

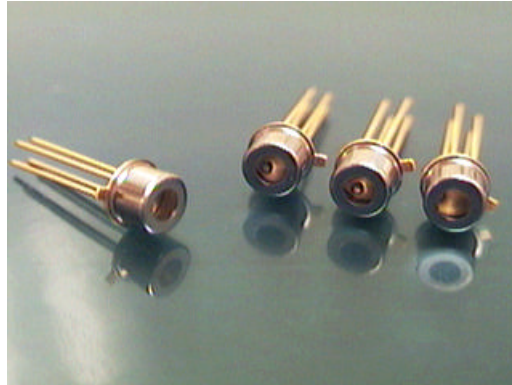
## 1310 nm Flat Window Cap LED DIODE

### Features

- .. InGaAsP Surface Emitting LED
- .. 115 MHz operating bandwidth
- .. High speed 1310 nm LED
- .. TO-46 hermetic packaging with a flat window cap.

### Applications

- .. Optical communication system
  - Optical data links
  - Optical LANs
  - FDDI
  - O-E Interface Conversion



### Handling and Safety Precautions

Anti-static protection, such as ionized air blowers or grounded wrist straps with a 1 mega series resistor, should be used at all times when handling LED diode. In addition, soldering irons should be well grounded.

Overheating caused by soldering of the leads of a laser diode must be prevented. Recommend soldering iron temperature and maximum exposure time are below 260°C and 10 seconds.

### Description

The MCE-3L4F-002 is a high performance InGaAsP surface emitting LED that offers high coupling powers in 1310 nm fiber optic transmission applications. Data rates can vary from DC to 115 MHz depending upon component application. This product is designed for optical fiber communication and other applications. As the drive current varies about the component's threshold, the optical output increases proportionally.

The MCE-3L4F-002 is compatible with industry standard wave or hand solder processes.

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**Unity Opto Technology Co., Ltd.**  
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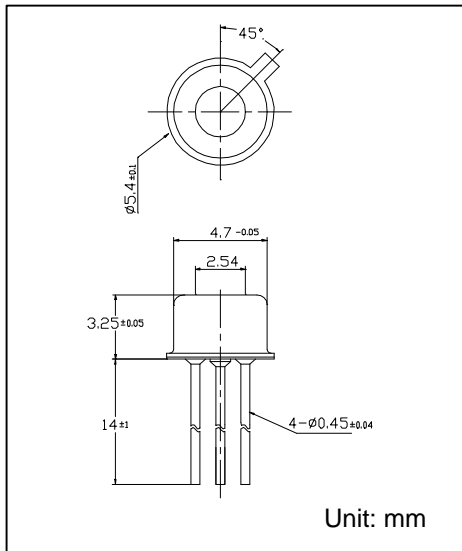
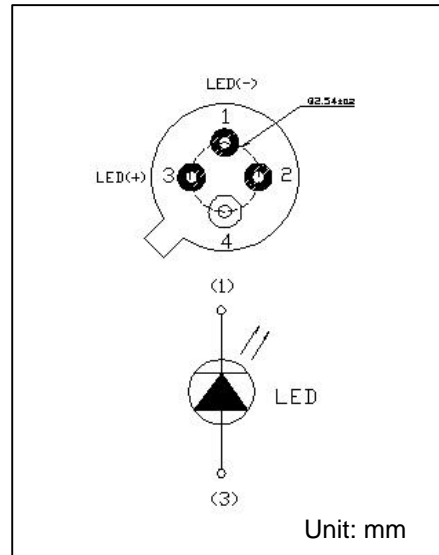
**For prototype and Production call**  
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Rev.A 10/07/2003

**· Absolute Maximum Ratings (Tc = 25 °C)**

Parameter	Symbol	Rated Value	Unit
Reverse Voltage	V <sub>R</sub>	2	V
Forward Current	I <sub>F</sub>	150	mA
Operating case temperature	T <sub>op</sub>	- 40 to +85	°C
Storage temperature	T <sub>STG</sub>	- 40 to +85	°C

**· Optical & Electrical Characteristics (Tc = 25 °C If=60mA)**

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Coupled power	P <sub>o</sub>	62.5/125µm MMF	30	-	-	µW
Wavelength	λ	CW	1280	1310	1350	nm
Spectral width	Δλ	CW,RMS	-	-	170	nm
Operating voltage	V <sub>f</sub>	CW	-	1.2	1.7	V
Bandwidth	BW		115	-	-	MHz
Output Power over Temperature	dP <sub>o</sub> /dT	10-90%	-	-	±3	dB


**Package Dimensions**

**Pin Connections ( Bottom View )**

NOTE: Specifications are subjected to change without notice.

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