



MORE LIGHT

JOLD-x-QA-8A

Diode laser stack in housing: qcw, passively cooled with tap water

Design 04022100824

Features

- High optical output power up to 780 W for long pulses
- Wavelength: 808 nm
- Small and robust design, light weight (< 60 g)
- Sealed housing
- Cooling with tap water

Applications

- Pumping of solid-state lasers
- Medical applications

Diode laser stack in housing | qcw, passively cooled with tap water

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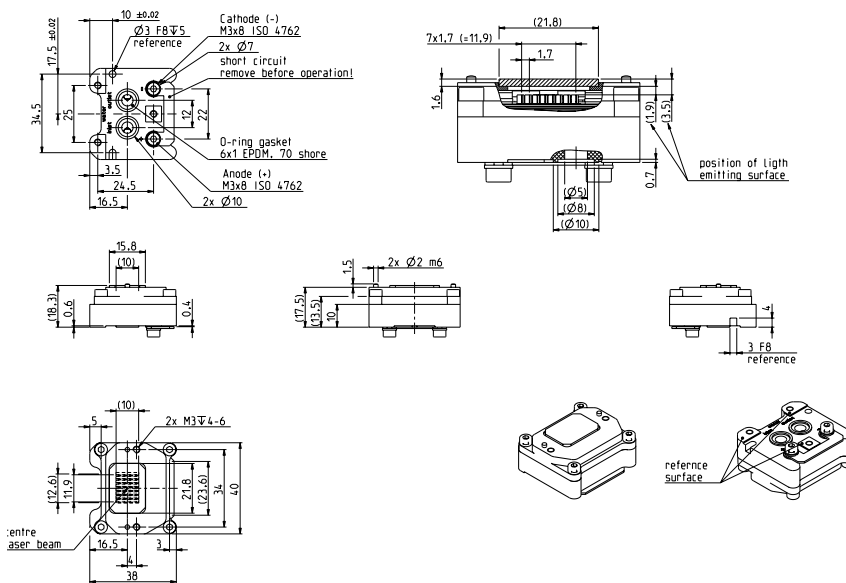
Specifications (start of life)

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Operation Mode	qcw				
Maximum Pulse Length/Duty Cycle	50 ms/15 %	100 ms/20 %	200 ms/33 %	400 ms/55 %	
Maximum Pulse Power	780	550	280	150	W
Maximum Mean Power	117	110	92	82.5	W
Maximum Pulse Energy	39	55	56	60	J
Center Wavelength at 25 °C	808	808	808	808	nm
Center Wavelength Variation at 25 °C	10	10	10	10	nm
Typical Operation Current	110	85	55	42	A
Maximum Operation Current	120	90	60	45	A
Typical Threshold Current	15	15	15	15	A
Maximum Threshold Current	20	20	20	20	A
Typical Slope	8.3	7.9	7.0	5.6	W/A
Minimum Slope	7.4	7.3	6.2	5.0	W/A
Maximum Operating Voltage	15	15	15	15	V
Typical Fast Axis Divergence 95 %	66	66	66	66	°
Typical Slow Axis Divergence 95 %	10	10	10	10	°
Spot Size (at exit window)	15 mm x 10 mm				
Anode, Cathode Connectors	Via two M3 x 8 screws (ISO 4762)				
Weight	55				g
Operation Conditions	Non-condensing atmosphere; no cleanroom needed				
Expected Lifetime	15	15	7	4	Mshots
Cooling					
Flow Rate	0.8 l/min ± 20 %				
Water Temperature	15 ... 25 °C				
Maximum Inlet Pressure	400 kPa				
Maximum Pressure Drop	100 kPa				
Water Connection	Via o-ring gaskets 6 mm x 1 mm, EPDM, 70 shore				
Water Quality	Industrial grade, anti-freeze possible, particle filter < 100 µm (not included)				
Cooling System	Do not use any material that in combination with copper would form galvanic elements (e.g. aluminum, zinc, brass)				

See general user information!

Options on request: variation number of bars, fast axis collimation



Design 220430826

pat.
EP 1977486 B1
CN 101361239 B
JP 4993317 B2
US 7801190 B2