GaAlAs T-1 PACKAGE
INFRARED EMITTING DIODE MIE-334H4

Description

The MIE-334H4 is a GaAlAs infrared LED having a peak wavelength at 850nm. It features ultra-high power, high response speed and molded package with higher radiant intensity. In addition to improving the S/N ratio in applied optical systems, the MIE-334H4 has greatly improved long-distance characteristics as well as significantly increased its range of applicability .

Features

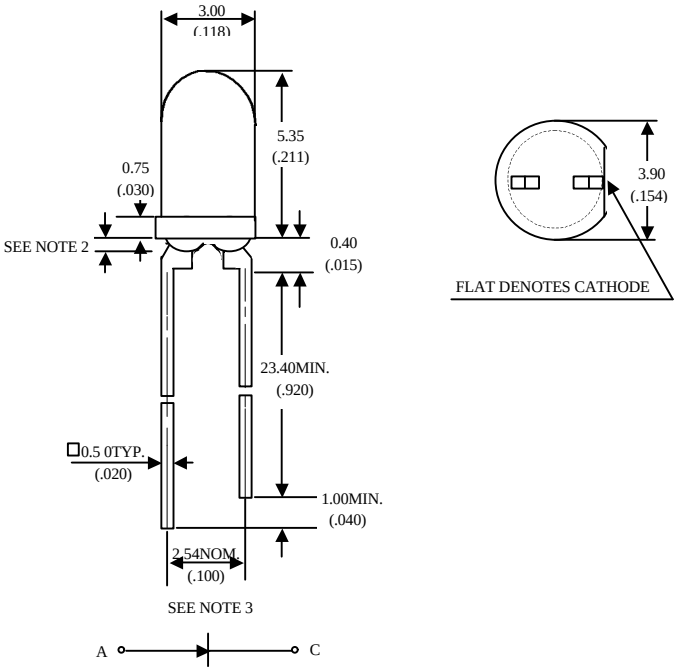
- Ultra-High radiant intensity
- High response speed
- Standard T-1 (ϕ3mm) package, radiant angle : 30°
- Peak wavelength λ_P =850 nm
- Good spectral matching to si-photodetector

Application

- Data communication
- SIR

Package Dimensions

Unit : mm (inches)



Notes :
1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 0.4 mm (.015") 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(300pps,10μs pulse)	1	A
Continuos 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		3.2		mW/sr
Forward Voltage	I_F=50mA	V_F		1.5	1.8	V
Reverse Current	V_R=5V	I_R			100	μA
Peak Wavelength	I_F=20mA	λ		850		nm
Spectral Bandwidth	I_F=20mA	Δλ		30		nm
View Angle	I_F=20mA	2 $\theta_{1/2}$		30		deg .

Typical Optical-Electrical Characteristic Curves

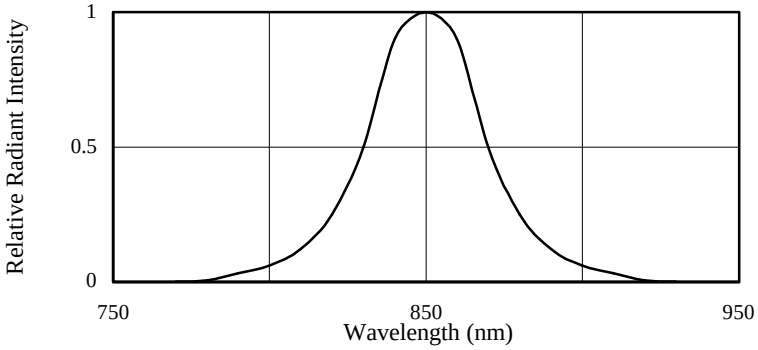


FIG.1 SPECTRAL DISTRIBUTION

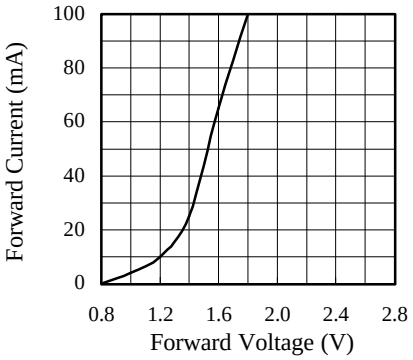


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

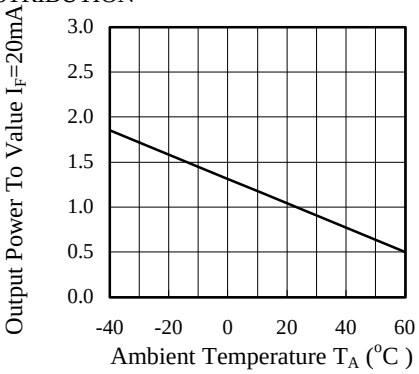


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

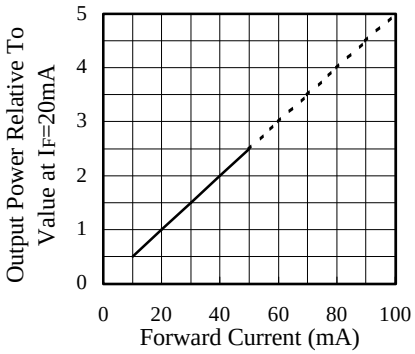


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

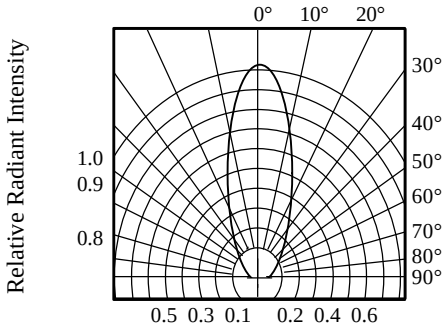


FIG.5 RADIATION DIAGRAM