

An OSI Systems Company

OSI Laser Diode, Inc. 4 Olsen Avenue Edison, NJ 08820 USA Voice (732) 549-9001 Fax: (732) 906-1559 Internet: www.laserdiode.com ISO 9001:2008 Certified

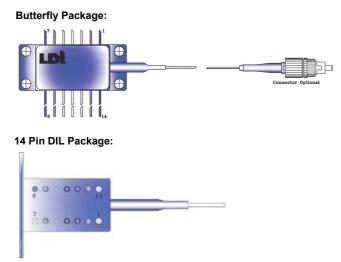
## SCW 1632-350R & SCW 1631F-350R

## 1625 nm High Power Pulsed Laser Diode Module for OSA / OTDR Applications

The SCW 1632-350R & SCW 1631F-350R laser diode modules are High Powered 1625 nm RWG F/P laser diodes packaged in 14 pin butterfly & DIL packages. The laser diodes are optically coupled to an SMF fiber pigtail and include a thermoelectric cooler and an electrically isolated temperature sensing thermistor. The SCW 1632-350R & SCW 1631F-350R laser diode modules are specifically designed for optical test equipment applications where high peak pulsed optical power is desired. The devices are RoHS compliant.

Characteristics (T <sub>amb</sub> = 0° to 65° C; T <sub>Id</sub> = 15° C):						
Parameter	Symbol	Conditions	Min.	Тур.	Max	Units
Optical power (fiber)	Po	$P_w = 10 \text{ us}; \text{ D/C} = 1\%$	275	350		mW
Forward drive current	l <sub>f</sub>	$P_w = 10 \text{ us}; \text{ D/C} = 1\%$		2100	3000	mA
Threshold current	I <sub>th</sub>	$P_w = 10 \text{ us}; \text{ D/C} = 1\%$		70		mA
Forward voltage	V <sub>f</sub>	$P_{w} = 10 \text{ us}; \text{ D/C} = 1\%$		3	4	V
Center wavelength	λ	$P_w = 10 \text{ us}; \text{ D/C} = 1\%$	1615	1625	1635	nm
Spectral width (RMS)	$\Delta\lambda$	$P_w = 10 \text{ us}; \text{ D/C} = 1\%$		10	12	nm
Thermistor resistance	R	$T_{ld} = 15^{\circ} C.$	15.44	15.67	15.90	KΩ
Thermistor B constant	В	B25/50	3910.9	3950.0	3989.9	K
Cooling capacity	$\Delta T$	$P_{w} = 10 \text{ us}; \text{ D/C} = 1\%$	60			Ъ
TEC Voltage @ 55° $\Delta$ T	V <sub>tec</sub>	$P_w = 10 \text{ us}; \text{ D/C} = 1\%$		1.3	1.6	V
TEC Current @ $55^{\circ} \Delta T$	I <sub>tec</sub>	P <sub>w</sub> = 10 us; D/C = 1%		1200	1500	mA
Fiber Length	L	per outline	1			Meter
Operating temp. range	$T_{op}$	$P_{w} = 10 \text{ us}; \text{ D/C} = 1\%$	0		65	°C
Storage temp. range	T <sub>stg</sub>	Non operating	-40		85	°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 (-)	
Pin	Function	n
Pin 1	Function TEC (+)	n
Pin 1 2,3,4,6		n
1	TEC (+)	n
1 2,3,4,6	TEC (+) N/C N/C	n Case Ground
1 2,3,4,6 7,8,13	TEC (+) N/C N/C	Case Ground
1 2,3,4,6 7,8,13 5,10	TEC (+) N/C N/C Laser Anode/	Case Ground
1 2,3,4,6 7,8,13 5,10 9	TEC (+) N/C N/C Laser Anode/ Laser Cathod Thermistor Thermistor	Case Ground
1 2,3,4,6 7,8,13 5,10 9 11	TEC (+) N/C N/C Laser Anode/ Laser Cathod Thermistor	Case Ground
1 2,3,4,6 7,8,13 5,10 9 11 12	TEC (+) N/C N/C Laser Anode/ Laser Cathod Thermistor Thermistor	Case Ground

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.