

GaAs SIDE LOOK PACKAGE INFRARED EMITTING DIODE

MIE-144G1

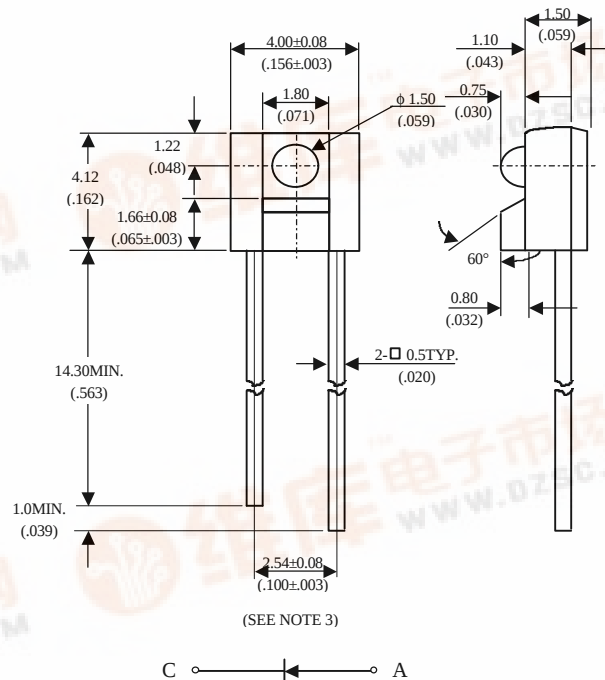
Description

The MIE-144G1 is a GaAs infrared emitting diode molded in clear , lensed side looking package .

The MIE-144G1 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
- Mechanically and spectrally matched to The MID-14422 of phototransistor .

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°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°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature	260°C for 5 seconds	

Optical-Electrical Characteristics

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

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Incidance	$I_F=20\text{mA}$	Ee	-	0.6	-	mW/cm^2
Forward Voltage	$I_F=20\text{mA}$	V_F	-	1.25	1.40	V
Reverse Current	$V_R=5\text{V}$	I_R	-	-	100	μA
Peak Wavelength	$I_F=20\text{mA}$	λ	-	940	-	nm
Spectral Bandwidth	$I_F=20\text{mA}$	$\Delta\lambda$	-	50	-	nm
Half View Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$	-	80	-	deg .

Typical Optical-Electrical Characteristic Curves

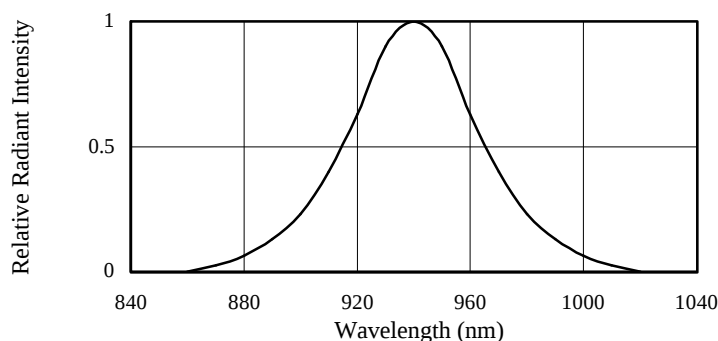


FIG.1 SPECTRAL DISTRIBUTION

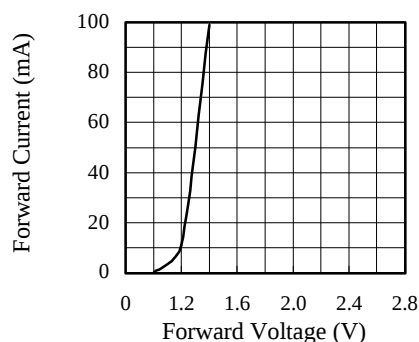


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

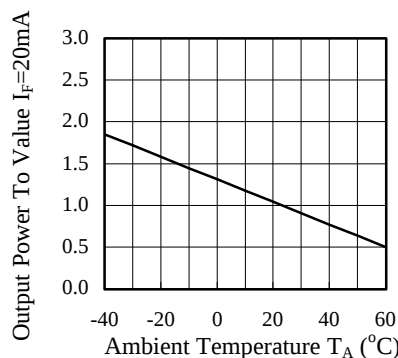


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

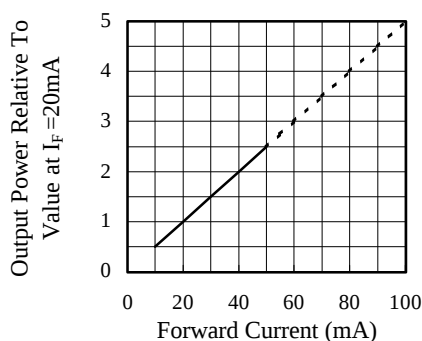


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

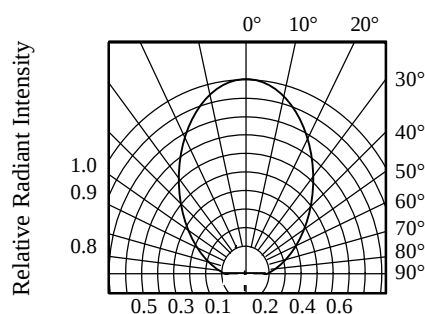


FIG.5 RADIATION DIAGRAM