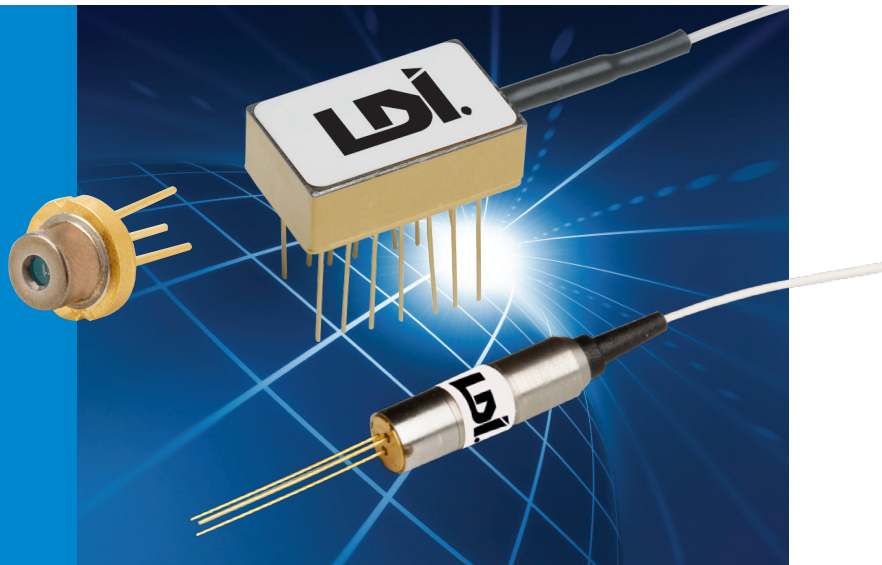


PULSED 850nm Instrument Laser Modules

- Output Powers up to 1 Watt
- Low Inductance
- Low Power Consumption
- Hermetic Package
- 14-PIN Dual In-Line or 3-Pin Coaxial Package
- 50 and 62.5 μ m Fiber
- Connector Options Available
- RoHS Compliant



OSI Laser Diode, Inc.'s 850nm laser modules are designed for use in fiber optic instruments where high optical power and low power consumption are required. All packages contain LDI's high reliability laser chips. The low profile style package is designed for use with narrow high current pulses. Devices can be custom tailored to meet specific application requirements.

Device Characteristics and Operating Conditions* @ 25°C

	Symbol	LP8M03-27-50R	LP8M03-27-62R	LP8M05-23-50R	LP8M05-23-62R	LP8M10-23-50R	LP8M10-23-62R	Units
Power (min)	P_o	300	300	500	500	1000	1000	mW
Threshold Current (typ)	I_{th}	0.1 850	0.1	0.25	0.25	0.25	0.25	A
Peak Wavelength	λ_p	± 20	850 ± 20	850 ± 20	850 ± 20	850 ± 20	850 ± 20	nm
Spectral Width FWHM(typ)	$\Delta\lambda$	1-2	1-2	1-2	1-2	1-2	1-2	nm
Pulse Width*	P_w	50	50	50	50	50	50	ns
Repetition Rate *	PRR	10	10	10	10	10	10	KHz
Peak Forward Current (typ)	I_{th}	1.4	1.2	2.2	2.0	4.5	4.0	A

* Lower drive current devices available on special order

-50 = 50 μ m core fiber

-62 = 62.5 μ m core fiber

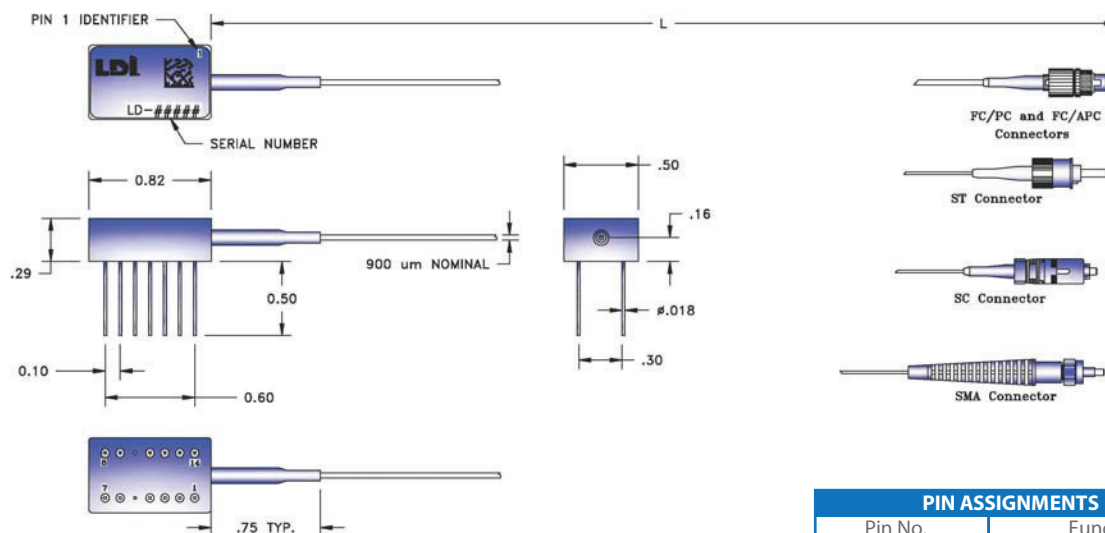
LP8M03 Series = 3 pin Coaxial Package

LP8M05 Series = 14 pin NF DIL Package

LP8M10 Series = 14 pin NF DIL Package

**Options are available for TO56 Package: Consult factory

Outline Drawing



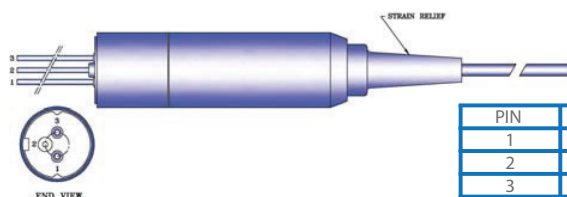
Dimensions: Inches

Detailed package drawings are available upon request.

Standard fiber lengths: 1m min. unconnectorized; 1m +/- 0.1m connectorized

PIN ASSIGNMENTS	
Pin No.	Function
1,2,3,4,6,7,8,	No connection
11,12,13,14	No connection
5,10	Laser anode & case
9	Laser cathode

Coaxial Package



PIN	Function
1	Laser cathode (-)
2	Laser anode (+)/ Ground
3	No Connection

TO56 Package



Detailed package drawings are available on LDI website.
Not recommended for CW products.

Maximum Ratings

Operation above absolute maximum ratings can cause damage to the device.

Normal operation of the device should be per the operating conditions provided in the data sheet.

	Unit	Min.	Max.
Operating Temperature	°C	-20	70
Storage Temperature	°C	-40	70
Laser Forward Current	A		6
Laser Reverse Current	μA		10
Laser Reverse Voltage	V		0.5
Fiber Bend Radius	mm		50

Products can be ordered directly from OSI Laser Diode, Inc. or its representatives.
For a complete listing of representatives, visit our website at
www.laserdiode.com

Personal Hazard and Handling Precautions:

Handle optical fiber with normal care, avoiding stretch, tension, kink or bend abuse. ESD precautions apply. Class 3R Laser.

Laser light emitted from any diode laser may be harmful to the human eye. Avoid looking directly into the diode laser aperture when device is in operation.

Warranty:

Please refer to your product purchase agreement for complete details or check with your OSI Laser Diode sales representative.

Notice:

OSI Laser Diode, Inc. reserves the right to make changes to the products or information contained herein without notice.

No liability is assumed as a result of their use or application.