

Onyx MCCP 9000-940

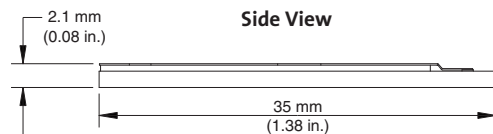
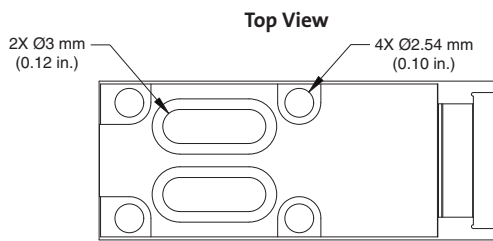
9000 Series 940 nm Diode Laser Bars

Features

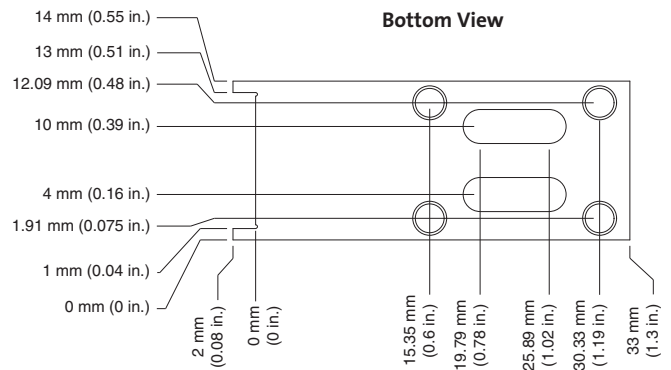
- 940 nm \pm 10 nm
- 40 Watts, 60 Watts, or 80 Watts
- CW, QCW, or ON-OFF (“Hard Pulsed”) operation
- Stackable using Coherent 9012 and 9013 platforms
- 2.1 mm vertical pitch
- Fast and slow axis collimation options available
- Water-cooled



Mechanical Specifications



Front View



Superior Reliability & Performance

Onyx™ MCCP 9000-940

9000 Series 940 nm Diode Laser Bars

Device Specifications

	40 Watts	60 Watts	80 Watts	100 Watts
Center Wavelength ¹ (nm)	940	940	940	940
Center Wavelength Tolerance (nm)	±10	±10	±10	±10
Bar Spectral Width (FWHM)(nm)	<5	<5	<5	<5
Coolant Temperature ² (°C)	20	20	20	20
Bar Pitch (mm)	2.1	2.1	2.1	1.6
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)	0.3	0.3	0.3	0.3
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	70	85	110
Threshold Current (typical)(A)	7	11	15	15
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)	1.1	1.1	1.1	1.15
Storage Temperature (°C)	5 to 40	5 to 40	5 to 40	5 to 40

¹ Additional wavelengths are available; please contact Coherent.

² 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 or contact your local Sales or Service Representative.



www.Coherent.com

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