

SCW 1532-500R

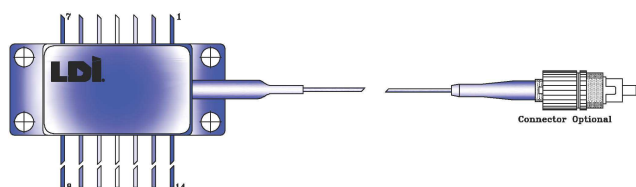
1550 nm High Power Pulsed Laser Diode Module for OSA / OTDR Applications

The SCW 1532-500R laser diode module is a High Power 1550 nm Al RWG F/P laser diode packaged in a 14 pin butterfly package. The laser diode is optically coupled to an SMF fiber pigtail and includes a thermoelectric cooler and an electrically isolated temperature sensing thermistor. The SCW 1532-500R laser diode modules are specifically designed for optical test equipment applications where high peak pulsed optical power is desired. The device is RoHS compliant.

Characteristics ($T_{amb} = 0^{\circ}$ to 65° C; $T_{ld} = 25^{\circ}$ C):

Parameter	Symbol	Conditions	Min.	Typ.	Max	Units
Optical power (fiber)	P_o	$P_w = 10$ us; D/C = 1%	400	500		mW
Forward drive current	I_f	$P_w = 10$ us; D/C = 1%		2500		mA
Threshold current	I_{th}	$P_w = 10$ us; D/C = 1%		70		mA
Forward voltage	V_f	$P_w = 10$ us; D/C = 1%		3	4	V
Center wavelength	λ	$P_w = 10$ us; D/C = 1%	1530	1550	1570	nm
Spectral width (RMS)	$\Delta\lambda$	$P_w = 10$ us; D/C = 1%		10	12	nm
Pulse Droop	P_D	$P_w = 20$ us; D/C = 1%			20	%
Thermistor resistance	R	$T_{ld} = 25^{\circ}$ C.	9.9	10.0	10.1	K Ω
Thermistor B constant	B	B25/50	3910.9	3950.0	3989.9	K
Cooling capacity	ΔT	$P_w = 10$ us; D/C = 1%	60			$^{\circ}$ C
TEC Voltage @ 40° Δ T	V_{tec}	$P_w = 10$ us; D/C = 1%		1.2	1.6	V
TEC Current @ 40° Δ T	I_{tec}	$P_w = 10$ us; D/C = 1%		800	1500	mA
Fiber Length	L	per outline	1			Meter
Operating temp. range	T_{op}	$P_w = 10$ us; D/C = 1%	0		65	$^{\circ}$ C
Storage temp. range	T_{stg}	Non operating	-40		85	$^{\circ}$ C

Detailed package drawing available upon request



Pin	Function
1	TEC (+)
2	Thermistor
3,4	N/C
5	Thermistor
6,7,8,9	N/C
10	Laser Anode
11	Laser Cathode
12	N/C
13	Case Gnd
14	TEC (-)

Personal Hazard and Handling Precautions:

ESD precautions apply.

Normal aversion reactions will protect from radiation hazards to the eye associated with devices of this kind. IEC Class 3R when operated at rated conditions.

Warranty:

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

Notice:

OSI 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.