



F6 Series Diode Lasers

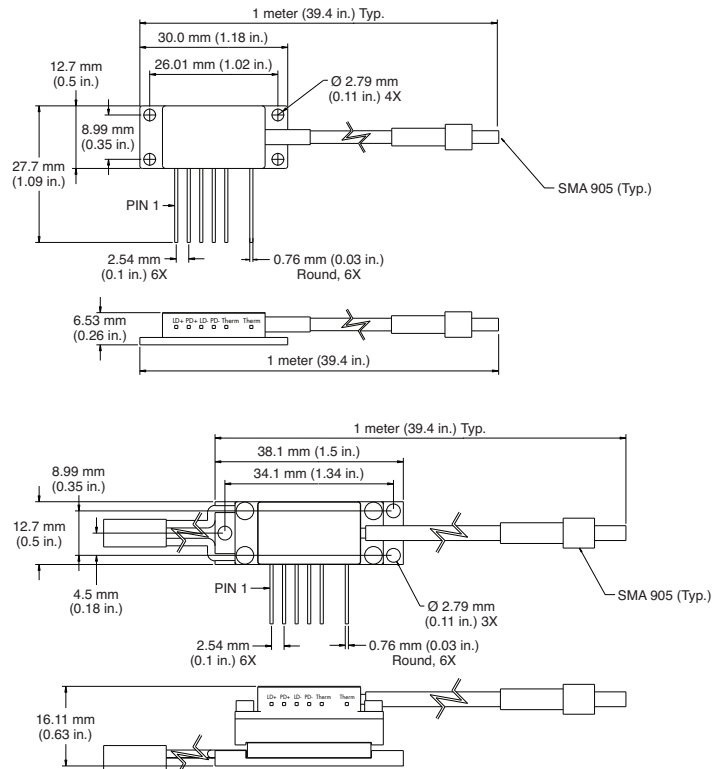
780 to 830 nm Fiber-Coupled Single-Emitters



Features

- Unique AAA™ technology for highest reliability and lifetime
- Low divergence output (<0.15 numerical aperture)
- F6 package includes integrated photodiode and thermistor
- Optional thermo-electric cooler (TEC) is available as an external accessory

Mechanical Specifications



Superior Reliability & Performance

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780 to 830 nm Fiber-Coupled Single-Emitters

Optical Characteristics

	1.0W 100 μm	1.5W 150 μm	2.4W 200 μm
Optical Output Power (W)	1.0	1.5	2.4
Fiber Core Size (diameter)(μm)	100	150	200
Numerical Aperture	<0.15	<0.15	<0.15
Center Wavelength (nm)	790 \pm 10	797.5 \pm 3	808 \pm 3
Standard options, at 25°C	808 \pm 3 810 \pm 10		
Wavelength Temperature Coefficient (nm/C)	0.28	0.28	0.28
Spectral Width (nm) (FWHM)	<3 (808) <6 (790, 810)	<3	<3
Threshold Current (mA)	<340 (290 typ.)	<640 (370 typ.)	<640 (470 typ.)
Operating Current (mA)	<1500 (1200 typ.)	<2500 (1900 typ.)	<3600 (2800 typ.)
Operating Voltage (V)	<2.1	<2.2	<2.2
Recommended Operating Temp. (°C)	25	25	25
Recommended Operating Temp. Range (°C)	-20 to 35	-20 to 35	-20 to 35
Storage Temperature Range (°C)	-40 to +60	-40 to +60	-40 to +60

Fiber Characteristics

Fiber Length (m)	1	1	1
Fiber Connector	SMA-905	FC	SMA-905
Fiber Jacket Diameter (mm)	3	3	3
Fiber Jacket Type	Orange SR-PVC	Orange SR-PVC	Orange SR-PVC
Momentary Bend Radius (inches)	0.86	0.86	0.86
Long Term Bend Radius (inches)	1.66	1.66	1.66

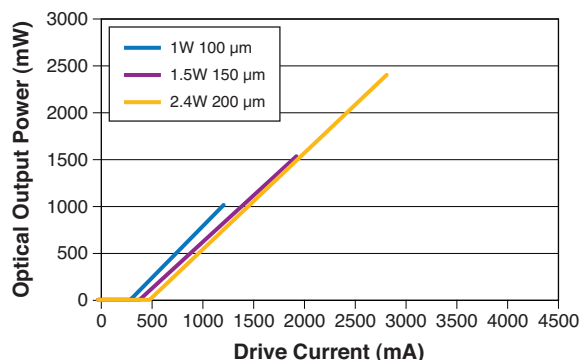
Recommended Heat Sink

Recommended Heat Sink Capacity (W)	3	4.5	6
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TEC Assembly (optional)

TEC Voltage (V (DC))	8.0
TEC Current (A)	<2.5

Optical Output Power vs Drive Current



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 HB-Diode Systems. 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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