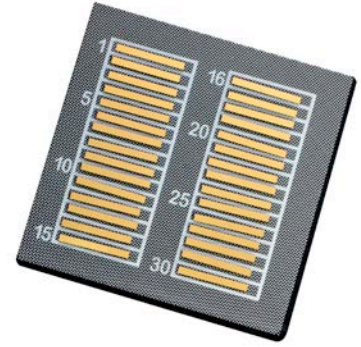


Unmounted Diode Laser Bars (UMBs), 1060 nm



High-Power Diode Laser Bars for Pumping and Direct-Diode Applications

DEVICE SPECIFICATIONS ^{1,2,3,4}	40W 20FFX1mm	100W 50FFX1.5mm
Polarization	TE	TE
Rated Power (W) (at T _j ≤55°C)	60	100
Fill Factor (%)	20	50
Number of Emitters	19	49
Emitter Width (μm)	100	100
Emitter-to-Emitter Pitch (μm)	500	200
Cavity Length (mm)	1	1.5
Centroid Wavelength (nm)	1060 ±20	1060 ±20
Spectral Width (nm)	<10	<10
Wavelength Temperature Coefficient (nm/°C)	0.4	0.4
Fast Axis Divergence (degrees) (FWHM)	<35 (30 typical)	<35 (30 typical)
Slow Axis Divergence (degrees) (FWHM)	<7	<7
Threshold Current (A)	<4 (2 typical)	<13 (10 typical)
Operating Current (A)	<49	<135
Operating Voltage (V)	<1.7	<1.7

¹ Wavelength specifications are based on testing of unmounted bars under low current, low duty cycle, short-pulsewidth test conditions. Contact factory for details.

² Bars are qualified on a Coherent conduction-cooled package (CCP) operated at full power and 25°C. Customers' results may vary as a function of packaging stress, packaging thermal resistance, operating power, and temperature.

³ Specifications listed here apply at beginning of life. Operating current at end of life is 120% the operating current at beginning of life.

⁴ Please consult the factory for any requirements not listed, including the following options:

- Centroid wavelength and spectral width requirements other than listed here.
- Optical output powers other than listed here.
- Emitter aperture widths other than listed here.

OPERATION NOTES:

- 1) Negative current transients greater than 25 μA and/or reverse voltages >3V can destroy the device.



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

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Unmounted Diode Laser Bars. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative MC-016-15-0M0520Rev.A Copyright ©2020 Coherent, Inc.