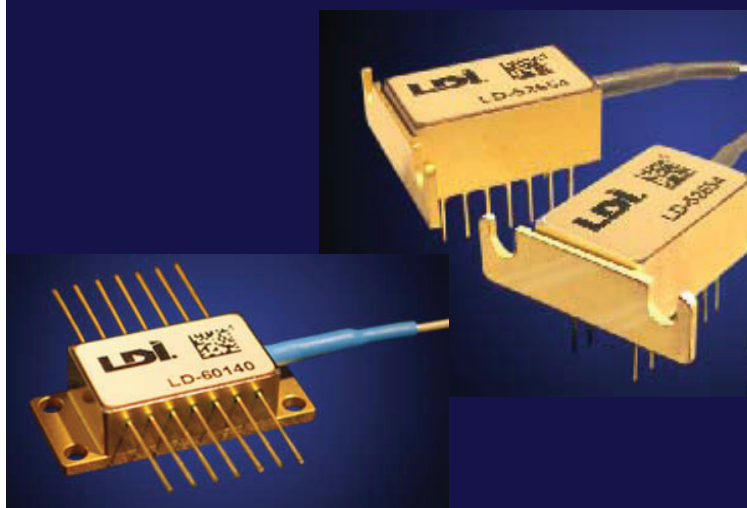


SCW Series: High Power Instrument Laser Modules Pulsed Applications



- Wavelengths: 1310nm, 1550nm, 1625nm and 1650nm
- High Peak Optical Power (Pulsed) 180mW
- RoHS Compliant
- Singlemode
- Typical Applications*:
OTDR Instruments
Spectroscopy
Photon Counting
Optical and LOS Sensors
Talk Sets

*Options: Temperature controlled or uncooled versions available. Custom packaging available

OSI Laser Diode, Inc.'s High Power SMF coupled laser modules are designed to meet the performance demands of the optical test equipment marketplace. The high peak optical power SCW Series lasers serve 1310nm through 1650nm wavelengths and are available in fully hermetic laser welded packages. These packaged lasers can include both TEC and temperature sensing thermistors and back facet monitors for superior wavelength stability over a wide temperature range.

Characteristics w/TEC: $T_a = -30^\circ\text{C}$ to 70°C ; $T_{id} = +25^\circ\text{C}$

w/o TEC: $T_a = +25^\circ\text{C}$

Conditions: $P_w = 10\ \mu\text{s}$; $D/C = 1\%$

Fiber : SMF 28e⁶; 1 meter min. fiber length for unconnectorized parts
1 meter +/- 0.1 for connectorized pigtailed

Parameters	Symbol	1330 Series			1530 Series			1630 Series			1650 Series			Units
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
Optical Power (Fiber)	P	180			180			180			180			mW
Forward Current	I_f			1000			1000			1200			1200	mA
Threshold Current	I_{th}		30			35			45			45		mA
Forward Voltage	V_f		2			2			2			2		V
Center Wavelength	λ	1290	1310	1330	1530	1550	1570	1615	1625	1635	1640	1650	1665	nm
Spectral Width	$\Delta\lambda$			8			10			12			12	nm
Cooling Capacity**	ΔT	45			45			45			45			$^\circ\text{C}$
TEC Voltage**	V_{tec}		1.2	1.6		1.2	1.6		1.2	1.6		1.2	1.6	V
TEC Current**	I_{tec}		600	800		600	800		600	800		600	800	mA
Operating Temperature Range	T_{op}	-30		70	-30		70	-30		70	-30		70	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40		85	-40		85	-40		85	-40		85	$^\circ\text{C}$

**Cooled Modules Only

Reliability data available upon request

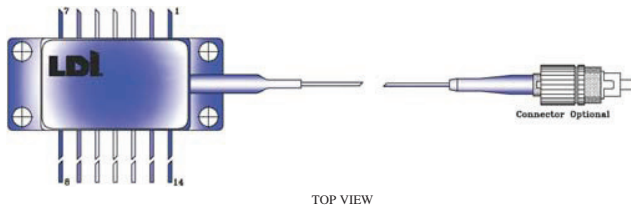
14-pin Butterfly Package and 14-pin DIP Package F Series and G Series

F Series (Floating Thermistor)	
Pin	Function
1	cooler anode (+) *
2,3,4,6,7,8,13	no connection
5	laser anode (+), ground
9	laser cathode (-)
10	ground
11,12	thermistor *
14	cooler cathode (-) *

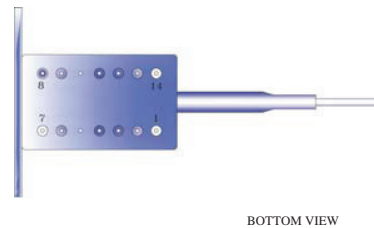
G Series (Ground Thermistor)	
Pin	Function
1	cooler anode (+) *
2,3,4,6,7,8,12,13	no connection
5	laser anode (+), ground
9	laser cathode (-)
10	ground, thermistor
11	thermistor *
14	cooler cathode (-) *

*Cooled Package Only. No connection for uncooled pkg.

14-pin Butterfly Package

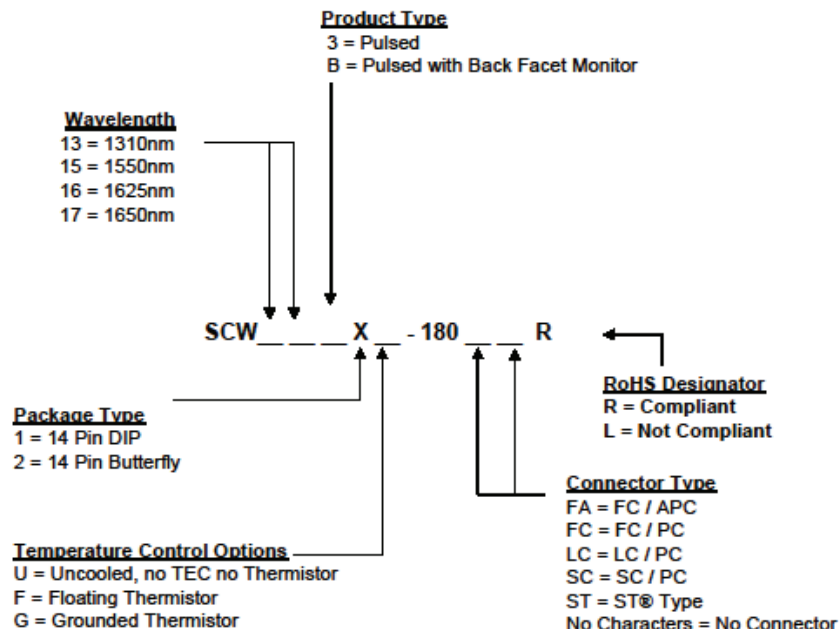


14-Pin DIP Package



Part Numbering Diagram

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
When ordering, refer to the information below.



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. 1310nm lasers are Class 3R; higher wavelengths are Class 1 lasers when operated at rated conditions.
IEC 3B for all CW models.

Warranty:

Please refer to your product purchase agreement for complete details or check with your 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.

distributed by



Ohmstrasse 4
85716 Unterschleissheim
www.imm-photonics.de

Tel.: +49 89 3214120
Fax.: +49 89 3214121
sales@imm-photonics.de

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