

# Onyx MCCP 9000-808

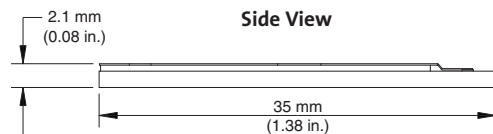
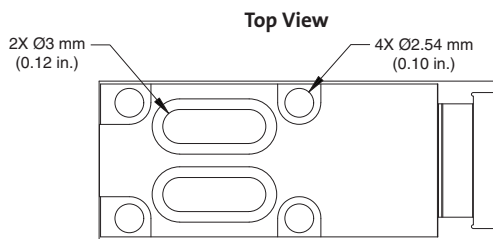
9000 Series 808 nm Diode Laser Bars

## Features

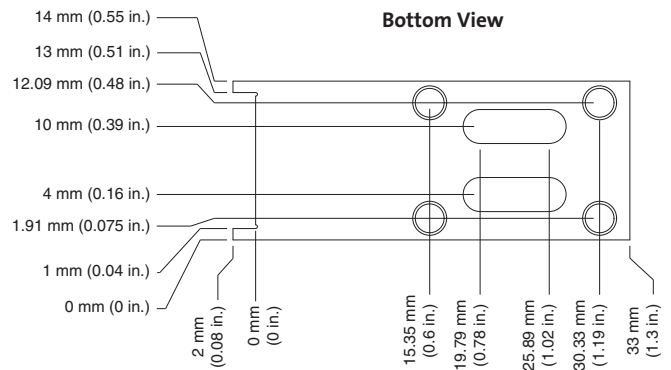
- 808 nm  $\pm 3$  nm or  $\pm 10$  nm
- 40 Watts, 60 Watts, 80 Watts, or 100 Watts
- CW, QCW, or ON-OFF (“Hard Pulsed”) operation
- Stackable using Coherent 9013 platforms
- 2.1 mm vertical pitch
- Fast and slow axis collimation options available
- Water-cooled



## Mechanical Specifications



**Front View**



**Superior Reliability & Performance**

# Onyx™ MCCP 9000-808

## 9000 Series 808 nm Diode Laser Bars

### Device Specifications

	40 Watts	60 Watts	80 Watts	100 Watts
Center Wavelength <sup>1</sup> (nm)	808	808	808	808
Center Wavelength Tolerance (nm)	±3 or ±10	±3 or ±10	±3 or ±10	±3 or ±10
Bar Spectral Width (FWHM)(nm)	<4	<4	<4	<4
Coolant Temperature <sup>2</sup> (°C)	20	20	20	20
Bar Pitch (mm)	2.1	2.1	2.1	2.1
Divergence FWHM (no lenses)				
Slow Axis (typical)(deg.)	6	6	6	6
Fast Axis (typical)(deg.)	35	35	35	35
Divergence FWHM (with fast lens)				
Slow Axis (typical)(deg.)	6	6	6	6
Fast Axis (deg.)	<0.25	<0.25	<0.25	<0.25
Divergence FWHM (with fast and slow lens) (19 emitters only)				
Slow Axis (deg.)	<4.5			
Fast Axis (deg.)	<0.25			
Thermal Resistance (°C/W)	0.25	0.25	0.25	0.25
Maximum Coolant Pressure (psi)	65	65	65	65
Typical Coolant Pressure (psi)	35	35	35	35
Coolant Flow Rate Per Bar (l/min.)	>0.25	>0.25	>0.35	>0.35
Maximum Operating Current (A)	45	67	95	112
Threshold Current (typical)(A)	9	14	23	23
Operating Voltage (V)	<1.9	<1.9	<1.9	<1.9
Conversion Efficiency (%)	>50	>50	>50	>50
Series Resistance (Ω)	0.005	0.005	0.005	0.005
Emitter Dimensions (W x H)	150 x 1	200 x 1	200 x 1	200 x 1
Emitter Spacing (center to center)(μm)	500	400	400	400
Number of Emitters	19	25	25	25
Polarization	TE	TE	TE	TE
Slope Efficiency (typical)(W/A)	1.2	1.2	1.2	1.25
Storage Temperature (°C)	5 to 40	5 to 40	5 to 40	5 to 40

<sup>1</sup> Additional wavelengths are available; please contact Coherent.

<sup>2</sup> The following water conditions must be met: Operation at temperatures below the dew point requires the use of Class D breathing air environment; deionized water is required; conductivity should be maintained at 2 to 4 microsiemens or 250K ohms to 500K ohms; the pH should be maintained at a range from 7.0 to 7.5; water filter should be rated <30 microns.

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 Onyx Diode Laser Bars. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative.



[www.Coherent.com](http://www.Coherent.com)

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