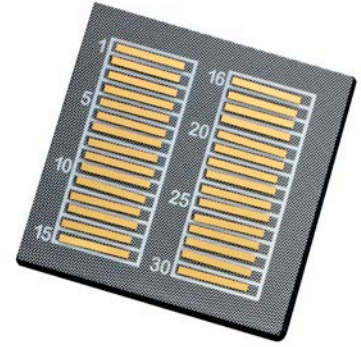


Unmounted Diode Laser Bars (UMBs), 965-985 nm



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

DEVICE SPECIFICATIONS ^{1,2,3}	60W 10FFx4 mm	100W 18FFx4 mm	150W 30FFx4 mm
Bar Geometry	10FFx4mm	18FFx4mm	30FFx4mm
Polarization	TE	TE	TE
Rated Power (W) (at T _j ≤50°C)	60	100	150
Fill Factor (%)	10	18	30
Number of Emitters	10	19	19
Emitter Width (µm)	100	90	150
Emitter-to-Emitter Pitch (µm)	1000	500	500
Cavity Length (mm)	4	4	4
Centroid Wavelength Available ⁴ (nm)	965 to 985	965 to 985	965 to 985
Centroid Wavelength, Standard (nm) (at 25°C)	975 ±10	975 ±10	975 ±10
Spectral Width, Standard (nm) (FWHM)	<10	<10	<10
Wavelength Temperature Coefficient (nm/°C)	0.4	0.4	0.4
Fast Axis Divergence (degrees) (FWHM)	31	31	31
Slow Axis Divergence (degrees) (FWHM)	<10	<10	<10
Threshold Current (A)	5 typical	8 typical	14 typical
Operating Current (A)	<70 (62 typical)	<120 (110 typical)	<175 (165 typical)
Operating Voltage (V)	<1.7 (1.5 typical)	<1.7 (1.5 typical)	<1.7 (1.5 typical)

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

3 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.

4 Contact factory for availability.

OPERATION NOTES:

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



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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-019-15-0M0520Rev.A Copyright ©2020 Coherent, Inc.