JENOPTIK

MORE LIGHT

JOLD-x-CPBN-1L | JOLD-x-CPFN-1L

Open heat sink diode lasers: cw, passively cooled | with(out) collimation

JOLD-50-CPBN-1L | Design 215507226
JOLD-68-CPBN-1L | Design 215507226
JOLD-90-CPFN-1L | Design 215507126

Features

- High optical output power up to 90 W cw after collimation
- Wavelengths: 808, 880, 915, 938 and 976 nm
- High efficiency, low divergences
- Long lifetime > 20,000 h, high reliability

Applications

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

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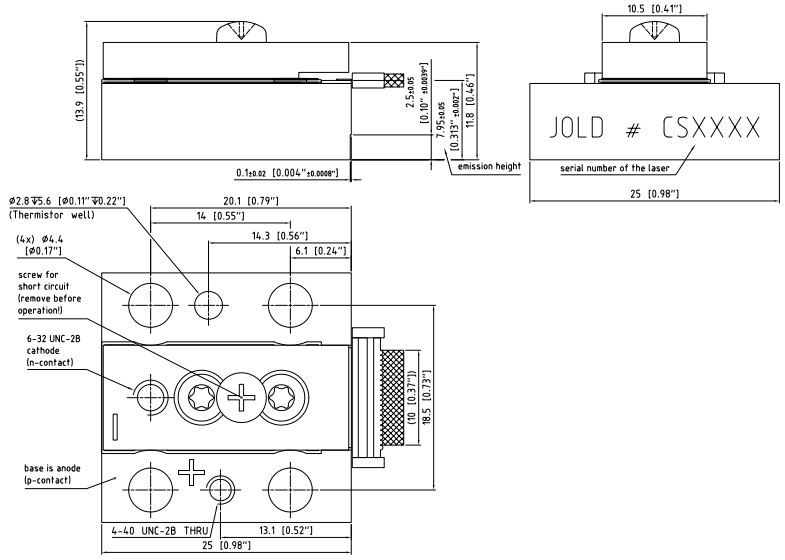
Specifications (start of life)	JOLD-50-CPBN-1L, JOLD-68-CPBN-1L Design 215507226					JOLD-90-CPFN-1L Design 215507126		
Operation Mode	cw/pulsed							
Max. Optical Output Power after Collimation	50	68	68	68	68	90	90	W
Center Wavelength at 25 °C	808	880	915	938	976	938	976	nm
Center Wavelength Variation at 25 °C	4	4	5	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	5	5	5	5	5	5	5	nm
Typical Operation Current	59	81	79	79	83	112	116	A
Maximum Operation Current	65	91	89	89	93	122	126	A
Typical Threshold Current	10	9	6	6	6	14	14	A
Maximum Threshold Current	13	12	10	9	9	18	18	A
Typical Slope	1.05	0.95	0.95	0.95	0.90	0.95	0.90	W/A
Minimum Slope	0.90	0.80	0.80	0.80	0.75	0.80	0.80	W/A
Maximum Operating Voltage	2.0	1.8	1.8	1.8	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	°
Slow Axis Divergence (Full Power)	< 4	< 4	< 4	< 4	< 4			°
Typical Slow Axis Divergence FWHM						6	6	°
Typical Slow Axis Divergence 86 %						7	7	°
Typical Slow Axis Divergence 95 %						8	8	°
Anode, Cathode Connectors	Threads 4-40 UNC-2B, 6-32 UNC-2B							
Operation Conditions	Cleanroom class ISO 5, 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 heat sink							

See general user information!

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



Design 215507226

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