FIBER-COUPLED SINGLE BAR DIODE LASER MODULE

808 nm, 30 W, 200 µm Ø, Conduction-Cooled, Narrow Linewidth, CW

Our fiber-coupled single bar modules deliver outstanding optical performance across a broad wavelength range from 630 nm to 2 µm, supporting output powers up to 50 W continuous wave (CW) and 250 W quasi-continuous wave (QCW). Designed for high-demand environments, these modules combine reliability, efficiency, and configurability in a compact footprint. Available with fiber core diameters starting from 100 µm, the modules offer a wide range of customizable features including line narrowing, wavelength stabilization, and integrated monitoring options for real-time performance feedback and control.

FEATURES

- Narrow linewidth of <0.5 nm
- High coupling efficiency
- High brightness
- Sealed housing
- Standard fiber coupling (HP-SMA) for 200 µm NA 0.22

INCLUDING

- VBG for wavelength stabilization

COHERENT

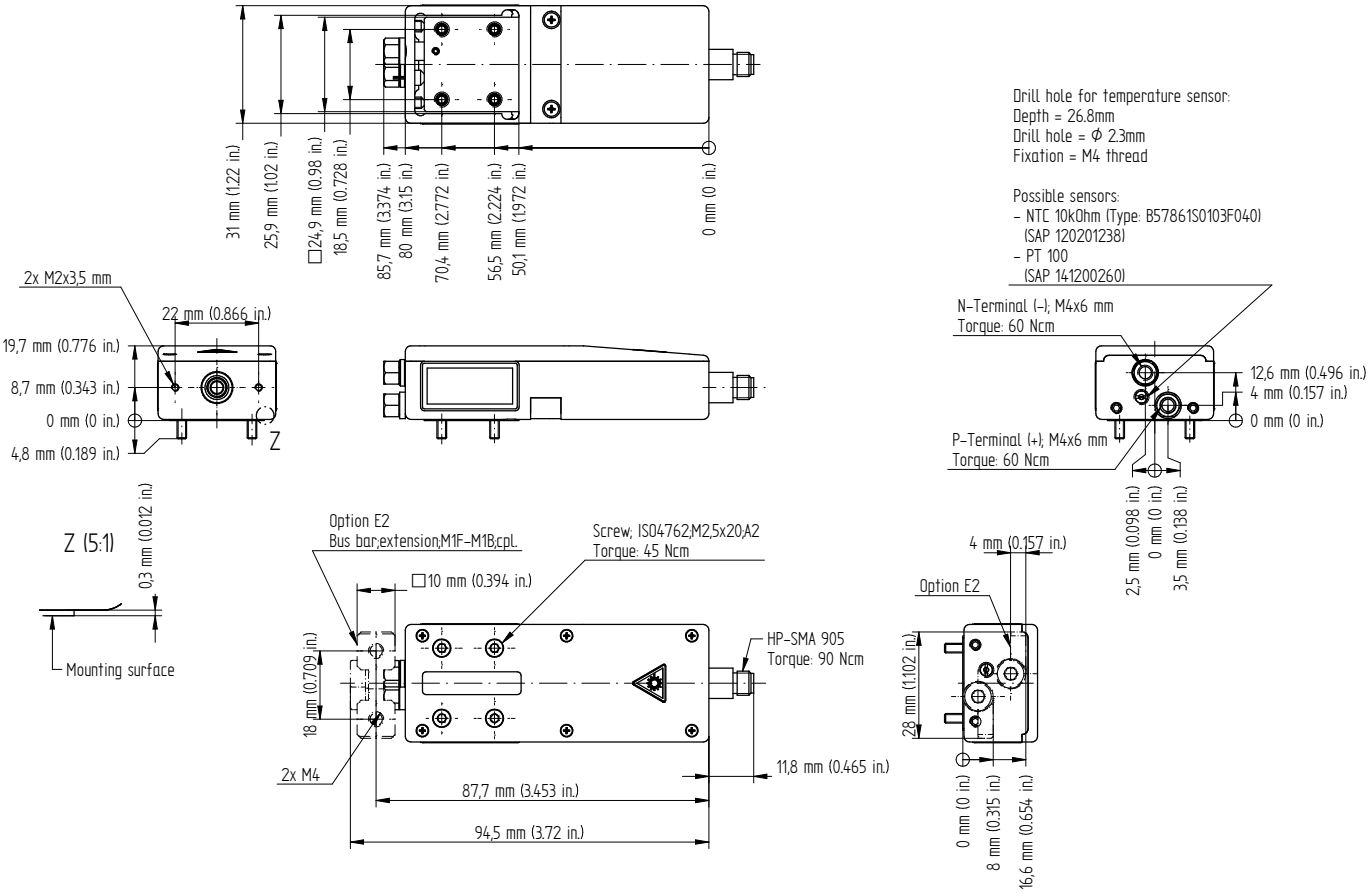
Device Specification

Optical Parameters[1]	SS2.1
Center Wavelength Range[3] (nm)	808
Center Wavelength Tolerance[3] (nm)	±0.6
Output Power[2] (W)	30
Operating Condition	CW
Spectral Width (FWHM) (nm)	≤0.5
Slope Efficiency (W/A)	≥0.5
Wavelength Temp. Coefficient (nm/°C)	~0.01[5]
Fiber Parameters	
Fiber Connector	SMA
Fiber Core Diameter (µm)	200
Fiber Cladding Diameter (µm)	
Fiber Coating Diameter (µm)	
Fiber Loose Tubing Diameter (mm)	
Numerical Aperture (NA)	0.22
Fiber Length (m)	
Fiber Termination	
Electrical Parameters[1]	
Power Conversion Efficiency (%)	≥30
Threshold Current (I_{TH}) (A)	≤9
Operating Current (I_{OP}) (A)	≤55
Operating Voltage (V_{OP}) (V)	≤1.9
Duty Cycle[3] (%)	-
Pulse Length[3] (µsec)	-
Thermal Parameters[1]	
Operating Temperature Range[2,3,4] (°C)	+20 to +30
Storage Temperature Range[3,4] (°C)	0 to +55
Recommended Heatsink Capacity (W)	≥80

Part Number(s)	
M1F2S22-808.(0,6)-30C-SS2.1O2	100405274

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.
5. Within operating temperature ±3°C.

Package Dimension



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