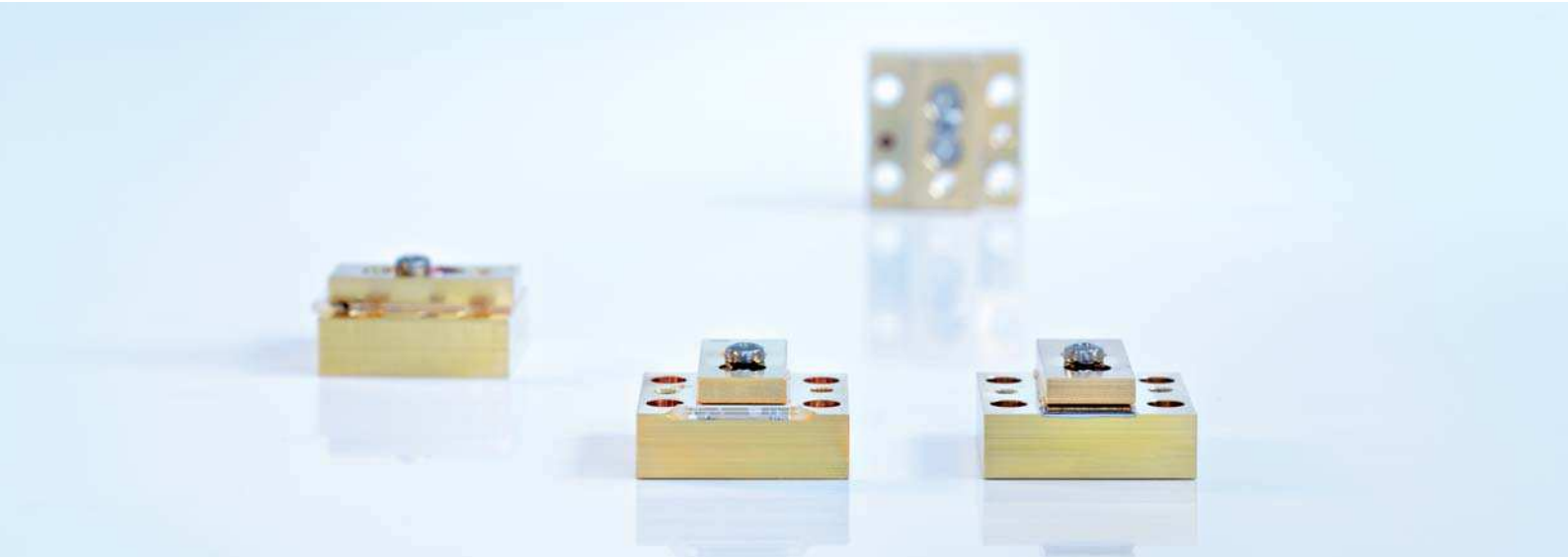
JENOPTIK

Open Heat Sink Diode Lasers

cw & qcw, passively cooled, new: 880 nm



JOLD-x-CPNN-1L
JOLD-100-QPNN-1L

Design 215507124

Features:

- High optical output power up to 60 W cw, 100 W qcw
- High efficiency, low divergences
- Long lifetime > 20,000 h, high reliability

Applications:

- Pumping of solid-state lasers
- Print applications
- Medical applications

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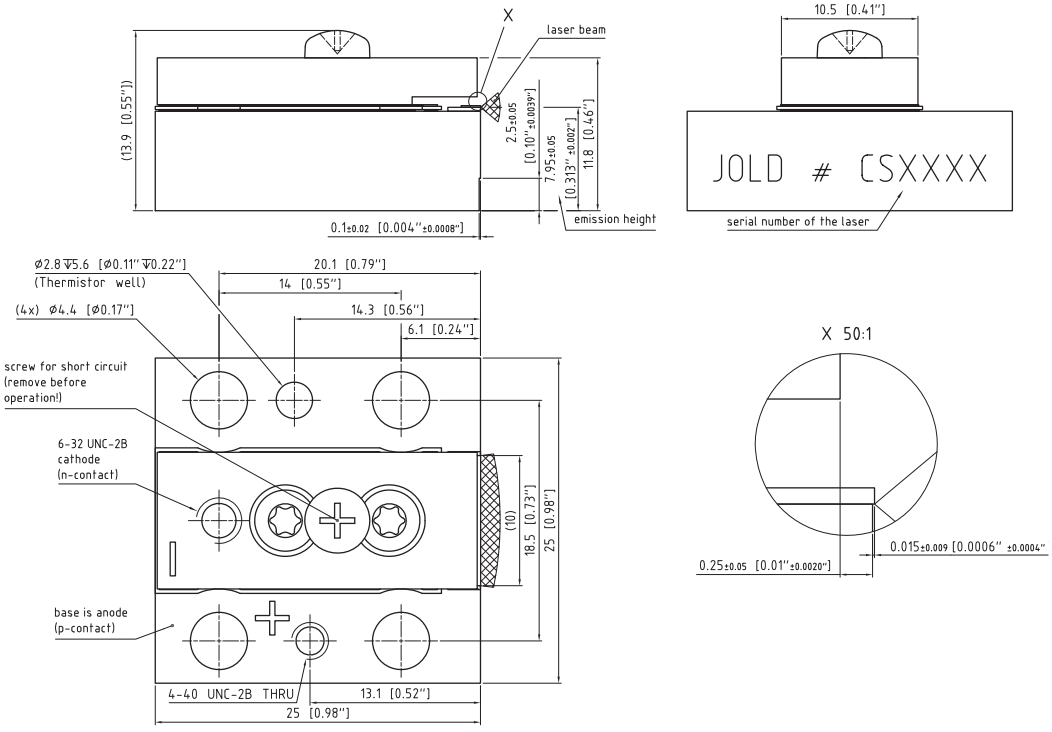
Specifications (Start of Life)

Product	JOLD-40-CPNN-1L, Design 215507124					JOLD-60-CPNN-1L, Design 215507124					JOLD-100-QPNN-1L, Design 215507124		
Operation Mode	cw / pulsed										qcw		
Maximum Pulse Length / Duty Cycle											≤ 0.3 ms / ≤ 20 %		
Maximum Optical Output Power	40	40	40	40	40	60	60	60	60	60	100	100	W
Center Wavelength at 25 °C	808	880	915	938	976	808	880	915	938	976	808	938	nm
Center Wavelength Variation at 25 °C	3	3	5	5	5	3	3	5	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	4	5	4	4	4	5	5	5	5	5	5	5	nm
Typical Operation Current	40	43	42	42	44	59	60	60	60	64	105	110	A
Maximum Operation Current	45	47	47	47	47	65	66	66	66	70	120	125	A
Typical Threshold Current	7	9	6	6	6	10	9	6	6	6	14	12	A
Maximum Threshold Current	10	12	9	9	9	13	12	9	9	9	18	14	A
Typical Slope	1.25	1.20	1.15	1.15	1.10	1.25	1.20	1.15	1.15	1.05	1.10	1.05	W/A
Minimum Slope	1.05	1.05	0.95	0.95	0.95	1.05	1.05	1.00	1.00	0.90	0.90	0.85	W/A
Maximum Operating Voltage	2.0	1.8	1.8	1.8	1.8	2.0	1.8	1.8	1.8	1.8	2.2	2.2	V
Typical Fast Axis Divergence FWHM	35	27	27	27	34	35	27	27	27	28	37	27	°
Typical Fast Axis Divergence 86 %	47	34	34	34	47	47	34	34	34	36	48	34	°
Typical Fast Axis Divergence 95 %	63	48	46	46	65	63	48	46	46	47	63	46	°
Typical Slow Axis Divergence FWHM	6	6	6	6	6	6	6	6	6	6	6	7	°
Typical Slow Axis Divergence 86 %	6	6	6	6	6	7	6	7	7	7	7	8	°
Typical Slow Axis Divergence 95 %	7	7	7	7	8	9	7	9	9	9	8	9	°
Anode, Cathode Connectors	Threads 4-40 UNC-2B, 6-32 UNC-2B												
Operation Conditions	Cleanroom class 100, non-condensing atmosphere												
Expected Lifetime	> 20,000 h (constant current), partly under qualification										> 1 GShot		
Cooling:													
Mounting	Via thermally conductive foil (thickness 25 ... 100 µm) on cooled surface (water cooled plate or TEC)												
Note	**Do not mount via any paste-like media!**												
Operation Temperature	15 ... 30 °C, measured with temperature sensor in heatsink												
	See General User Information!												

Options on request: 88x nm; for additional designs or specifications please visit our website: www.jenoptik.com



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