



## Open Heat Sink Diode Lasers

cw & qcw, actively cooled



JOLD-x-CANN-1L  
JOLD-100-QANN-1L

Design 210470024

### Features:

- High optical output power up to 60 W cw, 100 W qcw
- High efficiency, low divergences
- Lifetime > 10,000 h, high reliability

### Applications:

- Pumping of solid-state lasers

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## Specifications (Start of Life)

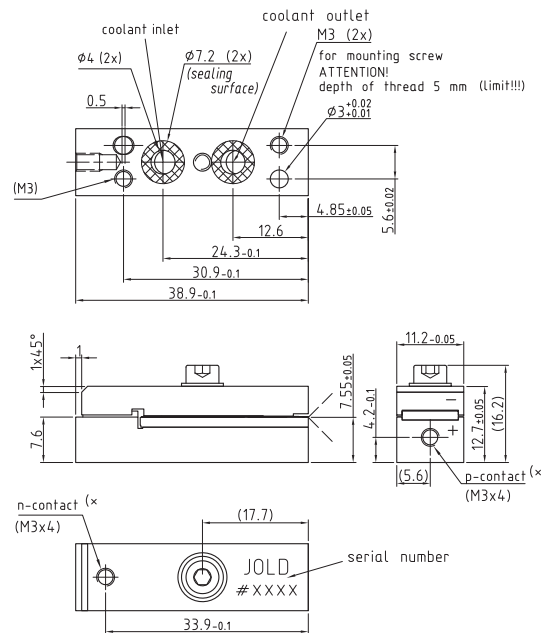
Product	JOLD-x-CANN-1L, Design 210470024			JOLD-x-QANN-1L, Design 210470024		
Operation Mode	cw, power modulation only between threshold and maximum current			qcw		
Maximum Pulse Length / Duty Cycle				≤ 0.3 ms / ≤ 20 %		
Maximum Optical Output Power	50	60	50	100	100	W
Center Wavelength at 25 °C	807	938	976	808	938	nm
Center Wavelength Variation at 25 °C	3	3	3	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	4	4	4	5	5	nm
Typical Operation Current	56	67	56	105	110	A
Maximum Operation Current	60	75	60	120	125	A
Typical Threshold Current	14	12	10	14	12	A
Maximum Threshold Current	18	14	12	18	14	A
Typical Slope	1.20	1.10	1.10	1.10	1.05	W/A
Minimum Slope	1.00	0.95	1.00	0.90	0.85	W/A
Maximum Operating Voltage	2.0	1.8	1.7	2.2	2.2	V
Typical Fast Axis Divergence FWHM	37	27	34	37	27	°
Typical Fast Axis Divergence 86 %	48	34	47	48	34	°
Typical Fast Axis Divergence 95 %	63	46	64	63	46	°
Typical Slow Axis Divergence FWHM	6	6	6	6	7	°
Typical Slow Axis Divergence 86 %	6	6	6	7	8	°
Typical Slow Axis Divergence 95 %	7	7	7	8	9	°
Anode, Cathode Connectors	Holes for screws M3x4 (max. tightening torque 1 Nm)					
Operation Conditions	Cleanroom class 100, non-condensing atmosphere					
Expected Lifetime	> 10,000 h (constant current)			> 1 GShot		

### Cooling:

Flow Rate	0.33 l/min
Flow Rate Tolerance	± 10 %
Water Temperature	15 ... 35 °C
Maximum Inlet Pressure	400 kPa
Pressure Drop	< 200 kPa
Water Quality	Deionized 2 ... 6 µS/cm, mixed bed ion exchanger, particle filter < 25 µm (not included)

**See Safety and General User Information!**

Options on request: For additional designs or specifications please visit our website: [www.jenoptik.com](http://www.jenoptik.com)



(\*) ATTENTION!  
depth of thread 4 mm (Limit!!!)



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