

MORE LIGHT

JOLD-x-CABN-xA

## Vertical diode laser stacks: cw, actively cooled, with collimation, 808 nm

### Designs

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

### Features

- High optical output power of 32 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)

# Vertical diode laser stacks | cw, actively cooled, with collimation, 808 nm

## JOLD-x-CABN-xA

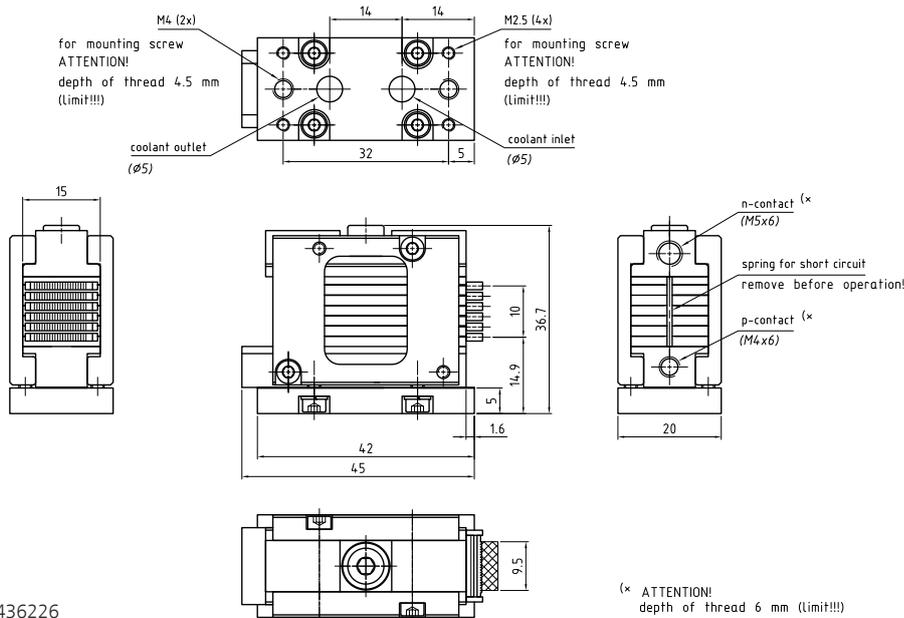
JOLD-x-CABN-xA Designs 210436126 (4 submounts), 210436226 (6 submounts), 210436326 (8 submounts), 210436426 (10 submounts), 210436526 (12 submounts)

### Specifications (start of life)

Operation Mode	cw, power modulation only between threshold and maximum current					
Maximum Optical Output Power	128	192	256	320	384	W
Number of Submounts	4	6	8	10	12	
Power per Submount after Collimation	32	32	32	32	32	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)	4	4	4	4	4	nm
Typical Operation Current	40	40	40	40	40	A
Maximum Operation Current	45	45	45	45	45	A
Typical Threshold Current	7	7	7	7	7	A
Maximum Threshold Current	10	10	10	10	10	A
Typical Slope	3.9	5.9	7.8	9.7	11.7	W/A
Minimum Slope	3.3	5.0	6.7	8.4	10.1	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)					
<b>Cooling</b>						
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](http://www.jenoptik.com)



Design 210436226