

JOLD-100-CPXF-2P W

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

Design 215533224 | 215535324

Features

- High optical output power up to 100 W cw
- Wavelengths: 808, 880, 915, 938 and 976 nm
- Fiber core diameter: 400 μm | 600 μm (NA 0.22)
- Integrated pilot laser and power monitor
- Long lifetime > 20,000 h, high reliability

Applications

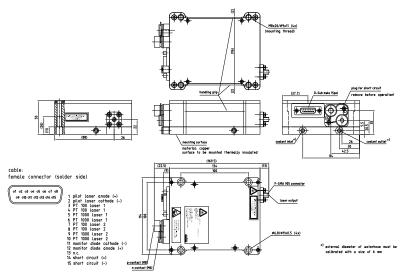
- Pumping of solid-state lasers and fiber lasers
- Material processing
- Medical applications

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Specifications (start of life)	JOLD-100-CPXF-2P W Design 215535324 JOLD-100-CPXF-2P W Design 215533224					
Operation Mode	cw / pulsed					
Maximum Optical Output Power	100	100	100	100	100	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	85	75	70	72	72	A
Maximum Operation Current	95	85	80	80	80	A
Typical Threshold Current	19	9	6	6	6	A
Maximum Threshold Current	22	12	9	9	9	A
Typical Slope	1.5	1.5	1.55	1.5	1.5	W/A
Minimum Slope	1.3	1.3	1.35	1.35	1.35	W/A
Maximum Operating Voltage	4.5	4.5	4.5	4.5	4.5	V
Fiber Core Diameter, Numerical Aperture	600 μm, NA 0.22	400 μm, NA 0.22	400 μm, NA 0.22	400 μm, NA 0.22	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	M8, M6 (e.g. socket cap screws ISO 4762)					
Signal Connector	D-Sub, male, 15 pin					
Operation Conditions	Non-condensing atmosphere					
Expected Lifetime	> 10,000 h (constant current), partly un qualification	> 20,000 h (constant current), partly under qualification				
Cooling						
Flow Rate	> 3 l/min					
Water Temperature	8 20 °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 35°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



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