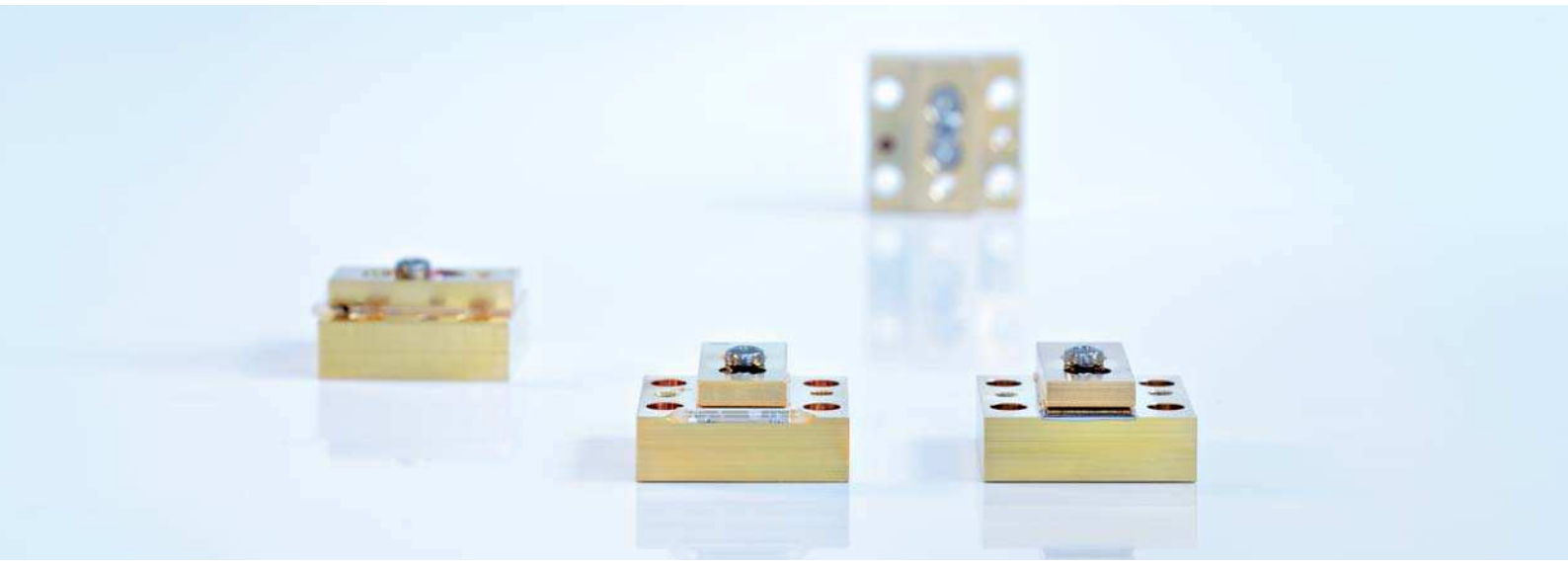




Open Heat Sink Diode Lasers

cw, passively cooled, with collimation, new: 880 nm



JOLD-50-CPBN-1L
JOLD-55-CPFN-1L

Design 215507226
Design 215507126

Features:

- High optical output power up to 55 W cw after collimation
- High efficiency, low divergences
- Long lifetime > 20,000 h, high reliability

Applications:

- Pumping of solid-state lasers
- Print applications
- Medical applications

Open Heat Sink Diode Lasers

cw, passively cooled, with collimation, new: 880 nm

Specifications (Start of Life)

Product	JOLD-50-CPBN-1L, Design 215507226					JOLD-55-CPFN-1L, Design 215507126					
Operation Mode	cw / pulsed										
Max. Optical Output Power after Collimation	50	50	50	50	50	55	55	55	55	55	W
Center Wavelength at 25 °C	808	880	915	938	976	808	880	915	938	976	nm
Center Wavelength Variation at 25 °C	4	3	5	5	5	4	3	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	5	5	5	5	5	5	5	5	5	5	nm
Typical Operation Current	59	60	60	60	64	59	60	60	60	64	A
Maximum Operation Current	65	66	66	66	70	65	66	66	66	70	A
Typical Threshold Current	10	9	6	6	6	10	9	6	6	6	A
Maximum Threshold Current	13	12	9	9	9	13	12	9	9	9	A
Typical Slope	1.05	1.00	0.95	0.95	0.90	1.15	1.10	1.05	1.05	0.95	W/A
Minimum Slope	0.90	0.85	0.80	0.80	0.75	1.00	0.95	0.90	0.90	0.85	W/A
Maximum Operating Voltage	2.0	2.0	1.8	1.8	1.8	2.0	2.0	1.8	1.8	1.8	V
Fast Axis Divergence (Full Power)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	°
Slow Axis Divergence (Full Power)	< 4	< 4	< 4	< 4	< 4						°
Typical Slow Axis Divergence FWHM						6	6	6	6	6	°
Typical Slow Axis Divergence 86 %						7	6	7	7	7	°
Typical Slow Axis Divergence 95 %						9	7	9	9	9	°
Anode, Cathode Connectors	Threads 4-40 UNC-2B, 6-32 UNC-2B										
Operation Conditions	Cleanroom class 100, non-condensing atmosphere										
Expected Lifetime	> 20,000 h (constant current), partly under qualification										

Cooling:

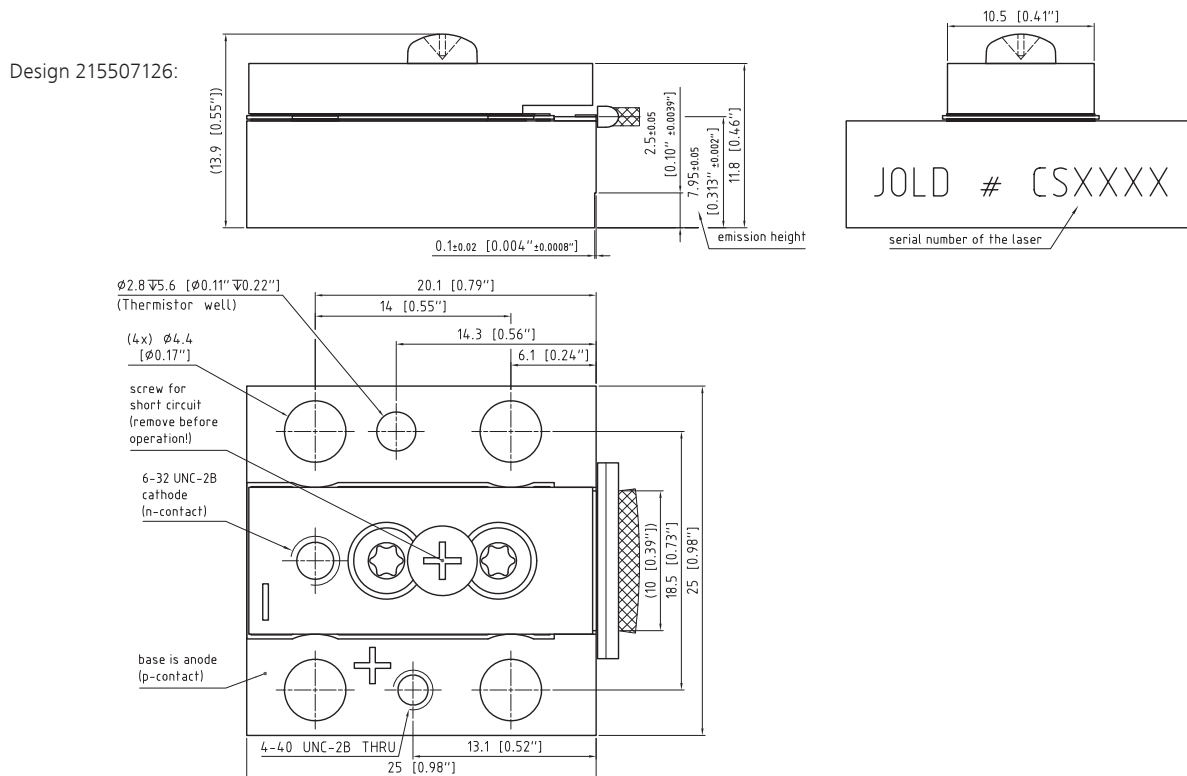
Mounting Via thermally conductive foil (thickness 25 ... 100 µm) on cooled surface (water cooled plate or TEC)

Note **Do not mount via any paste-like media!**

Operation Temperature 15 ... 30 °C, measured with temperature sensor in heatsink

See General User Information!

Options on request: 88x nm; for additional designs or specifications please visit our website: www.jenoptik.com



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