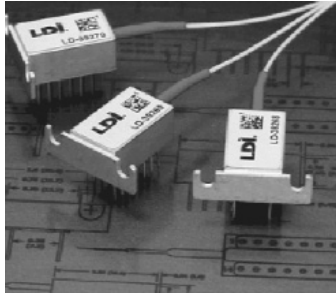


1310nm Laser Diode



Product Facts

- Power to 2 mW
- Singlemode 9/125/900 fiber
- 14-pin DIP
- Buried Hetero-Structure laser design
- High stability fiber coupling
- Hermetically sealed

Applications

- Telecommunications
- Test instrumentation

Specifications and Limits at 25 ° C

Spectral Characteristics		Power Options (uW)		
		500	1000	2000
Wavelength range	nm	1270-1330	1270-1330	1270-1330
Spectral width RMS (typ)	nm	1.7	1.7	1.7
Spectral width, FWHM (typ)	nm	2	2	2
Drive Characteristics				
Threshold current (typ; max)	mA	6;15	6;15	6;15
Modulation current (typ;max)	mA	10;25	10;25	15;25
Forward voltage maximum	V	2	2	2
Maximum optical rise/fall time	ns	0.5	0.5	0.5
Monitor Diode				
Photocurrent at P _{MAX} (min;max)	uA	50;1200	50;1200	50;1200
Maximum dark current	nA	10	10	10
Maximum capacitance	pF	6	6	6
Maximum rise/fall time	ns	2	2	2
Maximum reverse voltage	V	10	10	10
Tracking error*	dB	±0.5	±0.5	±0.5
Temperature Range				
Module operating temperature	° C	-20 to +70	-20 to +70	-20 to +70
Storage temperature	° C	-40 to +85	-40 to +85	-40 to +85
Thermoelectric Cooler				
Maximum cooler capacity	° C	45	45	45
Current for maximum capacity	A	.75	.75	.75
Maximum current	A	1.2	1.2	1.2
Voltage for maximum current	V	1.2	1.2	1.2
Thermistor				
Resistance at T = 25° C	KΩ	9.8-10.2	9.8-10.2	9.8-10.2
Temperature coefficient	%/° C	-4.4	-4.4	-4.4

Notes:

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

Ordering Information

Part Number	Description
SCW 1301X-050XX	Laser, 1310nm, 50 uW, 14-pin DIP, TEC, 9/125/900 μm pigtail
SCW 1301X-100XX	Laser, 1310nm, 1000 uW, 14-pin DIP, TEC, 9/125/900 μm pigtail
SCW 1301X-200XX	Laser, 1310nm, 2000 uW, 14-pin DIP, TEC< 9/125/900 μm pigtail

Note:

To indicate the thermistor pin assignment you require, substitute one of the following designations for the "X" in the above table:

- Use F (floating thermistor) to indicate F Series pinout
- Use G (grounded thermistor) to indicate G series pinout

To indicate the pigtail connector termination you require, substitute one of the following designations for the "XX" in the above table:

- Use FC to indicate an FC/PC type connector
- Use LC to indicate an LC/PC type connector
- Use SC to indicate an SC/PC type connector
- Use ST to indicate an ST type connector
- For no connector, omit suffix

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For technical data or samples, contact Laser Diode Inc. or visit the LDI website at: <http://www.laserdiode.com/>. Specifications subject to change. Consult Laser Diode Inc. for latest specifications. For other Tyco Electronics fiberoptic products call 1-800-522-6752 or visit <http://www.tycoelectronics.com/fiberoptics>.