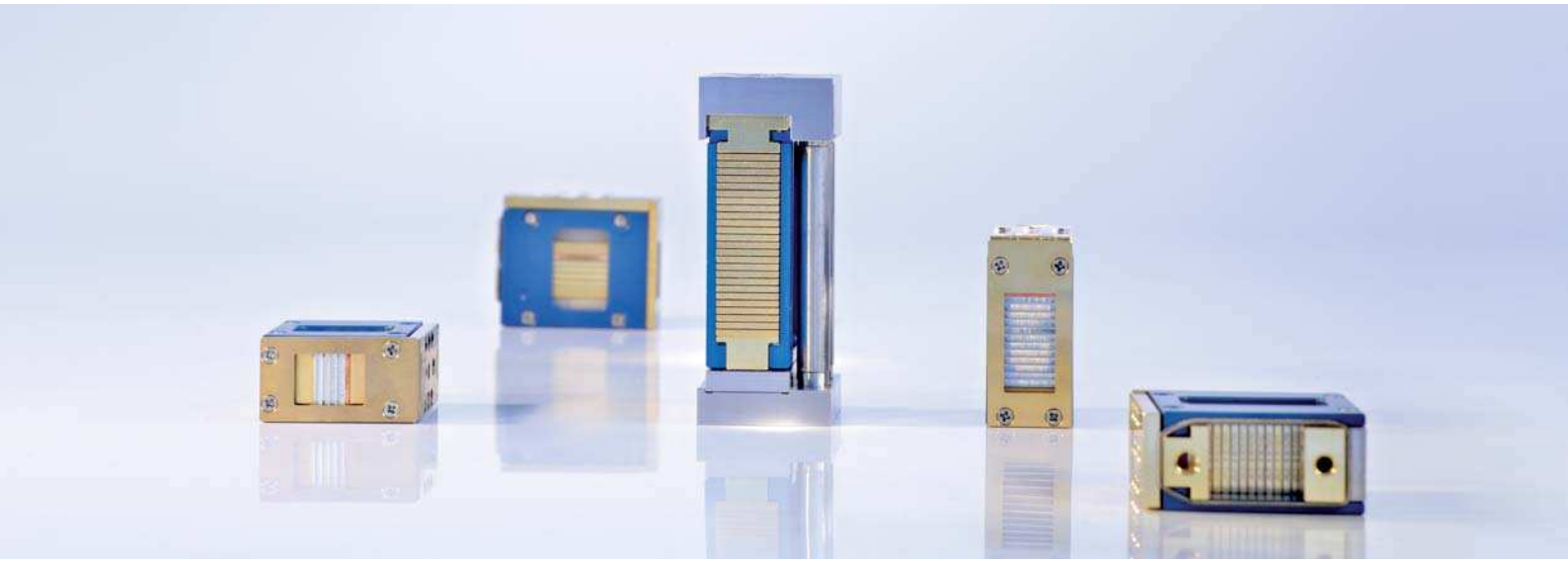
JENOPTIK

Vertical Diode Laser Stacks

cw, actively cooled, with collimation, 808 nm



JOLD-x-CABN-xA

Design 210436x26

210436126 (4 submounts)
210436226 (6 submounts)
210436326 (8 submounts)
210436426 (10 submounts)
210436526 (12 submounts)
210436626 (25 submounts)

Features:

- High optical output power of 32 W cw per bar after collimation (in fast and slow axis)
- 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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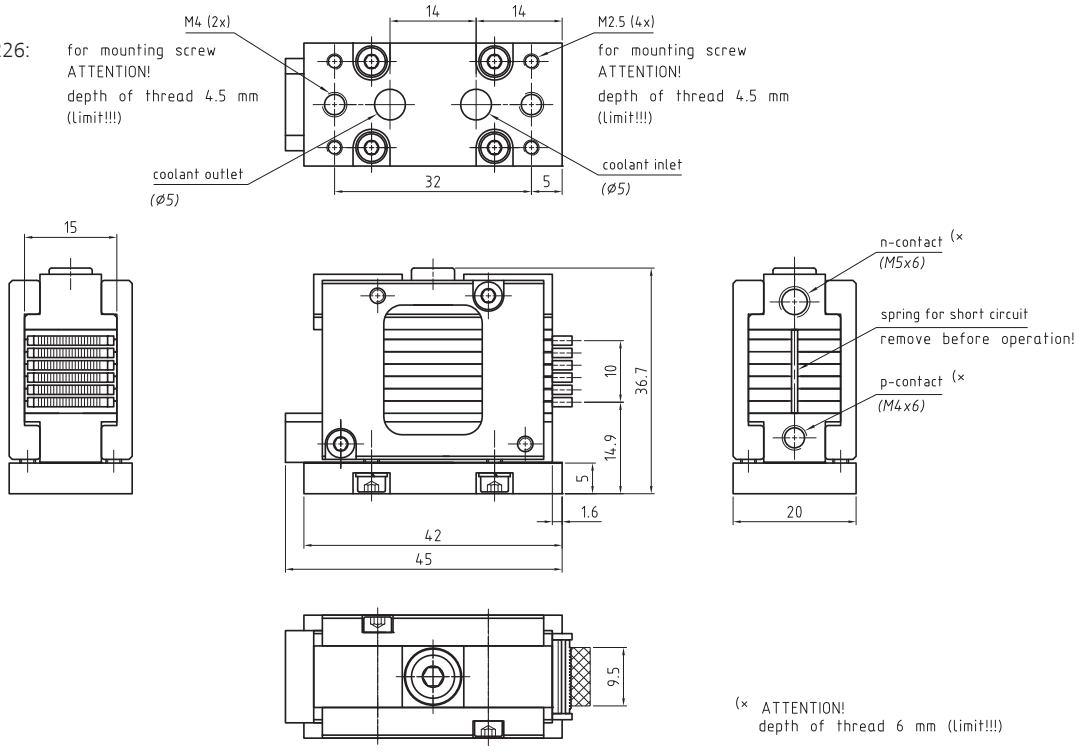
Specifications (Start of Life)

Product	JOLD-x-CABN-xA, Designs 210436126 (4 submounts), 210436226 (6 submounts), 210436326 (8 submounts), 210436426 (10 submounts), 210436526 (12 submounts), 210436626 (25 submounts)						
Operation Mode	cw, power modulation only between threshold and maximum current						
Maximum Optical Output Power	128	192	256	320	384	800	W
Number of Submounts	4	6	8	10	12	25	
Power per Submount after Collimation	32	32	32	32	32	32	W
Center Wavelength at 25 °C	808	808	808	808	808	808	nm
Center Wavelength Variation at 25 °C	3	3	3	3	3	3	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	4	4	4	4	4	4	nm
Typical Operation Current	40	40	40	40	40	40	A
Maximum Operation Current	45	45	45	45	45	45	A
Typical Threshold Current	7	7	7	7	7	7	A
Maximum Threshold Current	10	10	10	10	10	10	A
Typical Slope	3.9	5.9	7.8	9.7	11.7	24.3	W/A
Minimum Slope	3.3	5.0	6.7	8.4	10.1	21.0	W/A
Maximum Operating Voltage	8	12	16	20	24	50	V
Fast Axis Divergence (Full Power)	< 0.5						°
Slow Axis Divergence (Full Power)	< 4						°
Operation Conditions	Cleanroom class 100, non-condensing atmosphere						
Expected Lifetime	> 10,000 h (constant current)						
Cooling:							
Number of Submounts	4	6	8	10	12	25	
Flow Rate	1.7	2.3	3.0	3.6	4.3	8.3	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 Safety and General User Information!						

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

Design 210436226:



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