OSI LaserDiode, Inc.
An OSI Systems Company

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MCW Combiner
Dual Wavelength Instrument Laser

ISO 9001:2008 Certified

- **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.

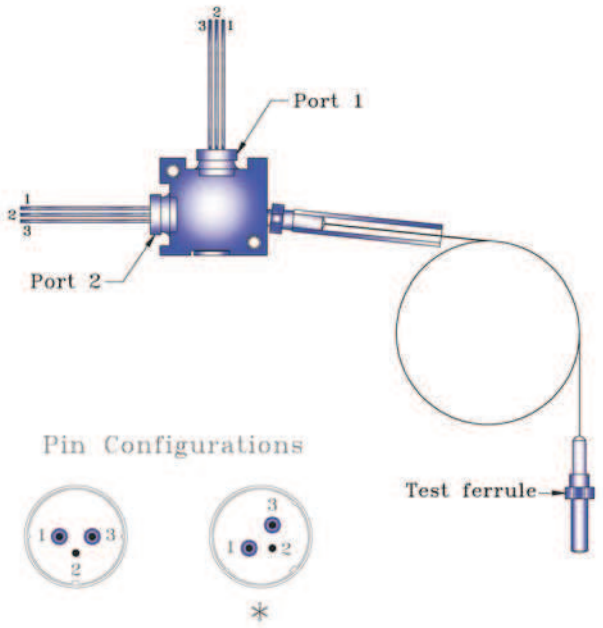
Characteristics @ T_a= 25˚C — Standard Model Specifications

Reliability data available upon request

Other combinations are available upon request

			MCW833M-XXR		MCW353S-XXR		MCW563S-XXR		
	Parameters	Symbol	Conditions	Typ.	Conditions	Typ.	Conditions	Typ.	Units
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}	P_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.