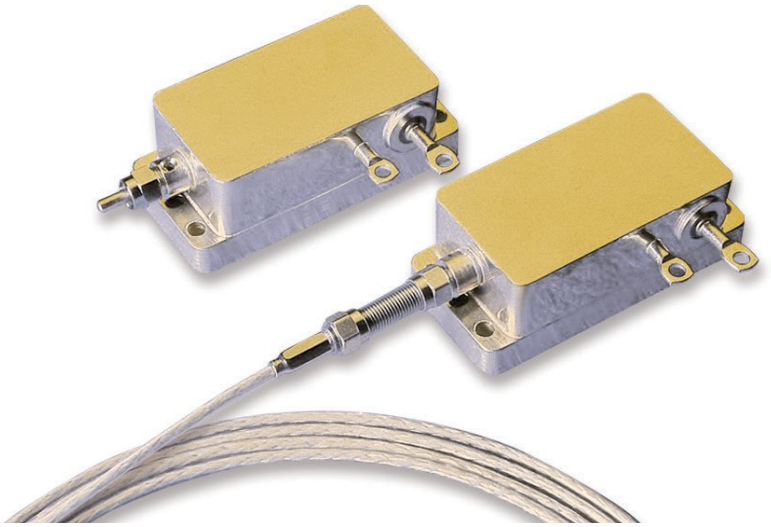
Diode Laser Components

HIGH-BRIGHTNESS FIBER-COUPLED BARS

808 nm, 30 W, Conduction-Cooled, CW

Fiber Array Packages (FAP) from Coherent are the highest quality fiber-coupled diode lasers in the industry, offering you the simplest way of delivering the output from a diode laser bar to your application.

The FAP 800 series consists of a 19-element conduction-cooled diode laser bar, lensed and coupled to an 800 µm, multimode fiber bundle array.



FEATURES

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

INCLUDING

- Solid-State Laser Pumping
- Plastic Welding
- Soldering
- Heating

COHERENT

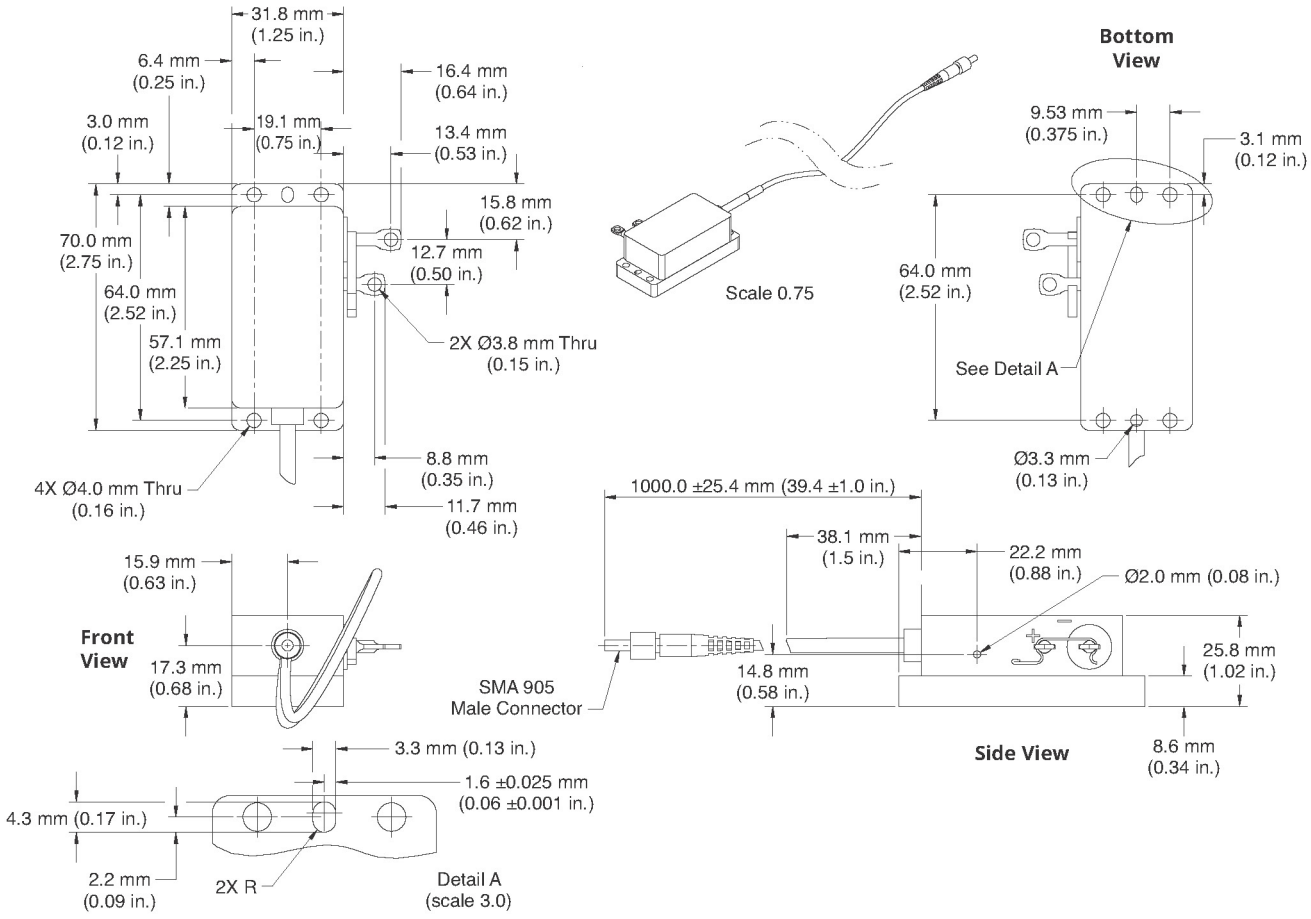
Device Specification

Optical Parameters[1]	FAP800
Center Wavelength Range[3] (nm)	808
Center Wavelength Tolerance[3] (nm)	±3
Output Power[2] (W)	30
Operating Condition	CW
Spectral Width (FWHM) (nm)	≤3.5
Slope Efficiency (W/A)	≥0.8
Wavelength Temp. Coefficient (nm/°C)	~0.28
Beam Divergence (NA)	≤0.14
Beam Diameter (µm)	810
Fiber Parameters	
Fiber Connector	SMA 905
Electrical Parameters[1]	
Power Conversion Efficiency (%)	≥35
Threshold Current (I_{TH}) (A)	8 to 11
Operating Current (I_{OP}) (A)	≤46
Operating Voltage (V_{OP}) (V)	≤2.1
Recommended Hookup Wire (gauge)	8 or heavier
Thermal Parameters[1]	
Thermal Resistance (typical) (°C/W)	0.7
Operating Temperature Range[3,4] (°C)	-20 to +30
Storage Temperature Range[3,4] (°C)	-20 to +60
Recommended Heatsink Capacity (W)	100
Thermal Resistance (°C/W)	≤0.1
Mechanical Parameters	
Size (mm^3) [W x D x H]	-
Weight (kg)	300 g (10.3 oz.)

Part Number(s)	
FAP800-30W-805.0to811.0-F<3.5-25C	1059281

Notes:
1. Data at 25°C cold plate temperature.
2. Reduced lifetime if used above nominal operating conditions.
3. Others available upon request.
4. A non-condensing environment is required for storage and operation below the ambient dew point.

Package Dimension



sales@coherent.com
www.coherent.com