

DATASHEET**Diode Lasers****FACTOR SERIES
FIBER-COUPLED DIODE LASER MODULE**

The FACTOR Series offers the highest efficiencies and best reliability for pump wavelengths in the range of 88x nm, 793 nm and 976 nm for pumping Nd^{3+} , Tm^{3+} and Yb^{3+} doped materials respectively. It is available between 1 and 22 single emitters, ranging from power levels of a few Watts up to 400 W.

**FEATURES**

- Robust package
- Fixed fiber
- Back reflection filter for 1720 nm to 2100 nm laser light

APPLICATIONS

- Fiber laser pumping

**Coherent, Inc.**

5100 Patrick Henry Drive, Santa Clara, CA 95054
p. (800) 527-3786 | (408) 764-4983
f. (408) 764-4646

tech.sales@coherent.com www.coherent.com

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Parameter	MDL793FCSE200HS22.10FACTOR202
Package	Fiber-Coupled Single Emitters
OPTICAL PARAMETERS ¹	
Center Wavelength Range ³ (nm)	793
Center Wavelength Tolerance ³ (nm)	±3
Output Power ² (W)	200
Operating Condition	CW
Spectral Width (90% power content) (nm)	≤4
Wavelength Locked Output Power Range	-
Slope Efficiency (W/A)	≥18
Wavelength Temp. Coefficient (nm/°C)	~0.27
Numerical Aperture (NA)	≥95% in 0.18
FIBER PARAMETERS ⁵	
Fiber Core Diameter (μm)	202 ±2
Fiber Cladding Diameter (μm)	242 ±2
Fiber Coating Diameter (μm)	400±25
Fiber Loose Tubing Diameter (mm)	3
Numerical Aperture (NA)	0.215 ±0.005
Fiber Length (m)	≥2
Fiber Termination	Pigtail
ELECTRICAL PARAMETERS ¹	
Power Conversion Efficiency (%)	≥40
Threshold Current (I _{TH}) (A)	≤2
Operating Current (I _{OP}) (A)	≤14
Operating Voltage (V _{OP}) (V)	≤42.5
THERMAL PARAMETERS	
Operating Temperature Range ^{2,3,4} (°C)	+20 to +30
Storage Temperature Range ^{3,4} (°C)	0 to +55
Recommended Heatsink Capacity (W)	300
Maximum Soldering Temperature for Electrical Leads (°C)	320
Maximum Soldering Time per Lead (s)	10
MECHANICAL PARAMETERS	
Size (mm ³) [W x D x H]	97 x 76 x 12.5
Weight (kg)	0.65

Notes:

- COHERENT
1. Based on 25°C reference temperature.
 2. Reduced lifetime if used above nominal operating conditions.
 3. Coherent, Inc. upon request.
 4. 5100 Patrick Henry Drive, Santa Clara, CA 95054
 5. Non-detachable fiber.
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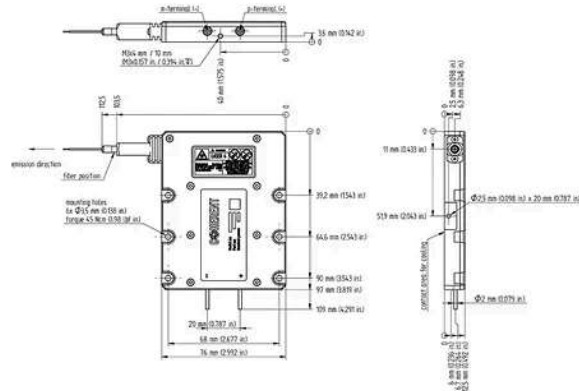
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