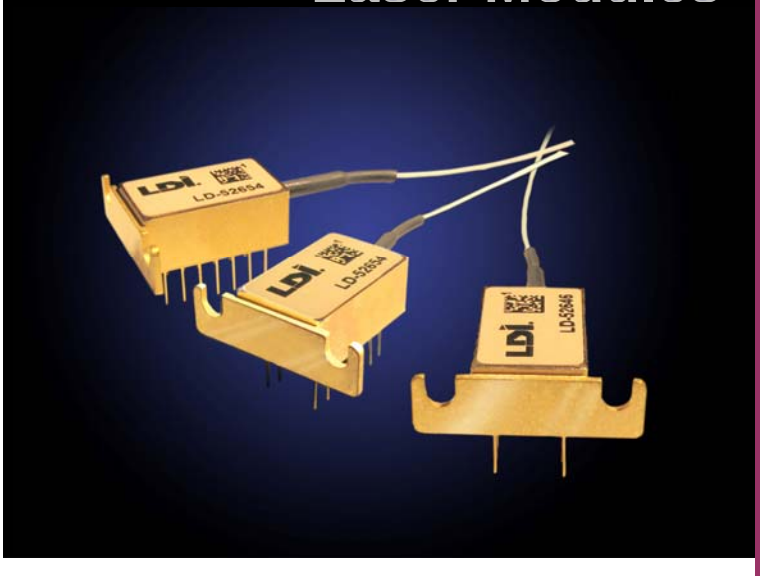
M/A-COM Technology Solutions
4 Olsen Avenue
Edison, NJ 08820 USA
Voice (732) 549-9001
Fax: (732) 906-1559
Internet: www.laserdiode.com
Email: sales@laserdiode.com

Laser Diode Incorporated
ISO 9001:2000 Certified

Telecom / Datacom Laser Modules



- Wavelengths: 1310nm and 1550nm
- Power to 2mW
- Singlemode 9/125/900 fiber
- 14-pin DIP
- High Stability Fiber Coupling
- Hermetically Sealed
- RoHS Compliant
- Typical Applications:
  - Telecom data transmission
  - Instrument laser
  - Light source

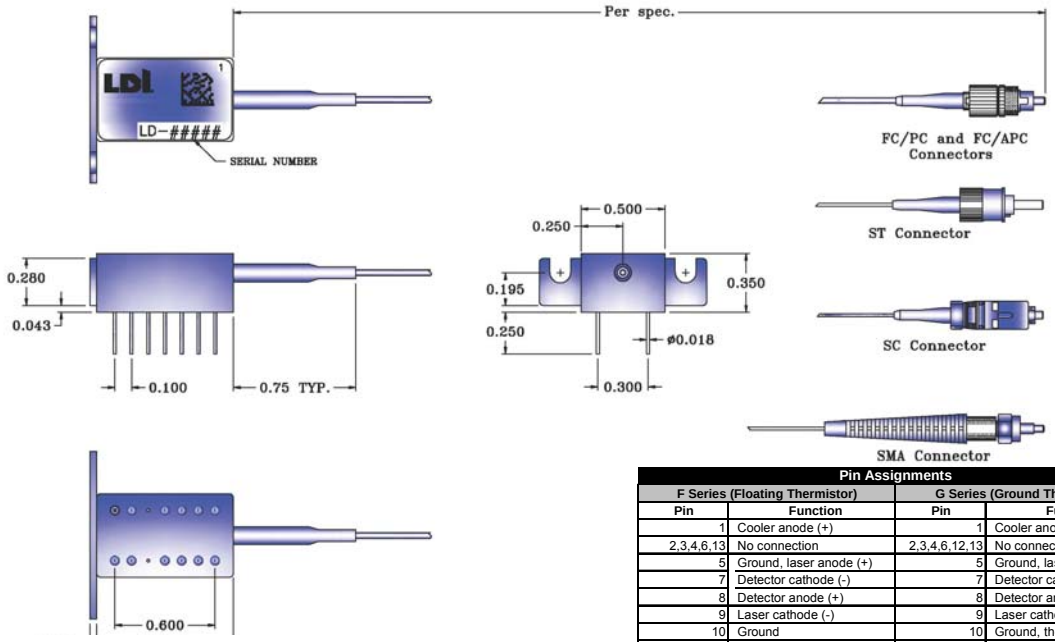
Laser Diode Incorporated's 1310nm and 1550nm Fabry-Perot lasers offer excellent output power and wavelength stability. These modules are ideally used in short, intermediate and long distance telecommunication systems such as SONET, SDH and Ethernet or Fiberchannel systems.

Specifications and Limits @ 25°C

Optical Characteristics	Units	1310nm	1550nm
Power Options	uW	500 / 1000 / 2000	500 / 1000 / 2000
Wavelength Range	nm	1270-1330	1520-1580
Spectral Width FWHM (typ)	nm	2	1.3
Drive Characteristics			
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
Monitor Diode			
Photocurrent at P_{MAX} (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
Temperature Range			
Module operating temperature	°C	-20 to +70	-20 to +70
Storage temperature	°C	-40 to +85	-40 to +85
Thermoelectric Cooler			
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
Thermistor			
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

Outline Drawing

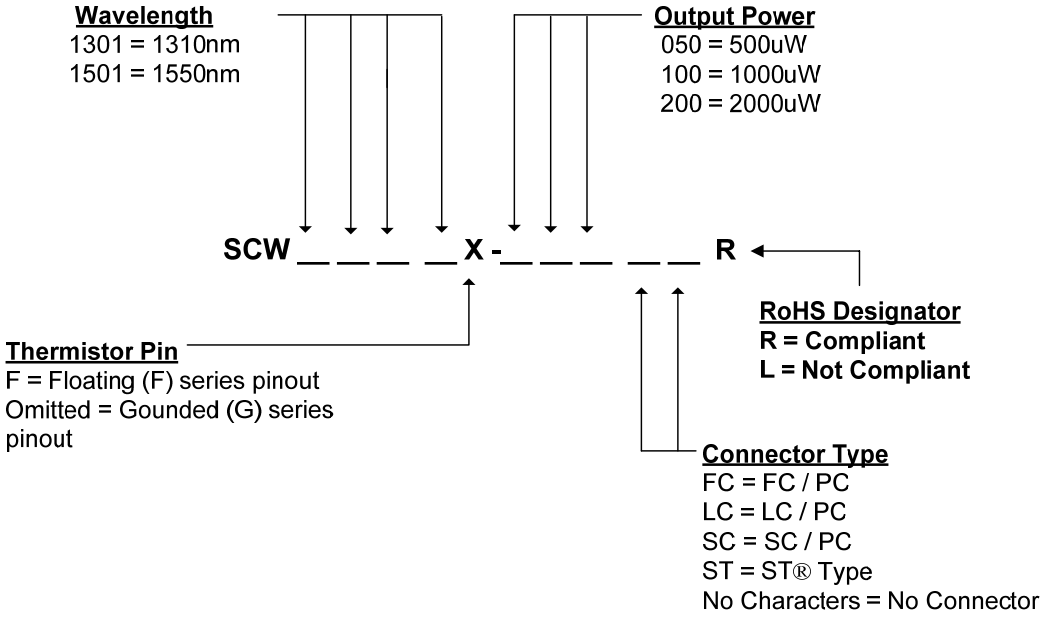


Dimensions: Inches [mm]
Detailed package drawings are available upon request.

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

Products can be ordered directly from Laser diode Incorporated or its representatives. For a complete listing of representatives, visit our website at www.laserdiode.com. When ordering, please refer to the numbering diagram below.



Personal Hazard and Handling Precauti
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.

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

Notice:
Laser Diode Incorporated 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.