

JOLD-75-CPXF-2P W

Fiber-coupled diode lasers: cw, passively cooled with tap water

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)	JOLD-75-CP	JOLD-75-CPXF-2P W Design 215531224				
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	
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 \pm 15 nm, 3 5 V, 40 \pm 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					

See general user information!

Note

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

Specify exact wavelength needed with your order



