

MORE LIGHT

JOLD-x-CABN-xA

Vertical diode laser stacks: cw, actively cooled, with collimation, 9xx 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)
- Wavelengths: 938 and 976 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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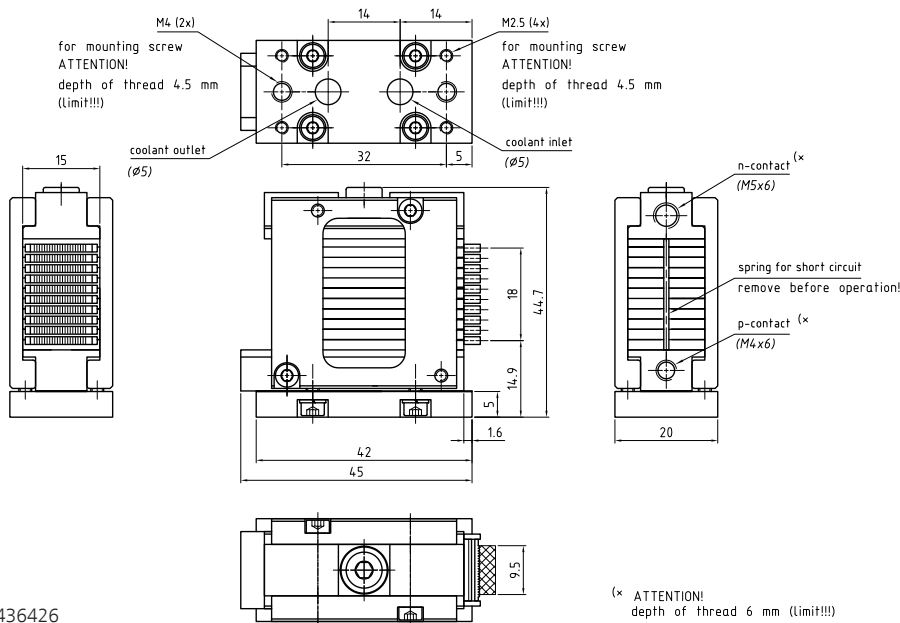
JOLD-x-CABN-xA Designs 210436126 (4 submounts), 210436226 (6 submounts), 210436326 (8 submounts), 210436426 (10 submounts), 210436526 (12 submounts)

Specifications (start of life)

Operation Mode	cw, power modulation only between threshold and maximum current										
Maximum Optical Output Power	128	192	256	320	384	128	192	256	320	384	W
Number of Submounts	4	6	8	10	12	4	6	8	10	12	
Power per Submount after Collimation	32	32	32	32	32	32	32	32	32	32	W
Center Wavelength at 25 °C	938	938	938	938	938	976	976	976	976	976	nm
Center Wavelength Variation at 25 °C	5	5	5	5	5	5	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	4	4	4	4	4	4	4	4	4	4	nm
Typical Operation Current	42	42	42	42	42	44	44	44	44	44	A
Maximum Operation Current	47	47	47	47	47	47	47	47	47	47	A
Typical Threshold Current	6	6	6	6	6	6	6	6	6	6	A
Maximum Threshold Current	9	9	9	9	9	8	8	8	8	8	A
Typical Slope	3.6	5.4	7.2	8.9	10.7	3.4	5.1	6.8	8.5	10.2	W/A
Minimum Slope	3.1	4.6	6.2	7.8	9.3	3.1	4.6	6.2	7.8	9.3	W/A
Maximum Operating Voltage	8	12	15	19	23	8	11	15	18	22	V
Fast Axis Divergence (Full Power)	< 0.5					< 0.5					°
Slow Axis Divergence (Full Power)	< 4					< 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 210436426