



JENOPTIK

Vertical diode laser stacks: cw, actively cooled, with collimation, 808 nm JOLD-x-CABN-xA

Designs

- 210436126 (4 submounts)
- 210436226 (6 submounts)
- 210436326 (8 submounts)
- 210436426 (10 submounts)
- 210436526 (12 submounts)

Features

- High optical output power of 50 W cw per bar after collimation (in fast and slow axis)
- Wavelength: 808 nm
- High efficiency, low divergences
- Lifetime > 10,000 h, high reliability

Applications

- Pumping of solid-state lasers and fiber lasers
- Material processing
- Medical applications (e.g. hair removal)

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JOLD-x-CABN-xA

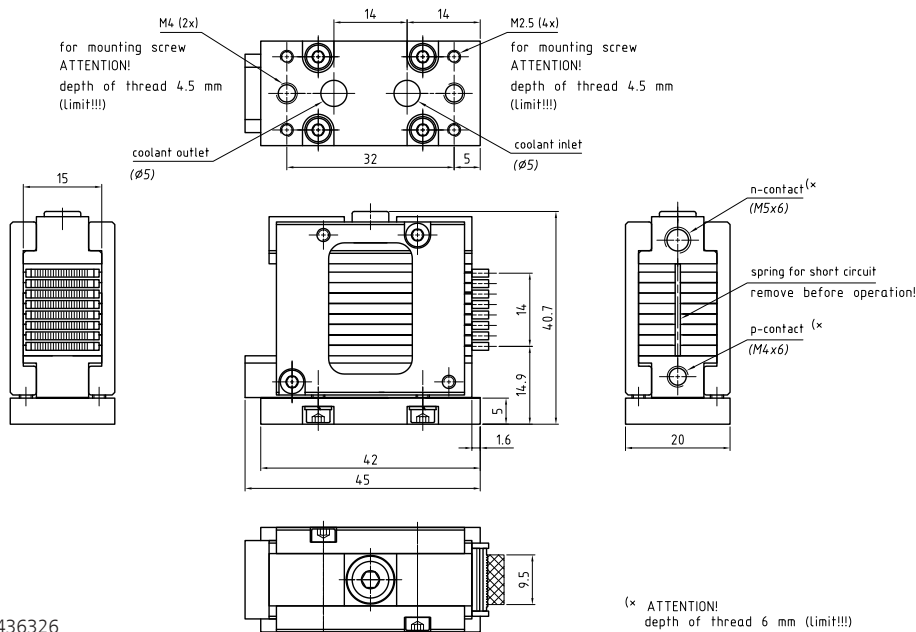
JOLD-x-CABN-xA Designs 210436126 (4 submounts), 210436226 (6 submounts), 210436326 (8 submounts), 210436426 (10 submounts), 210436526 (12 submounts)

Specifications (start of life)

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Operation Mode	cw, power modulation only between threshold and maximum current					
Maximum Optical Output Power	200	300	400	500	600	W
Number of Submounts	4	6	8	10	12	
Power per Submount after Collimation	50	50	50	50	50	W
Center Wavelength at 25 °C	808	808	808	808	808	nm
Center Wavelength Variation at 25 °C	3	3	3	3	3	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	5	5	5	5	5	nm
Typical Operation Current	59	59	59	59	59	A
Maximum Operation Current	65	65	65	65	65	A
Typical Threshold Current	10	10	10	10	10	A
Maximum Threshold Current	13	13	13	13	13	A
Typical Slope	4.1	6.2	8.2	10.3	12.3	W/A
Minimum Slope	3.6	5.4	7.2	9.0	10.9	W/A
Maximum Operating Voltage	8	12	16	20	24	V
Fast Axis Divergence (Full Power)	< 0.5 °					
Slow Axis Divergence (Full Power)	< 4 °					
Operation Conditions	Cleanroom class ISO 5, non-condensing atmosphere					
Expected Lifetime	> 10,000 h (constant current)					
Cooling						
Number of Submounts	4	6	8	10	12	
Flow Rate	1.7	2.3	3.0	3.6	4.3	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 general user information!

Options on request: For additional designs or specifications please visit our website: www.jenoptik.com



Design 210436326