GaAlAs T-1 3/4 PACKAGE INFRARED EMITTING DIODE

MIE-516L3U

Description

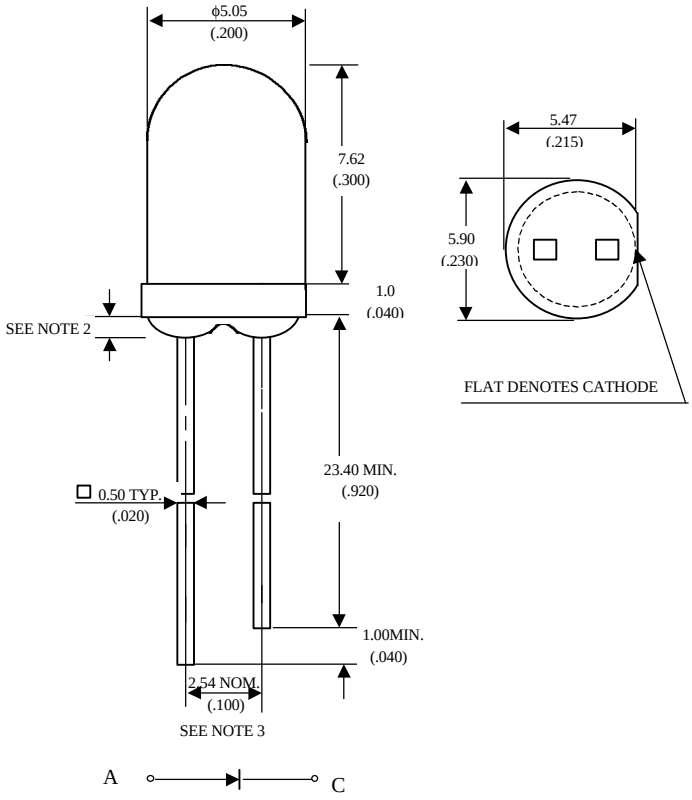
The MIE-516L3U is infrared emitting diodes in GaAlAs technology molded in pastel blue transparent package.

Features

- Suitable for DC and high pulse current operation
- Standard T-1 3/4 (ϕ 5mm) package
- Peak wavelength λ_p = 880 nm
- Good spectral matching to si-photodetector
- Radiant angle : 16°

Package Dimensions

Unit: mm (inches)



Notes :
1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ T_A=25°C

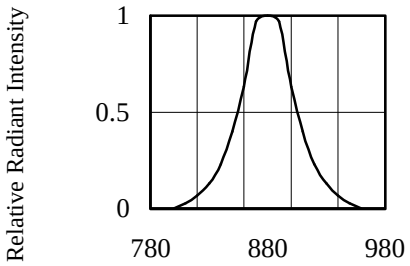
Parameter	Maximum Rating	Unit
Power Dissipation	120	mW
Peak Forward Current(300pps,10μs pulse)	1	A
Continuos Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-55°C to +100°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature	260°C for 5 seconds	

Optical-Electrical Characteristics

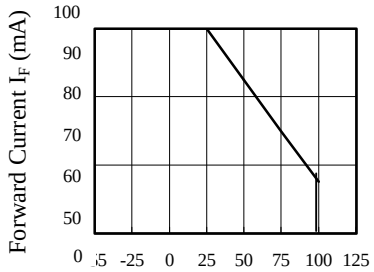
'@ T_A=25°C

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		1.4	1.7	V
	I_F=200mA			1.85	2.10	
Reverse Current	V_R= 5V	I_R			100	μA
Peak Wavelength	I_F=20mA	λ		880		nm
Spectral Bandwidth	I_F=20mA	Δλ		60		nm
View Angle	I_F=20mA	$2\theta_{1/2}$	-	16	-	deg.

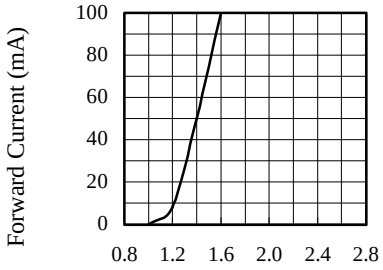
Typical Optical-Electrical Characteristic Curves



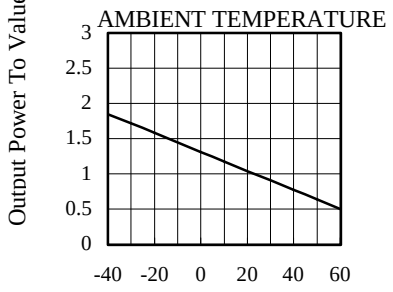
Wavelength (nm)
FIG.1 SPECTRAL DISTRIBUTION



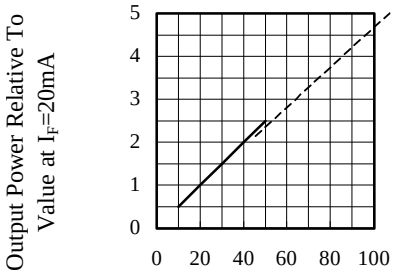
Ambient Temperature T_A (°C)
FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE



Forward Voltage (V)
FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE



Ambient Temperature T_A (°C)
FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE



Forward Current (mA)
FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

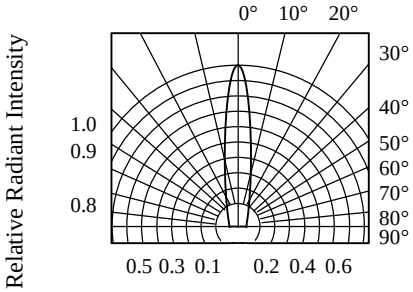


FIG.5 RADIATION DIAGRAM