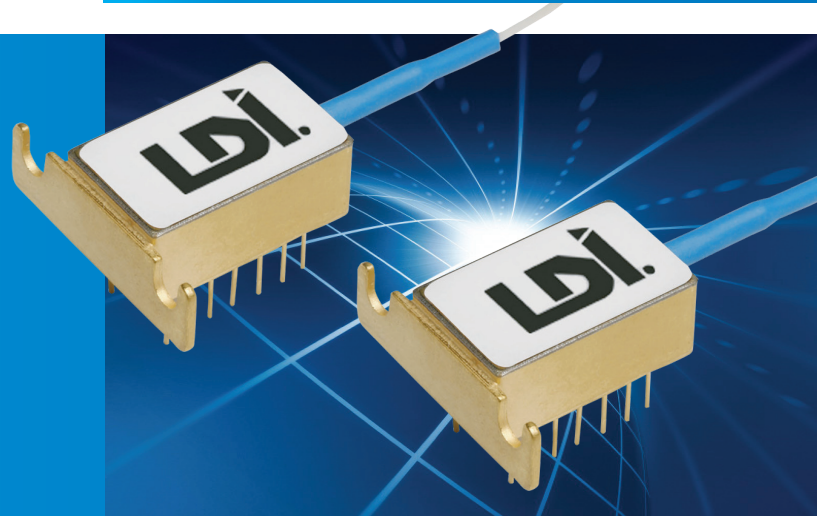


- Wavelengths: 1310nm and 1550nm
- Power to 2mW
- Singlemode and Multimode Fiber
- 14-Pin DIP
- High Stability Fiber Coupling
- Hermetically Sealed
- RoHS Compliant
- Typical Applications:
  - Telecom data transmission
  - Instrument laser
  - Light source



OSI Laser Diode, Inc.'s 1310nm and 1550nm Fabry-Perot lasers offer excellent output power and wavelength stability. These modules are ideally used in short, intermediate and long distance telecommunication systems such as **SONET**, **SDH** and **Ethernet** or **Fiberchannel** systems. Devices are available with or without **TEC** and temperature sensing thermistor.

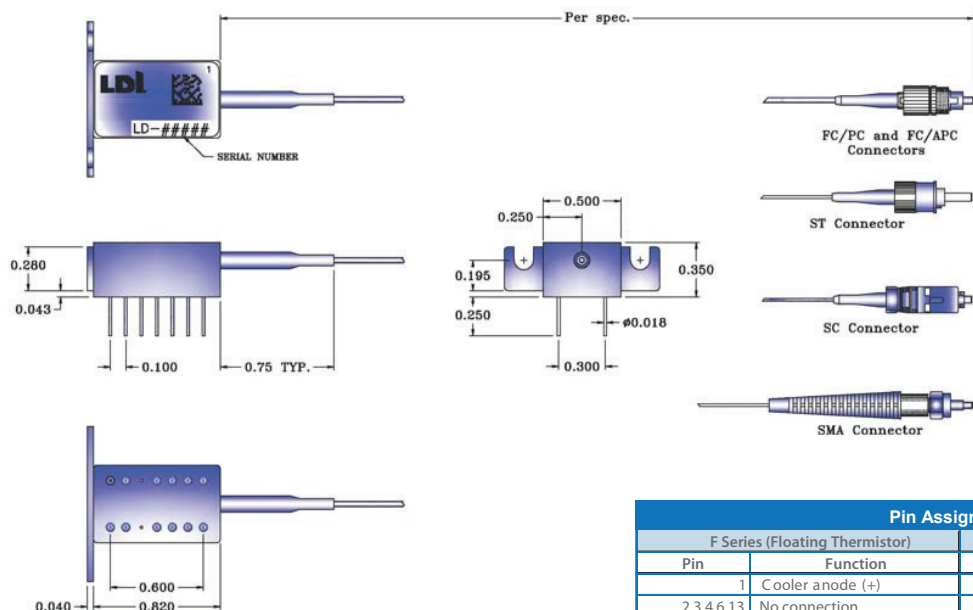
### Specifications and Limits @25°C

Optical Characteristics	Units	1310nm	1550nm
<b>Power Options</b>	uW	500 / 1000 / 2000	500 / 1000 / 2000
Wavelength Range	nm	1270-1330	1520-1580
Spectral Width FWHM (typ)	nm	2	1.3
<b>Drive characteristics</b>			
Threshold current (typ;max)	mA	6; 15	10; 14
Modulation current (typ;max)	mA	15; 25	12; 16
Forward voltage maximum	V	2	1.4
Maximum optical rise/fall time	ns	0.5	0.5
<b>Monitor Diode</b>			
Photocurrent at P <sub>max</sub> (min;max)	uA	50; 1200	50; 1200
Maximum dark current	nA	10	10
Maximum capacitance	pF	6	6
Maximum rise/fall time	ns	2	2
Maximum reverse voltage	V	10	10
Tracking error*	dB	±0.5	±0.5
<b>Temperature Range</b>			
Module operating temperature	°C	-20 to +70	-20 to +70
Storage temperature	°C	-40 to +85	-40 to +85
<b>Thermoelectric Cooler**</b>			
Maximum cooler capacity	°C	45	45
Current for maximum capacity	A	0.75	0.75
Maximum current	A	1.2	1.2
Voltage for maximum current	V	1.2	1.2
<b>Thermistor**</b>			
Resistance at T = 25°C	KΩ	9.8-10.2	9.8-10.2
Temperature coefficient	%/°C	-4.4	-4.4

\*Tracking error is the variation of the linear relationship between fiber-coupled power and monitor diode current over the specified operation temperature range

\*\*Cooled devices only

## Outline Drawing

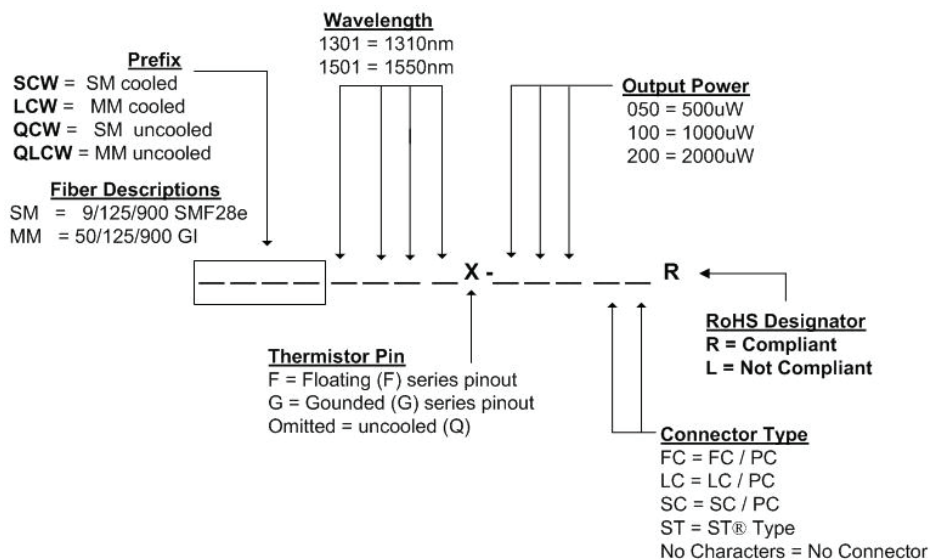


Dimensions: Inches (mm)  
 Detailed package drawings are available upon request  
 Standard fiber lengths; 1m min. unconnectorized; 1m +/- 0.1m connectorized

Pin Assignments			
F Series (Floating Thermistor)		G Series (Ground Thermistor)	
Pin	Function	Pin	Function
1	Cooler anode (+)	1	Cooler anode (+)
2,3,4,6,13	No connection	2,3,4,6,12,13	No connection
5	Ground, laser anode (+)	5	Ground, laser anode (+)
7	Detector cathode (-)	7	Detector cathode (-)
8	Detector anode (+)	8	Detector anode (+)
9	Laser cathode (-)	9	Laser cathode (-)
10	Ground	10	Ground, thermistor
11,12	Thermistor	11	Thermistor
14	Cooler cathode (-)	14	Cooler cathode (-)

## Part Ordering Information

When ordering, refer to the numbering diagram below.



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](http://www.laserdiode.com)

### Personal Hazard and Handling Precautions:

Handle optical fiber with normal care, avoiding stretch, tension, twist, kink or bend abuse. ESD precautions apply. Normal aversion reactions will protect from radiation hazards to the eye associated with devices of this kind.

**Class 1** lasers when operated at rated conditions

### 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.

### Warranty:

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