GaAs HIGH POWER T-1 PACKAGE INFRARED EMITTING DIODE

MIE-304G1

Description

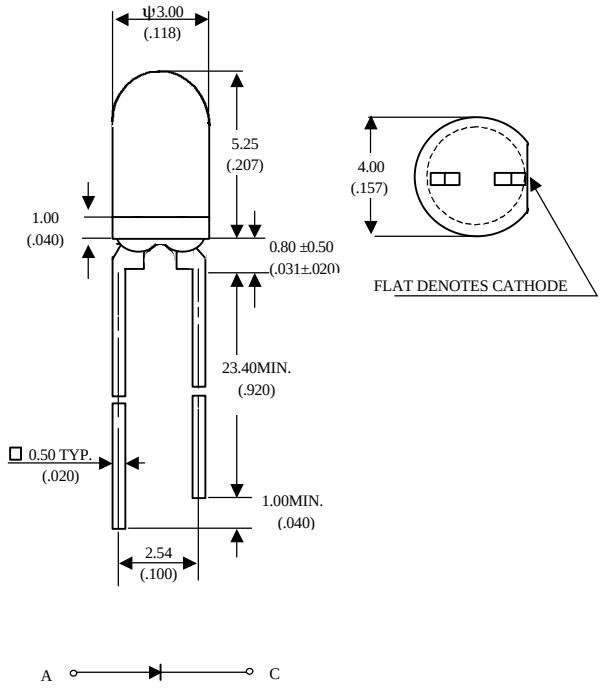
The MIE-304G1 is an infrared emitting diode in GaAs technology molded in water clear plastic package.

Features

- Standard T-1 (ϕ 3mm) package, radiation angle : ±10°
- Peak wavelength λp = 940 nm
- Good spectral matching to si-photodetector

Package Dimensions

Unit : mm (inches)



Notes :
1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 0.8 mm (.031") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ T_A=25°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	

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Intensity	I_F=20mA	Ie	1.5	2.5		mW/sr
Forward Voltage	I_F=50mA	V_F		1.30	1.5	V
Reverse Current	V_R=5V	I_R			100	μA
Peak Wavelength	I_F=20mA	λ		940		nm
Spectral Bandwidth	I_F=20mA	Δλ		50		nm
View Angle	I_F=20mA	2 $\theta_{1/2}$		20		deg .

Typical Optical-Electrical Characteristic Curves

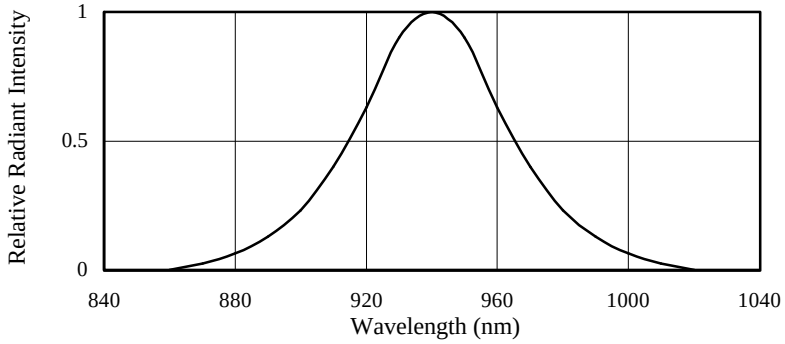


FIG.1 SPECTRAL DISTRIBUTION

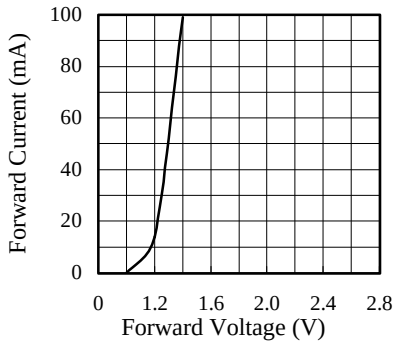


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

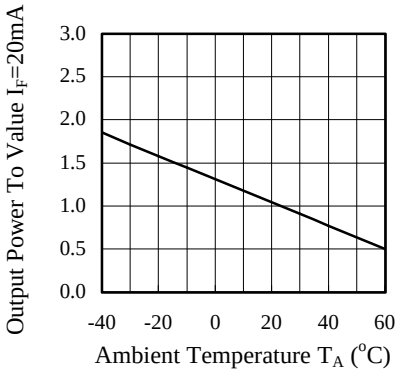


FIG.3 RELATIVE RADIANT INTENSITY VS.AMBIENT TEMPERATURE

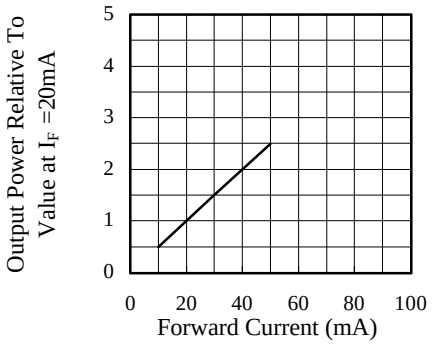


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

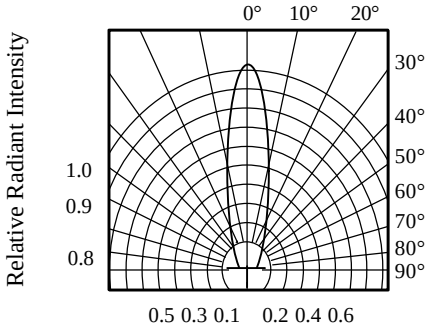


FIG.5 RADIATION DIAGRAM