

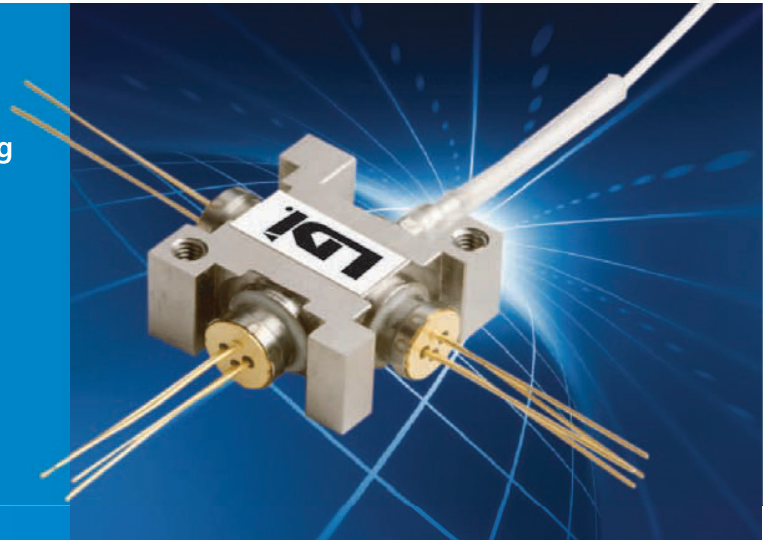
## TCW TriBiner Series: Triple Wavelength Instrument Laser

ISO 9001:2008 Certified

- Wavelengths: 650nm, 850nm, 1310nm, and 1550nm
- High Peak Optical Power
- Includes 650nm Red Laser for Fault Finding
- Compact Space Efficient Footprint
- Cost Saving Parts Count Reduction
- RoHS Compliant

### Typical Applications:

OTDR Instruments  
 Spectroscopy  
 Photon Counting  
 Optical Sensors  
 Talk Sets



OSI Laser Diode, Inc.'s TCW TriBiner Series fiber coupled lasers are designed to meet the performance demands of the optical test equipment marketplace. These high peak optical power lasers serve 850nm through 1550nm wavelengths and are available in a compact triplex package. The TriBiner incorporates a 650nm red laser for convenient fault finder capability.

### Characteristics @ $T_a = 25^\circ\text{C}$

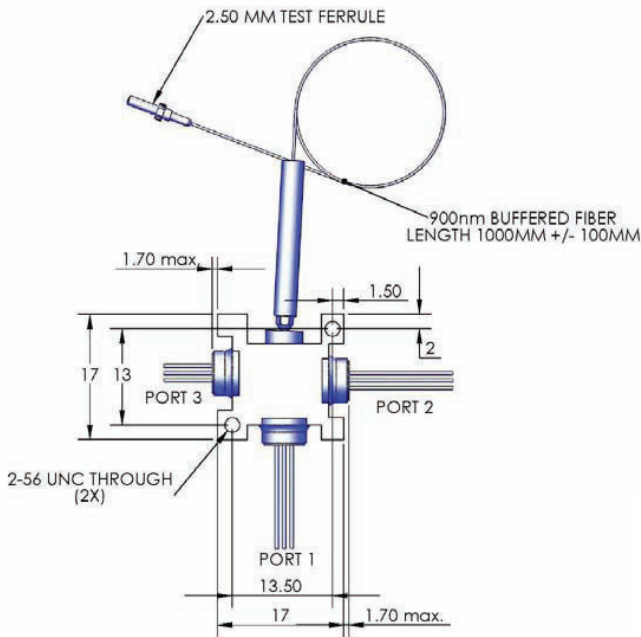
### Standard Model Specifications

Reliability data available upon request

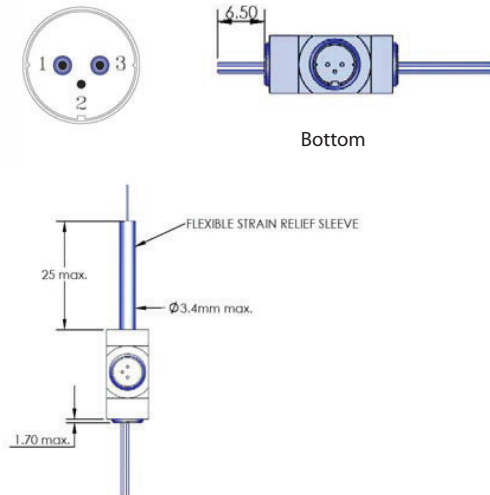
Other combinations are available upon request

		TCW6833M-XXR		TCW6353S-XXR			
	Parameters	Symbol	Conditions	Typ.	Conditions	Typ.	Units
Port 1	Optical power (fiber)	$P_o$	4A I <sub>f</sub> ; 200 ns PW; 0.1% D/C	45	1A I <sub>f</sub> ; 10 us PW; 1% D/C	85	mW
	Center wavelength	$\lambda$	4A I <sub>f</sub> ; 200 ns PW; 0.1% D/C	850	1A I <sub>f</sub> ; 10 us PW; 1% D/C	1550	nm
	Spectral width (RMS)	$\Delta\lambda$	4A I <sub>f</sub> ; 200 ns PW; 0.1% D/C	6	1A I <sub>f</sub> ; 10 us PW; 1% D/C	8	nm
	Threshold current	$I_{th}$	$P_w = 200 \text{ ns}; D/C = 0.1\%$	250	$P_w = 10 \text{ us}; D/C = 1\%$	35	mA
Port 2	Optical power (fiber)	$P_o$	1A I <sub>f</sub> ; 10 us PW; 1% D/C	225	1A I <sub>f</sub> ; 10 us PW; 1% D/C	90	mW
	Center wavelength	$\lambda$	1A I <sub>f</sub> ; 10 us PW; 1% D/C	1310	1A I <sub>f</sub> ; 10 us PW; 1% D/C	1310	nm
	Spectral width (RMS)	$\Delta\lambda$	1A I <sub>f</sub> ; 10 us PW; 1% D/C	5	1A I <sub>f</sub> ; 10 us PW; 1% D/C	5	nm
	Threshold current	$I_{th}$	$P_w = 10 \text{ us}; D/C = 1\%$	30	$P_w = 10 \text{ us}; D/C = 1\%$	30	mA
Port 3	Optical power (fiber)	$P_o$	40mA I <sub>f</sub>	0.5	40mA I <sub>f</sub>	0.5	mW
	Center wavelength	$\lambda$	40mA I <sub>f</sub>	650	40mA I <sub>f</sub>	650	nm
	Threshold current	$I_{th}$		25		25	mA
Common	Operating temp. range	$T_{op}$	@ rated drive conditions	-20 to 50	@ rated drive conditions	-20 to 50	$^\circ\text{C}$
	Storage temp. range	$T_{stg}$	non operating	-40 to 85	non operating	-40 to 85	$^\circ\text{C}$
	Fiber Length	L	per mechanical outlines	1	per mechanical outlines	1	Meter
	Fiber Type	$F_t$		62.5/ 125/ 900 um MMF		9/ 125/ 900 um SMF	

## Combiner Package and Pin Out



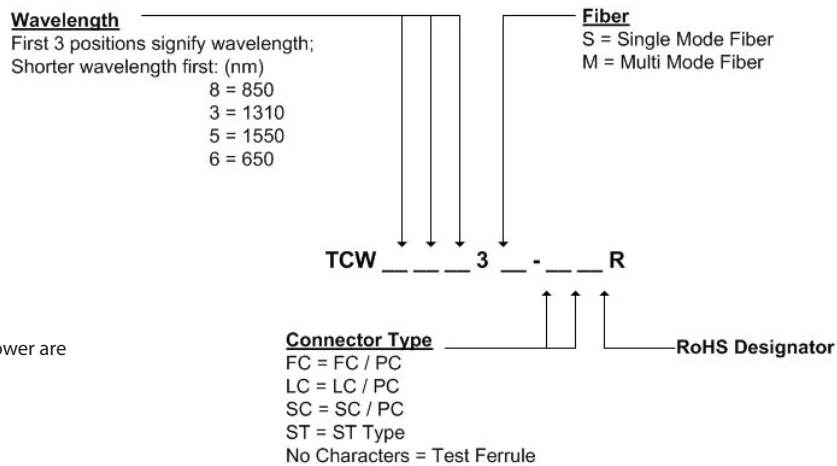
Model	Port	Laser	Pin 1	Pin 2	Pin 3
TCW6833M	1	850nm	NC	Cathode (case)	Anode
	2	1310nm	NC	Anode (case)	Cathode
	3	650nm	PD Anode	Laser Anode, PD Cathode (Case)	Laser Cathode
TCW6353S	1	1550nm	NC	Anode (case)	Cathode
	2	1310nm	NC	Anode (case)	Cathode
	3	650nm	PD Anode	Laser Anode, PD Cathode (Case)	Laser Cathode



Detailed package drawings are available upon request.  
Standard fiber length is +/- 0.1 meter.

## Part Numbering Diagram

When ordering, refer to the numbering diagram below.



Other combinations of wavelength and power are available upon request.

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](http://www.laserdiode.com)

### Personal Hazard and Handling Precautions:

Handle optical fiber with normal care, avoiding stretch, tension, 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 3B Laser**

### Warranty:

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