



MORE LIGHT

JOLD-x-QA-8A

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

Design 04022100824

### Features

- High optical output power up to 2400 W qcw
- Wavelengths: 808 and 940 nm
- Small and robust design, light weight (< 60 g)
- Sealed housing
- Cooling with tap water

### Applications

- Pumping of solid-state lasers
- Material processing

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### Specifications (start of life)

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Operation Mode	qcw			
Maximum Pulse Length/Duty Cycle	0.2 ms/1 %	0.2 ms/10 %	1.5 ms/1 %	3.0 ms/4 %
Maximum Pulse Power	2400	1200	2400	2000
Center Wavelength at 25 °C	808	808	940	940
Center Wavelength Variation at 25 °C	3	3	3	3
Typical Spectral Bandwidth (FWHM)	3	3	5	5
Maximum Spectral Bandwidth (FWHM)	6	6	7	7
Typical Operation Current	285	165	300	260
Maximum Operation Current	300	180	315	275
Typical Threshold Current	23	23	16	16
Maximum Threshold Current	25	25	18	18
Typical Slope	9.2	8.5	8.5	8.2
Minimum Slope	8.6	7.6	8	7.7
Typical Operating Voltage	15.8	14.4	14.9	14.7
Maximum Operating Voltage	16.8	15.4	15.9	15.7
Typical Fast Axis Divergence 95 %	66	66	47	47
Typical Slow Axis Divergence 95 %	10.0	8.5	10.0	8.5
Spot Size (at exit window)	15 mm x 10 mm			
Anode, Cathode Connectors	Via two M3 x 8 screws (ISO 4762)			
Weight	55			
Operation Conditions	Non-condensing atmosphere; no cleanroom needed			
Expected Lifetime	> 1 GShot			
<b>Cooling</b>				
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

