



JENOPTIK

Fiber-coupled diode lasers: cw, passively cooled with tap water JOLD-75-CPXF-2P W

Design 215531224

Features

- High optical output power of 75 W cw
- Wavelengths: 808, 880, 915, 938 and 976 nm
- Fiber core diameter: 400 μm (NA 0.22)
- Integrated pilot laser and power monitor
- Long Lifetime > 20,000 h, high reliability

Applications

- Pumping of solid-state lasers and fiber lasers
- Material processing
- Medical applications

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Specifications (start of life)

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Operation Mode	cw, power modulation only between threshold and maximum current					
Maximum Optical Output Power	75	75	75	75	75	W
Center Wavelength at 25 °C	808	880	915	938	976	nm
Center Wavelength Variation at 25 °C	3	3	5	5	3	nm
Typical Spectral Bandwidth (FWHM)	5	5	5	5	5	nm
Maximum Spectral Bandwidth (FWHM)	6	6	6	6	6	nm
Typical Operation Current	59	60	60	60	64	A
Maximum Operation Current	65	66	66	66	70	A
Typical Threshold Current	10	9	6	6	6	A
Maximum Threshold Current	13	12	9	9	9	A
Typical Slope	1.6	1.5	1.4	1.4	1.3	W/A
Minimum Slope	1.3	1.3	1.2	1.2	1.1	W/A
Maximum Operating Voltage	4.5	4.5	4.5	4.5	4.5	V
Fiber Core Diameter, Numerical Aperture	400 µm, NA 0.22					
Fiber Connector	HP-SMA 905, both ends free standing					
Power Monitor	Infineon, SFH 229					
Pilot Laser	0.5 ... 3 mW, 650 nm ± 15 nm, 3 ... 5 V, 40 ± 15 mA, power not adjustable (only for teaching and targeting purposes before laser operation)					
Anode, Cathode Connectors	M5, M4 (e.g. socket cap screws ISO 4762)					
Signal Connector	D-Sub, male, 15 pin					
Operation Conditions	Non-condensing atmosphere					
Expected Lifetime	> 20,000 h (constant current), partly under qualification					
Cooling						
Flow Rate	> 3 l/min					
Water Temperature	8 ... 23 °C					
Water Pressure	400 kPa maximum inlet and outlet pressure, < 80 kPa pressure drop					
Water Connectors	Ø 6 mm (OD) push-in fittings					
Water Quality	Industrial water, unfiltered up to a particle size of 0.5 mm					
Diode Laser Operating Temperature	15 ... 30 °C, measured with internal temperature sensor					
Integrated Temperature Sensor	PT 100 and PT 1000, separately for each diode laser					
Note	Specify exact wavelength needed with your order					

See general user information!

Options on request: For additional designs or specifications please visit our website: www.jenoptik.com

