

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

# Fiber-coupled diode lasers | cw, passively cooled with tap water JOLD-100-CPXF-2P W

Specifications (start of life)	JOLD-100-CPXF-2P W Design 215535324					
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	Α
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	Α
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	> 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

