



MORE LIGHT

JOLD-x-QPNN-1L | JOLD-x-QPFN-1L

Open heat sink diode lasers: qcw, passively cooled | with(out) collimation | high power

JOLD-250-QPNN-1L | Design 215507124

JOLD-300-QPNN-1L | Design 215507124

JOLD-225-QPFN-1L | Design 215507126

JOLD-270-QPFN-1L | Design 215507126

Features

- High optical output power up to 300 W qcw without collimation & up to 270 W qcw after collimation
- Wavelength: 808 nm
- High efficiency, low divergences
- Long lifetime > 1 GShot, high reliability

Applications

- Pumping of solid-state lasers
- Illumination

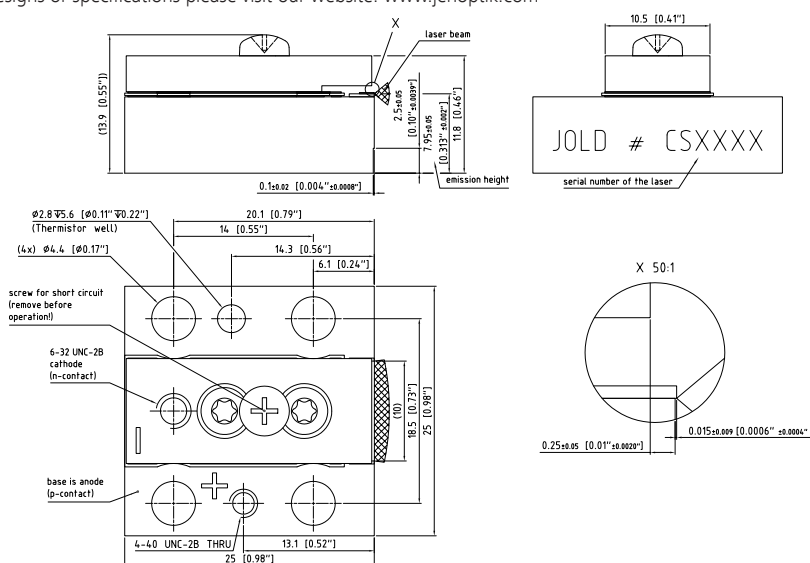
Open heat sink diode lasers | qcw, passively cooled | with(out) collimation

JOLD-x-QPNN-1L | JOLD-x-QPFN-1L

	JOLD-300-QPNN-1L Design 215507124	JOLD-250-QPNN-1L Design 215507124	JOLD-270-QPFN-1L Design 215507126	JOLD-225-QPFN-1L Design 215507126	
Specifications (start of life)					
Operation Mode	qcw	qcw	qcw	qcw	
Maximum Pulse Length/Duty Cycle	≤ 0.3 ms/≤ 4 %	≤ 0.3 ms/≤ 10 %	≤ 0.3 ms/≤ 4 %	≤ 0.3 ms/≤ 10 %	
Maximum Optical Output Power	300	250			W
Max. Optical Output Power after Collimation			270	225	W
Center Wavelength at 25 °C	808	808	808	808	nm
Center Wavelength Variation at 25 °C	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	5	5	5	5	nm
Typical Operation Current	275	230	275	230	A
Maximum Operation Current	290	255	290	255	A
Typical Threshold Current	17	17	17	17	A
Maximum Threshold Current	22	22	22	22	A
Typical Slope	1.20	1.20	1.05	1.10	W/A
Minimum Slope	1.05	1.05	0.95	0.90	W/A
Maximum Operating Voltage	2.2	2.2	2.2	2.2	V
Fast Axis Divergence (Full Power)			< 0.5	< 0.5	°
Typical Fast Axis Divergence FWHM	35	35			°
Typical Fast Axis Divergence 86 %	50	50			°
Typical Fast Axis Divergence 95 %	66	66			°
Typical Slow Axis Divergence FWHM	8	7	8	7	°
Typical Slow Axis Divergence 86 %	8	7	8	7	°
Typical Slow Axis Divergence 95 %	10	9	10	9	°
Anode, Cathode Connectors	Threads 4-40 UNC-2B, 6-32 UNC-2B				
Operation Conditions	Cleanroom class ISO 5, non-condensing atmosphere				
Expected Lifetime	> 1GShot				
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: For additional designs or specifications please visit our website: www.jenoptik.com



Design 215507124