



FAP 600 Series

High-Brightness Fiber-Coupled Bars

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.

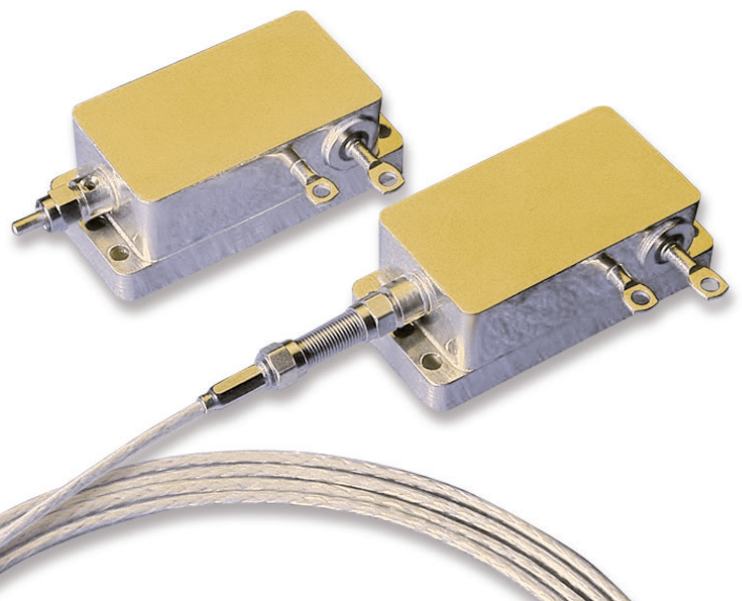
The FAP 600 series consists of a 19-element conduction-cooled diode laser bar, lensed and coupled to an 600 μm , multimode fiber bundle array.

FEATURES

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

APPLICATIONS

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



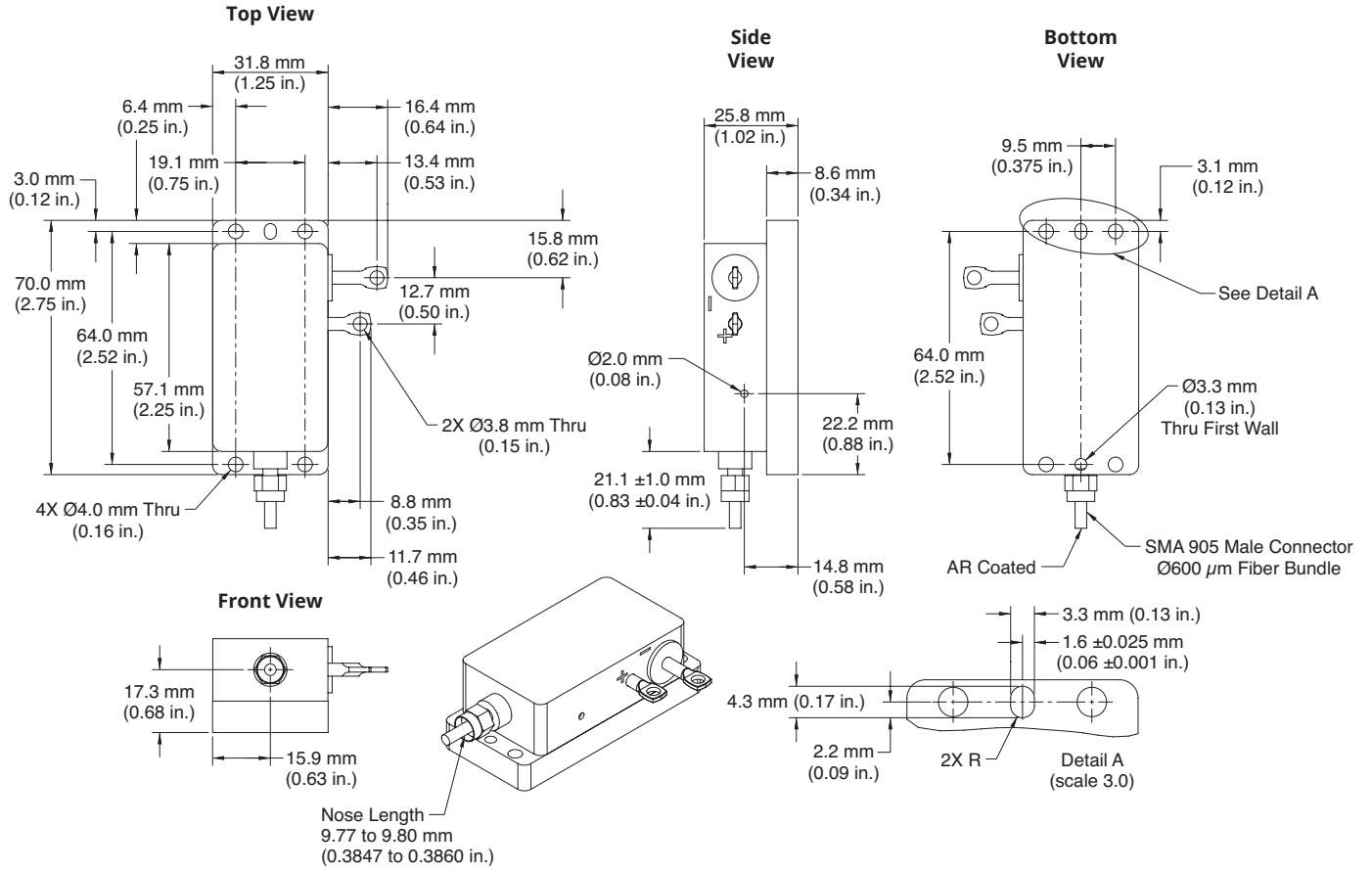
SPECIFICATIONS ¹	FAP600-25W- 805.0to811.0-F<3.5-25C	FAP600-50W-800.0to 820.0-FW90E<8.0-25C
Part Number	1041806	1276388
OPTICAL SPECIFICATIONS		
CW Output Power (W)	25	50
Center Wavelength ² (nm)	808	810
Center Wavelength Tolerance (nm)	±3.0	±10.0
Spectral Width ² (nm)	<3.5	<8.0
Wavelength Temperature Coefficient (nm/°C)	0.28	0.28
Beam Divergence ³ (NA)	<0.16	<0.16
Beam Diameter (µm)	600	600
ELECTRICAL CHARACTERISTICS (typical)		
Slope Efficiency (W/A)	>0.9	>1.0
Conversion Efficiency (%)	>40	>52
Threshold Current (A)	6 to 9	8
Operating Current (A)	<36	<55
Operating Voltage (V)	<2.0	<2.0
Recommended Hookup Wire (gauge)	8 or heavier	8 or heavier
THERMAL SPECIFICATIONS		
Thermal Resistance (typical) (°C/W)	0.7	0.7
Case Operating Temperature (°C)	-20 to 30	-20 to 30
Case Storage Temperature (°C)	-20 to 60	-20 to 60
RECOMMENDED HEAT SINK		
Capacity (W)	100	100
Thermal Resistance (°C/W)	<0.1	<0.1
MECHANICAL SPECIFICATIONS		
Weight	300 g (10.3 oz.)	300 g (10.3 oz.)
Fiber Connector	SMA 905	SMA 905

¹ All values measured at case temperature (TC) = 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.

MECHANICAL SPECIFICATIONS



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