

- Wavelengths: 850nm, 1310nm, 1550nm, 1625nm and 1650nm
- High Peak Optical Power
- 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 MCW Combiner 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 1650nm wavelengths and are available in a compact duplex package.

Characteristics @ T_a= 25°C

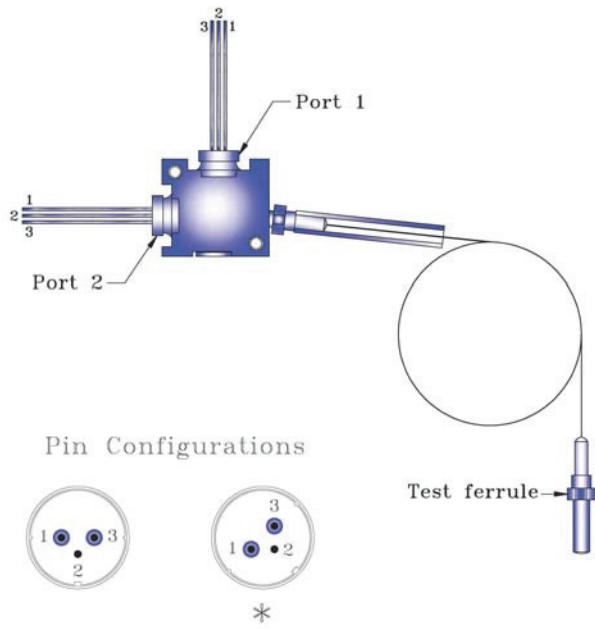
Standard Model Specifications

Reliability data available upon request

Other combinations are available upon request

| | Parameters | Symbol | MCW833M-XXR | | MCW353S-XXR | | MCW563S-XXR | | Units |
|--------|-----------------------|------------------|---|------|--------------------------------------|------|--------------------------------------|------|-------|
| | | | Conditions | Typ. | Conditions | Typ. | Conditions | Typ. | |
| Port 1 | Optical power (fiber) | P _o | 4A I _f ; 200 ns PW; 0.1% D/C | 50 | 1A I _f ; 10 us PW; 1% D/C | 100 | 1A I _f ; 10 us PW; 1% D/C | 70 | mW |
| | Center wavelength | λ | 4A I _f ; 200 ns PW; 0.1% D/C | 850 | 1A I _f ; 10 us PW; 1% D/C | 1550 | 1A I _f ; 10 us PW; 1% D/C | 1625 | nm |
| | Spectral width (RMS) | Δλ | 4A I _f ; 200 ns PW; 0.1% D/C | 6 | 1A I _f ; 10 us PW; 1% D/C | 8 | 1A I _f ; 10 us PW; 1% D/C | 8 | nm |
| | Threshold current | I _{th} | R _w = 200 ns; D/C = 0.1% | 250 | P _w = 10 us; D/C = 1% | 35 | P _w = 10 us; D/C = 1% | 45 | mA |
| Port 2 | Optical power (fiber) | P _o | 1A I _f ; 10 us PW; 1% D/C | 250 | 1A I _f ; 10 us PW; 1% D/C | 100 | 1A I _f ; 10 us PW; 1% D/C | 70 | mW |
| | Center wavelength | λ | 1A I _f ; 10 us PW; 1% D/C | 1310 | 1A I _f ; 10 us PW; 1% D/C | 1310 | 1A I _f ; 10 us PW; 1% D/C | 1550 | nm |
| | Spectral width (RMS) | Δλ | 1A I _f ; 10 us PW; 1% D/C | 5 | 1A I _f ; 10 us PW; 1% D/C | 5 | 1A I _f ; 10 us PW; 1% D/C | 8 | nm |
| | Threshold current | I _{th} | P _w = 10 us; D/C = 1% | 30 | P _w = 10 us; D/C = 1% | 30 | P _w = 10 us; D/C = 1% | 35 | mA |
| Common | Operating temp. range | T _{op} | @ rated drive conditions -20 to 50 | | @ rated drive conditions -20 to 50 | | @ rated drive conditions -20 to 50 | | °C |
| | Storage temp. range | T _{stg} | non operating -40 to 85 | | non operating -40 to 85 | | non operating -40 to 85 | | °C |
| | Fiber Length | L | per mechanical outlines 1 | | per mechanical outlines 1 | | per mechanical outlines 1 | | Meter |
| | Fiber Type | F _t | 62.5/ 125/ 900 um MMF | | 9/ 125/ 900 um SMF | | 9/125/900 um SI SMF | | |

Combiner Package and Pin Out



| Model | Port | Laser | Pin 1 | Pin 2 | Pin 3 |
|---------|------|--------|-------|----------------|---------|
| MCW833M | 1 | 850nm | NC | Cathode (case) | Anode |
| | 2 | 1310nm | NC | Anode (case) | Cathode |
| MCW353S | 1 | 1550nm | NC | Anode (case) | Cathode |
| | 2 | 1310nm | NC | Anode (case) | Cathode |
| MCW563S | *1 | 1550nm | NC | Anode (case) | Cathode |
| | 2 | 1625nm | NC | Anode (case) | Cathode |

Note: 1650nm available upon request

Detailed package drawings are available upon request.
Standard fiber lengths: 1 meter +/- 0.1 meter

Part Numbering Diagram

When ordering, refer to the numbering diagram below.

Wavelength

First 2 positions signify wavelength;
Shorter wavelength first: (nm)

8 = 850
3 = 1310
5 = 1550
6 = 1625
7 = 1650

Fiber

S = Single Mode Fiber
M = Multi Mode Fiber

MCW _ _ 3 _ _ R

Connector Type

FC = FC / PC
LC = LC / PC
SC = SC / PC
ST = ST Type
No Characters = Test Ferrule

RoHS Designator

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

Personal Hazard and Handling Precautions:

Handle optical fiber with normal care, avoiding stretch, tension, kink or bend abuse. ESD precautions apply. **Class 3B Laser.**
Laser light emitted from any diode laser may be harmful to the human eye. Avoid looking directly into the diode laser aperture when device is in operation.

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.