



FAP 800 Series

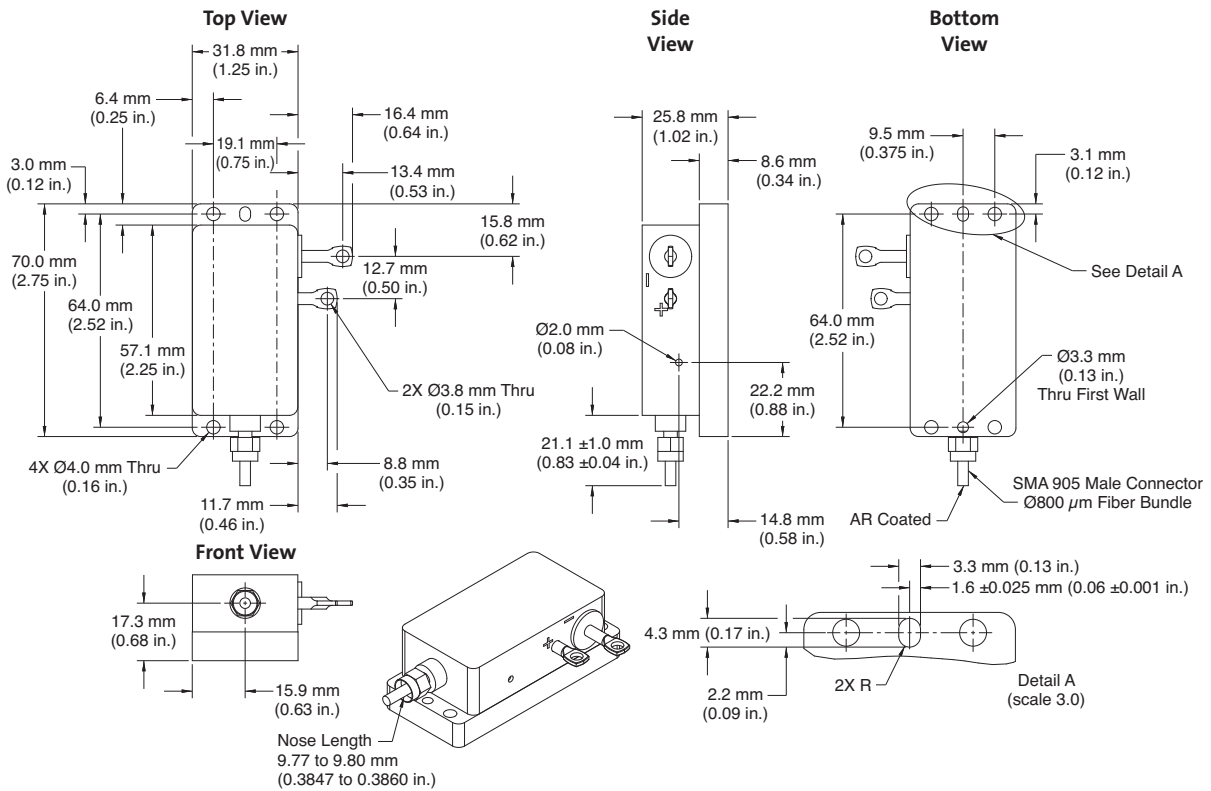
High-Brightness Fiber-Coupled Bars



Features

- High reliability
- High efficiency
- High brightness
- Rugged construction

Mechanical Specifications



Superior Reliability & Performance

FAP 800 Series

High-Brightness Fiber-Coupled Bars

Device Specifications	Part Number	1080859	1057746	1049769	1059281
	Description	FAP800-16W-804.0to810.0-F<3.0-25C-STD	FAP800-16W-805.0to811.0-F<3.5-25C	FAP800-30W-792.0to798.0-F<3.5-25C-STD	FAP800-30W-805.0to811.0-F<3.5-25C
Optical Specifications ¹	CW Output Power (W)	16	16	30	30
	Center Wavelength ² (nm)	807	808	795	808
	Center Wavelength Tolerance (nm)	±3.0	±3.0	±3.0	±3.0
	Spectral Width ² (nm)	<3.0	<3.5	<3.5	<3.5
	Wavelength Temp. Coefficient (nm/°C)	0.28	0.28	0.28	0.28
	Beam Divergence ³ (NA)	<0.16	<0.14	<0.16	<0.14
	Beam Diameter (µm)	810	810	810	810
Electrical Characteristics - Typical	Slope Efficiency (W/A)	>0.8	>0.8	>0.8	>0.8
	Conversion Efficiency (%)	>35	>35	>35	>35
	Threshold Current (A)	8 to 11	8 to 11	8 to 11	8 to 11
	Operating Current (A)	<28	<32	<46	<46
	Operating Voltage (V)	<2.0	<2.0	<2.1	<2.1
	Recommended Hookup Wire (gauge)	8 or heavier	8 or heavier	8 or heavier	8 or heavier
Thermal Specifications	Thermal Resistance (typical)(°C/W)	0.7	0.7	0.7	0.7
	Case Operating Temperature (°C)	-20 to 30	-20 to 30	-20 to 30	-20 to 30
	Case Storage Temperature (°C)	-20 to 60	-20 to 60	-20 to 60	-20 to 60
Recommended Heat Sink	Capacity (W)	100	100	100	100
	Thermal Resistance (°C/W)	<0.1	<0.1	<0.1	<0.1
Mechanical Specifications	Weight	300 g (10.3 oz.)	300 g (10.3 oz.)	300 g (10.3 oz.)	300 g (10.3 oz.)
	Fiber Connector	SMA 905	SMA 905	SMA 905	SMA 905
Device Specifications	Part Number	1057814	1071698	1056886	1065526
	Description	FAP800-40W-805.0to811.0-F<3.5-25C	FAP800-40W-820.0to830.0-F<6.0-25C	FAP800-LA-20W-970.0to990.0-F<5.0-25C	FAP800-L-30W-803.0to809.0-F<3.0-25C
Optical Specifications ¹	CW Output Power (W)	40	40	20	25
	Center Wavelength ² (nm)	808	825	980	807.5
	Center Wavelength Tolerance (nm)	±3.0	±5.0	±10.0	±2.5
	Spectral Width ² (nm)	<3.5	<6.0	<5.0	<2.5
	Wavelength Temp. Coefficient (nm/°C)	0.28	0.28	0.28	0.28
	Beam Divergence ³ (NA)	<0.14	<0.15	<0.14	<0.14
	Beam Diameter (µm)	810	810	810	810
Electrical Characteristics - Typical	Slope Efficiency (W/A)	>0.8	>0.85	>0.8	>0.8
	Conversion Efficiency (%)	>35	>35	>35	>35
	Threshold Current (A)	9 to 13	8 to 11	6 to 9	8 to 11
	Operating Current (A)	<53	<50	<34	<28
	Operating Voltage (V)	<2.2	<2.2	<2.0	<2.1
	Recommended Hookup Wire (gauge)	8 or heavier	8 or heavier	8 or heavier	8 or heavier
Thermal Specifications	Thermal Resistance (typical)(°C/W)	0.7	0.7	0.7	0.7
	Case Operating Temperature (°C)	-20 to 30	-20 to 30	-20 to 30	-20 to 30
	Case Storage Temperature (°C)	-20 to 60	-20 to 60	-20 to 60	-20 to 60
Recommended Heat Sink	Capacity (W)	100	100	100	100
	Thermal Resistance (°C/W)	<0.1	<0.1	<0.1	<0.1
Mechanical Specifications	Weight	300 g (10.3 oz.)	300 g (10.3 oz.)	300 g (10.3 oz.)	300 g (10.3 oz.)
	Fiber Connector	SMA 905	SMA 905	SMA 905	SMA 905

¹ All values measured at case temperature (T_c) = 25°C.

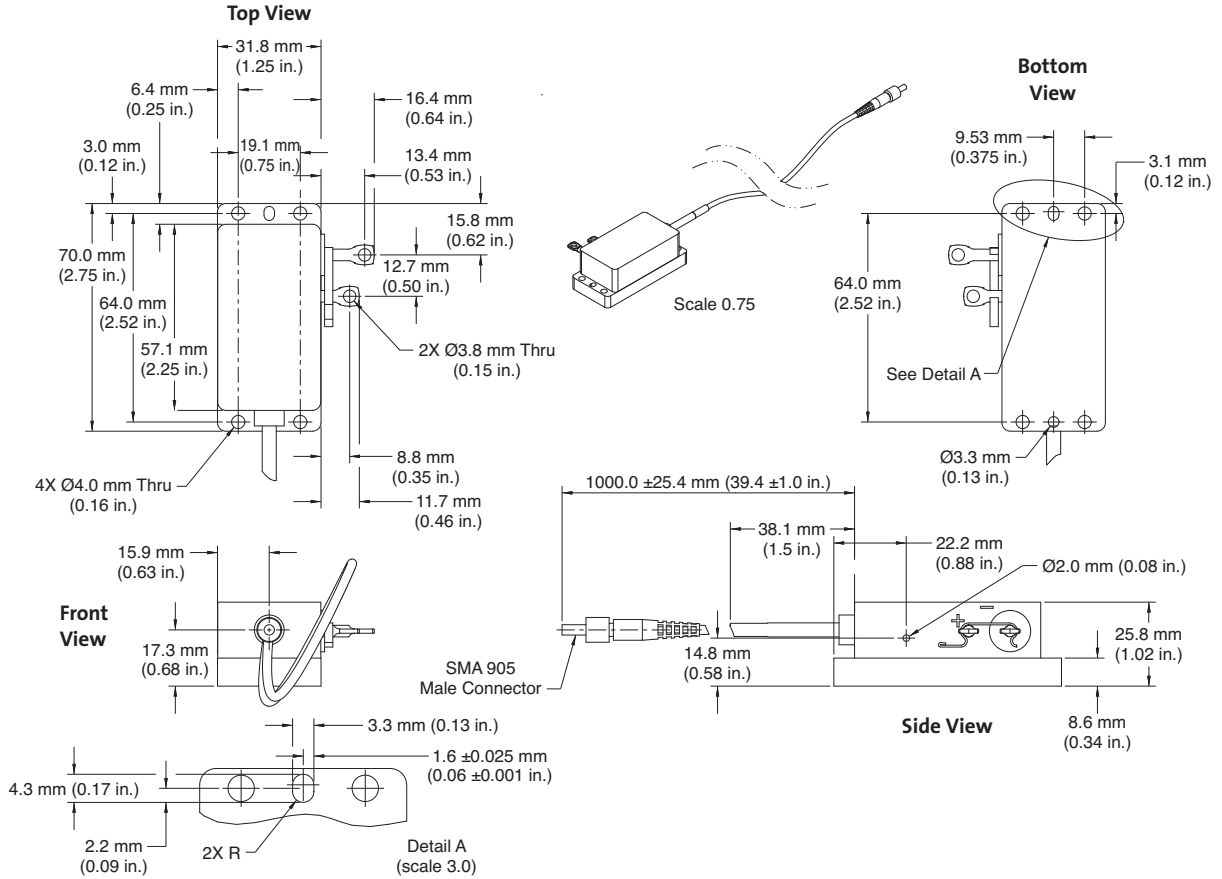
² Custom center wavelengths and custom spectral widths are available, some from stock. Consult your Coherent representative.

³ The numerical aperture of the output beam is defined as the sine of the half-angle of the divergence cone that encircles 90% of the energy.

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Mechanical Specifications



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 Fiber Array Packages. 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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