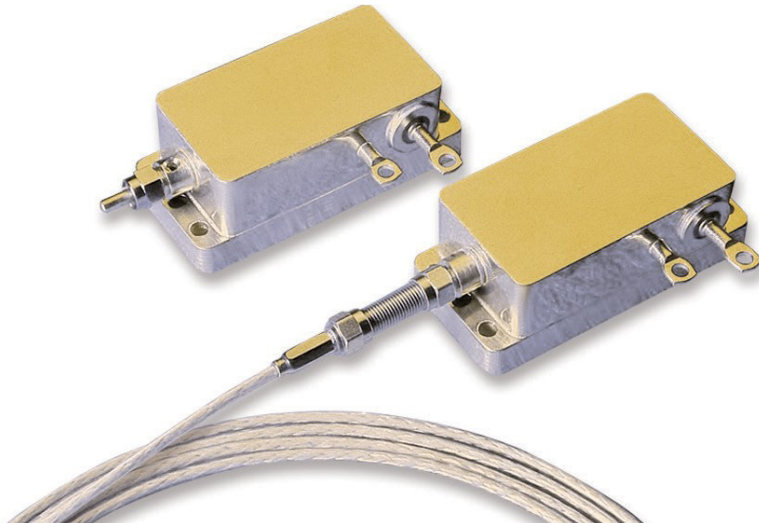


HIGH-BRIGHTNESS FIBER-COUPLED BARS

**808 nm, 50 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

Device Specification

Optical Parameters ¹		FAP800
Center Wavelength Range ³ (nm)		808
Center Wavelength Tolerance ³ (nm)		±3
Output Power ² (W)		50
Operating Condition		CW
Spectral Width (FWHM) (nm)		≤4.5
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 (%)		≥40
Threshold Current (I _{TH}) (A)		8 to 11
Operating Current (I _{OP}) (A)		≤65
Operating Voltage (V _{OP}) (V)		≤2.2
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)		
FAP800-50W-805.0to811.0-FW90E<4.5-25C		1124386

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.

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Package Dimension

