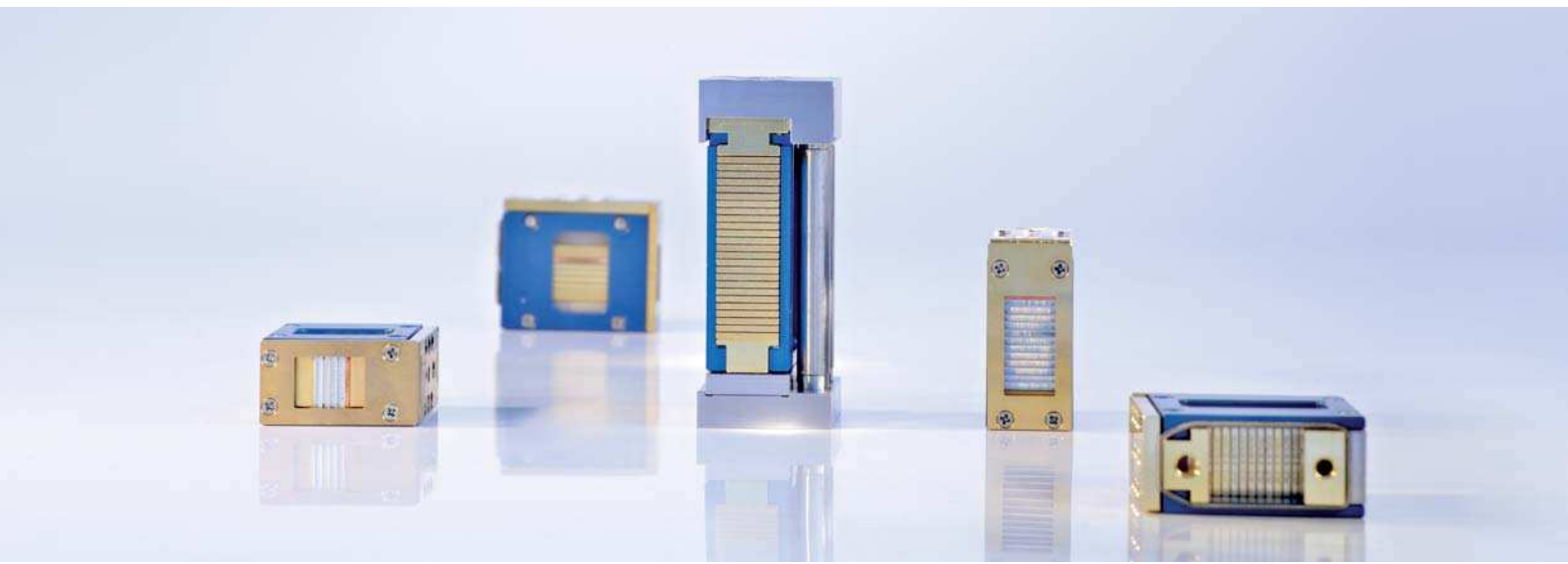




Vertical Diode Laser Stacks

cw, actively cooled, with collimation



JOLD-x-CAFN-xA

Features:

- High optical output power of 72 W cw per bar after collimation
- High efficiency, low divergences
- Lifetime > 10,000 h, high reliability

Design 2104xxx26

- | | |
|-------------------------|--------------------------|
| 210480326 (3 submounts) | 210480826 (8 submounts) |
| 210480426 (4 submounts) | 210481026 (10 submounts) |
| 210480526 (5 submounts) | 210481226 (12 submounts) |
| 210480626 (6 submounts) | 210430626 (25 submounts) |

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

Specifications (Start of Life)

Product

JOLD-x-CAFN-xA, Designs 210480326 (3 submounts), 210480426 (4 submounts), 210480526 (5 submounts), 210480626 (6 submounts), 210480826 (8 submounts), 210481026 (10 submounts), 210481226 (12 submounts), 210430626 (25 submounts)

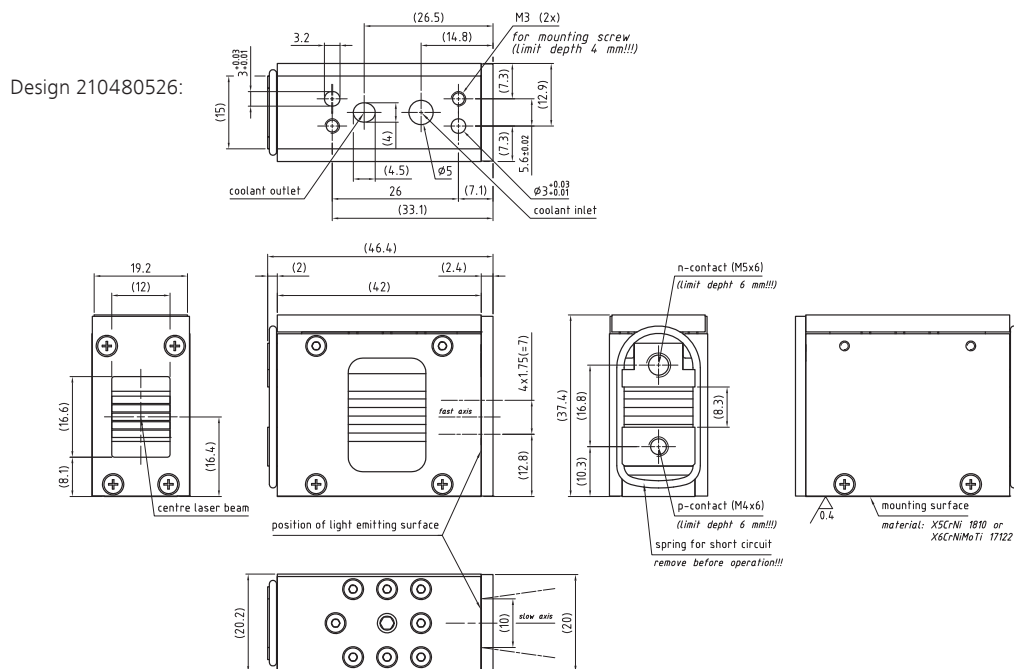
Operation Mode	cw, power modulation only between threshold and maximum current																	
Maximum Optical Output Power	216	288	360	432	576	720	864	1800	216	288	360	432	576	720	864	1800	W	
Number of Submounts	3	4	5	6	8	10	12	25	3	4	5	6	8	10	12	25		
Power per Submount after Collimation	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	W	
Center Wavelength at 25 °C	807																938 / 976	nm
Center Wavelength Variation at 25 °C	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	5	nm	
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	nm	
Maximum Spectral Bandwidth (FWHM)	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	nm	
Typical Operation Current	85	85	85	85	85	85	85	85	87	87	87	87	87	87	87	87	A	
Maximum Operation Current	95	95	95	95	95	95	95	95	97	97	97	97	97	97	97	97	A	
Typical Threshold Current	19	19	19	19	19	19	19	19	15	15	15	15	15	15	15	15	A	
Maximum Threshold Current	22	22	22	22	22	22	22	22	18	18	18	18	18	18	18	18	A	
Typical Slope	3.3	4.4	5.5	6.6	8.8	11.0	13.1	27.3	3.0	4.0	5.0	6.0	8.0	10.0	12.0	25.0	W/A	
Minimum Slope	2.8	3.7	4.7	5.6	7.5	9.4	11.3	23.6	2.6	3.5	4.3	5.2	7.0	8.7	10.5	21.9	W/A	
Maximum Operating Voltage	6	8	10	12	16	20	24	50	6	8	10	12	16	20	24	48	V	
Fast Axis Divergence (Full Power)	< 0.5																°	
Typical Slow Axis Divergence FWHM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	°	
Typical Slow Axis Divergence 86 %	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	°	
Typical Slow Axis Divergence 95 %	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	°	
Operation Conditions	Cleanroom class 100, non-condensing atmosphere																	
Expected Lifetime	> 10,000 h (constant current)																	

Cooling:

Number of Submounts	3	4	5	6	8	10	12	25	
Flow Rate	1.3	1.7	2.0	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: 915 nm; for additional designs or specifications please visit our website: www.jenoptik.com



JENOPTIK | Lasers & Material Processing

JENOPTIK Laser GmbH

Goeschwitzer Strasse 29 | 07745 Jena | Germany

Phone: +49 3641 65-3053 | Fax: +49 3641 65-4011

E-mail: sales-laser.lm@jenoptik.com | www.jenoptik.com/diodelasers