

Open heat sink diode lasers: cw, passively cooled JOLD-x-CPNN-1L

Design 215505724

Features

- High optical output power up to 160 W cw
- Wavelengths: 938 and 976 nm
- High efficiency, low divergences
- Long lifetime, high reliability

Applications

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

Open heat sink diode lasers | cw, passively cooled

JOLD-x-CPNN-1L

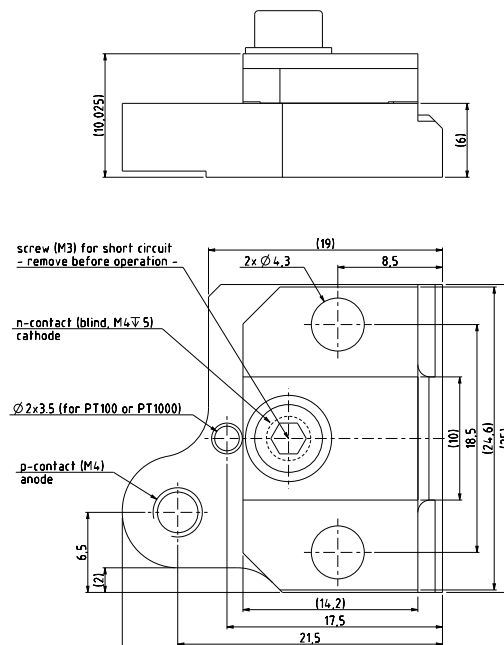
Specifications (start of life)

JOLD-x-CPNN-1L Design 215505724

Operation Mode	cw, power modulation only between threshold and maximum current				
Maximum Optical Output Power	120	120	160	160	W
Center Wavelength at 25 °C	938	976	938	976	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	125	125	165	165	A
Maximum Operation Current	135	135	175	175	A
Typical Threshold Current	14	14	14	14	A
Maximum Threshold Current	18	18	18	18	A
Typical Slope	1.10	1.10	1.10	1.10	W/A
Minimum Slope	0.95	0.95	0.95	0.95	W/A
Maximum Operating Voltage	1.8	1.8	1.8	1.8	V
Typical Fast Axis Divergence FWHM	27	27	27	27	°
Typical Fast Axis Divergence 86 %	36	36	36	36	°
Typical Fast Axis Divergence 95 %	47	47	47	47	°
Typical Slow Axis Divergence FWHM	6	6	7	7	°
Typical Slow Axis Divergence 86 %	6	6	7	7	°
Typical Slow Axis Divergence 95 %	8	8	9	9	°
Anode Connector	Hole for screw M4				
Cathode Connector	Hole for screw M4				
Operation Conditions	Cleanroom class ISO 5, non-condensing atmosphere				
Expected Lifetime (constant current)	> 5,000 h	> 20,000 h (under qualification)	> 5,000 h		
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



pat. pend.