



Open Heat Sink Diode Lasers

cw, passively cooled, new: 880 nm



JOLD-x-CPNN-1L

Features:

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

Design 215510124

Applications:

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

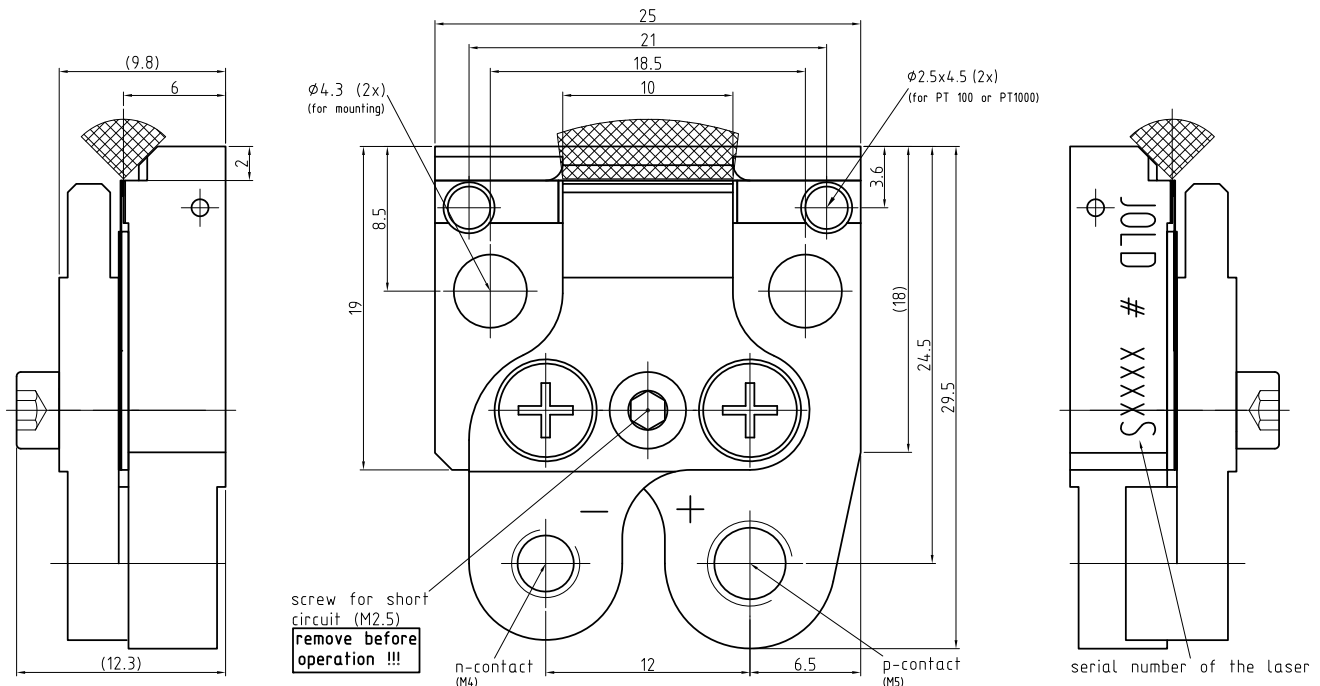
Open Heat Sink Diode Lasers

cw, passively cooled, new: 880 nm

Specifications (Start of Life)

Product	JOLD-x-CPNN-1L, Design 215510124										
Operation Mode	cw, power modulation only between threshold and maximum current										
Maximum Optical Output Power	40	60	80	80	80	80	80	100	100	100	W
Center Wavelength at 25 °C	808	808	880	915	938	976	808	938	976		nm
Center Wavelength Variation at 25 °C	3	3	3	5	5	5	4	5	5		nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	3	3		nm
Maximum Spectral Bandwidth (FWHM)	4	5	5	5	5	5	5	5	5		nm
Typical Operation Current	40	59	81	79	79	83	93	112	116		A
Maximum Operation Current	45	65	91	89	89	93	100	122	126		A
Typical Threshold Current	7	10	9	6	6	6	19	14	14		A
Maximum Threshold Current	10	13	12	10	9	9	22	18	18		A
Typical Slope	1.25	1.25	1.15	1.10	1.10	1.05	1.10	1.05	1.00		W/A
Minimum Slope	1.05	1.05	0.95	0.95	0.95	0.90	0.95	0.90	0.85		W/A
Maximum Operating Voltage	2.0	2.0	1.8	1.8	1.8	1.8	2.0	1.8	1.8		V
Typical Fast Axis Divergence FWHM	35	35	27	27	27	28	37	27	28		°
Typical Fast Axis Divergence 86 %	45	47	34	34	34	36	48	34	36		°
Typical Fast Axis Divergence 95 %	60	63	46	46	46	47	63	46	47		°
Typical Slow Axis Divergence FWHM	6	6	7	6	6	6	6	6	6		°
Typical Slow Axis Divergence 86 %	6	7	7	7	7	7	6	7	7		°
Typical Slow Axis Divergence 95 %	7	9	8	9	9	9	7	8	8		°
Anode, Cathode Connectors	Holes for screws M5, M4										
Operation Conditions	Cleanroom class 100, non-condensing atmosphere										
Expected Lifetime	> 20,000 h (constant current), partly under qualification; 80 W, 808 nm: > 10,000 h										
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



JENOPTIK | Lasers & Material Processing

JENOPTIK Laser GmbH

Goeschwitzer Strasse 29 | 07745 Jena | Germany

Phone: +49 3641 65-3053 | Fax: +49 3641 65-4011

E-mail: sales-laser.lm@jenoptik.com | www.jenoptik.com/diodelasers