



New: Fiber-Coupled Diode Lasers

cw, passively cooled, high brightness



JOLD-50-FC-11

Design 215720124

Features:

- High optical output power of 50 W cw
- Fiber core diameter: 105 μm (NA 0.15)
- Cooling via mounting plate
- Lifetime > 10,000 h, high reliability

Applications:

- Pumping of fiber lasers
- Material processing

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Preliminary Specifications (Start of Life)

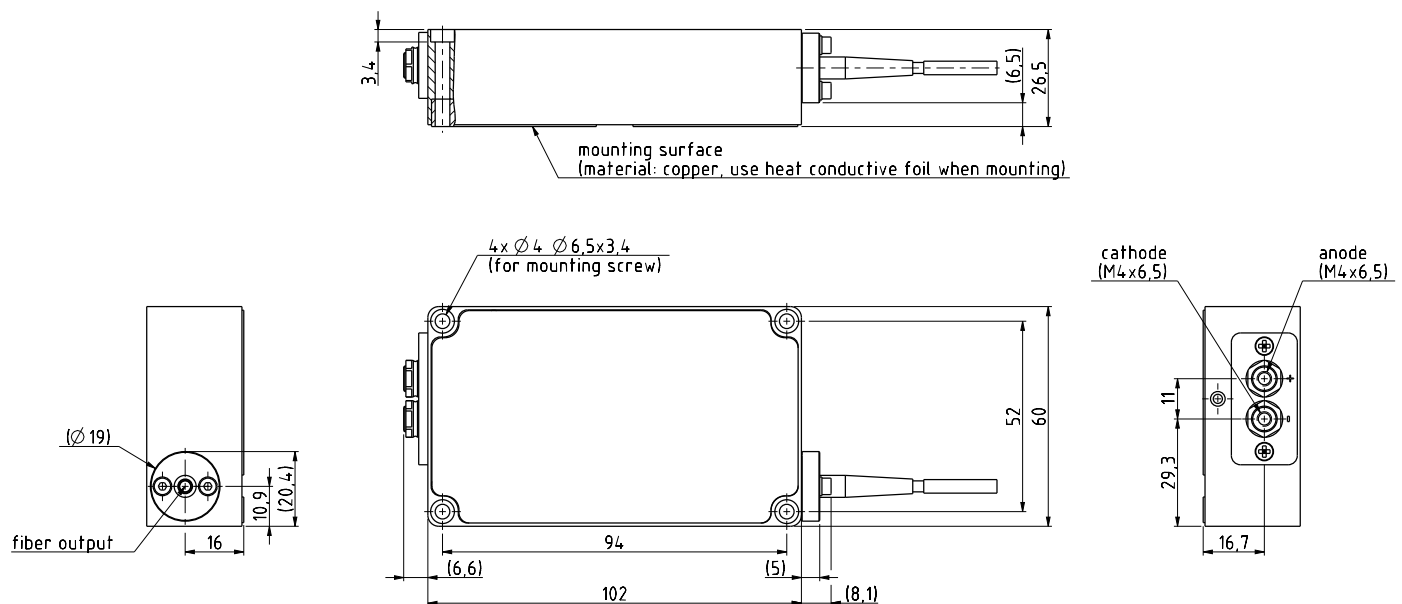
Product	JOLD-50-FC-11, Design 215720124	
Operation Mode	cw, pulsed	
Maximum Optical Output Power	50	W
Center Wavelength at 25 °C	938	nm
Center Wavelength Variation at 25 °C	3	nm
Typical Spectral Bandwidth (FWHM)	5	nm
Maximum Spectral Bandwidth (FWHM)	7	nm
Typical Operation Current	8	A
Maximum Operation Current	10	A
Typical Threshold Current	0.3	A
Maximum Threshold Current	0.4	A
Typical Slope	6.5	W/A
Minimum Slope	5.1	W/A
Typical Operating Voltage	16.5	V
Maximum Operating Voltage	20	V
Fiber Core Diameter, Numerical Aperture	105 µm, NA 0.15	
Cladding Diameter	125 µm	
Fiber Length	2 m	
Fiber Far End	Cleaved pigtail	
Power inside the Cladding	< 5%, cladding mode stripper integrated	
Integrated Filter	1030 ... 1100 nm, against back reflection	
Anode, Cathode Connectors	2x M4 socket cap screws ISO 4762 (case isolated)	
Operation Conditions	Non-condensing atmosphere	
Expected Lifetime	> 10,000 h (constant current), under qualification	

Cooling:

Mounting	Via thermally conductive foil (thickness 25 ... 100 µm) on cooled surface	
Diode Laser Operating Temperature	15 ... 30 °C at temperature sensor	
Temperature Sensor	Hole for thermal sensor, 2.5 mm diameter	
Storage Temperature	-25 ... 70 °C	

See General User Information!

Options on request: Other wavelengths



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