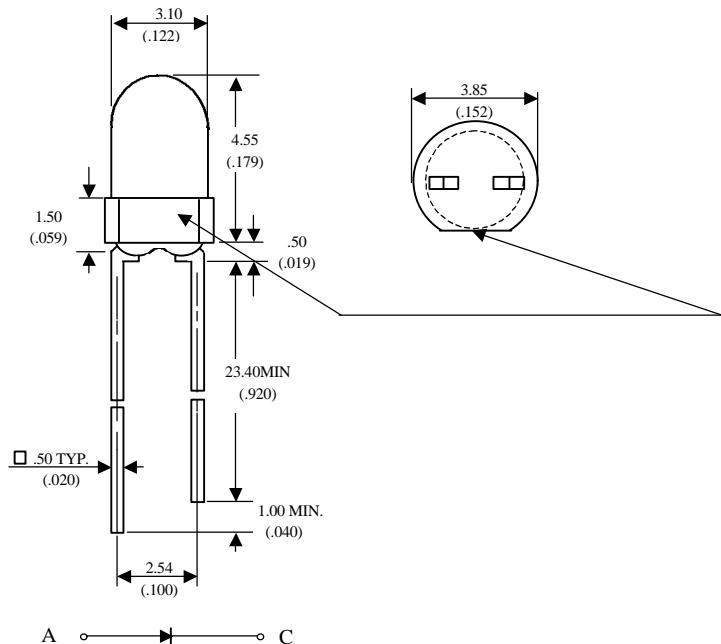
**MIE-364L3**

## **Description**

The MIE-364L3 is a GaAlAs infrared LED having a peak wavelength at 880nm. It features high power, and molded in water clear plastic package with higher radiant intensity.

## **Package Dimensions**

Unit : mm (inches )



## **Features**

- High radiant intensity
- Standard T-1 (  $\phi$  3mm ) package
- Peak wavelength  $\lambda_p = 880$  nm
- Radiant angle :  $35^\circ$

### Notes :

1. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
2. Protruded resin under flange is 0.5 mm (.019") 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	120	mW
Peak Forward Current	1	A
Continuous Forward Current	100	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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02/04/2002

## Optical-Electrical Characteristics

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

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Intensity	$I_F=20\text{mA}$	$I_e$		2.2	-	$\text{mW}/\text{sr}$
Forward Voltage	$I_F=50\text{mA}$	$V_F$	-	1.4	1.7	V
Reverse Current	$V_R=5\text{V}$	$I_R$	-	-	100	$\mu\text{A}$
Peak Wavelength	$I_F=20\text{mA}$	$\lambda_p$	-	880	-	nm
Spectral Bandwidth	$I_F=20\text{mA}$	$\Delta\lambda$	-	80	-	nm
View Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$	-	35	-	deg .

## Typical Optical-Electrical Characteristic Curves

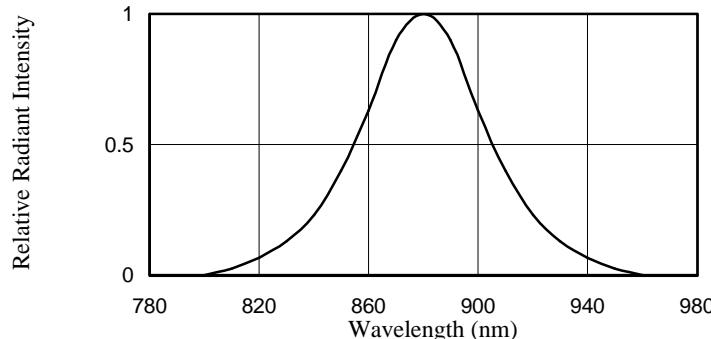


FIG.1 SPECTRAL DISTRIBUTION

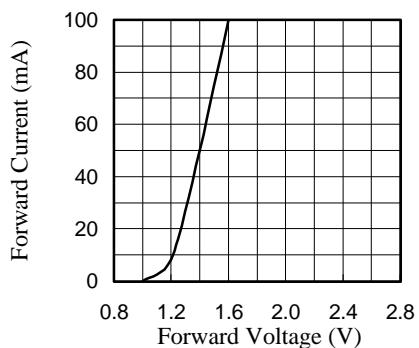


FIG.2 FORWARD CURRENT VS.  
FORWARD VOLTAGE

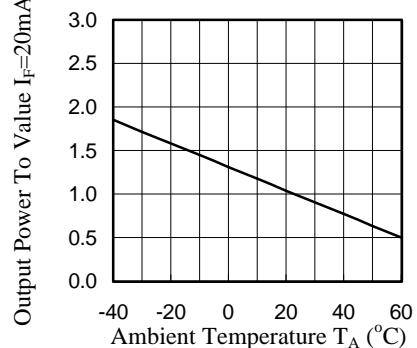


FIG.3 RELATIVE RADIANT INTENSITY  
VS. AMBIENT TEMPERATURE

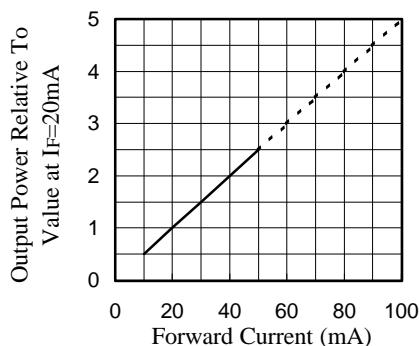


FIG.4 RELATIVE RADIANT INTENSITY  
VS. FORWARD CURRENT

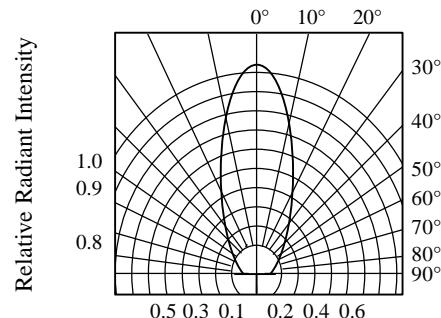


FIG.5 RADIATION DIAGRAM