



JENOPTIK

## Vertical diode laser stacks: cw, actively cooled, 9xx nm, high power JOLD-x-CANN-xA

### Designs

- 210480424 (4 submounts)
- 210480624 (6 submounts)
- 210480824 (8 submounts)
- 210481024 (10 submounts)
- 210481224 (12 submounts)

### Features

- High optical output power of 120 W cw per bar
- 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)

# Vertical diode laser stacks | cw, actively cooled, 9xx nm, high power

## JOLD-x-CANN-xA

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### Specifications (start of life)

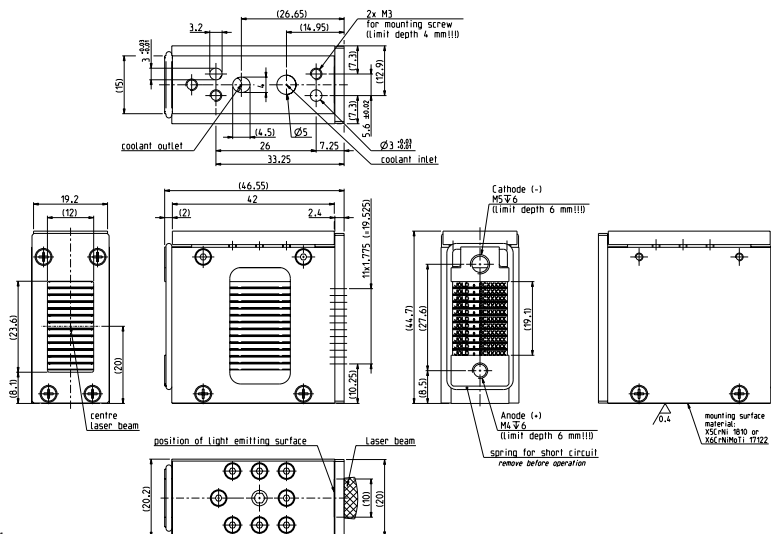
Operation Mode	cw only					
Maximum Optical Output Power	480	720	960	1200	1440	W
Number of Submounts	4	6	8	10	12	
Power per Submount	120	120	120	120	120	W
Center Wavelength at 25 °C	938 or 976					nm
Center Wavelength Variation at 25 °C	5	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	6	6	6	6	6	nm
Typical Operation Current	125	125	125	125	125	A
Maximum Operation Current	135	135	135	135	135	A
Typical Threshold Current	15	15	15	15	15	A
Maximum Threshold Current	18	18	18	18	18	A
Typical Slope	4.4	6.6	8.8	11.0	13.1	W/A
Minimum Slope	4.0	6.0	8.0	10.0	12.0	W/A
Maximum Operating Voltage	8	12	16	20	24	V
Typical Fast Axis Divergence FWHM	27	27	27	27	27	°
Typical Fast Axis Divergence 86 %	34	34	34	34	34	°
Typical Fast Axis Divergence 95 %	46	46	46	46	46	°
Typical Slow Axis Divergence FWHM	7	7	7	7	7	°
Typical Slow Axis Divergence 86 %	8	8	8	8	8	°
Typical Slow Axis Divergence 95 %	9	9	9	9	9	°
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: 915 nm; for additional designs or specifications please visit our website: [www.jenoptik.com](http://www.jenoptik.com)



Design 210481224

