



New: Open Heat Sink Diode Lasers

cw, passively cooled



JOLD-x-CPNN-1L

Design 215505724

Features:

- High optical output power up to 160 W cw
- High efficiency, low divergences
- Long lifetime, high reliability

Applications:

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

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Preliminary Specifications (Start of Life)

Product

JOLD-x-CPNN-1L, Design 215505724

Operation Mode	cw, power modulation only between threshold and maximum					
Maximum Optical Output Power	100	120	120	160	160	W
Center Wavelength at 25 °C	808	938	976	938	976	nm
Center Wavelength Variation at 25 °C	4	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	5	5	5	5	5	nm
Typical Operation Current	110	125	125	165	165	A
Maximum Operation Current	115	135	135	175	175	A
Typical Threshold Current	19	14	14	14	14	A
Maximum Threshold Current	22	18	18	18	18	A
Typical Slope	1.10	1.10	1.10	1.10	1.10	W/A
Minimum Slope	1.00	0.95	0.95	0.95	0.95	W/A
Maximum Operating Voltage	2.0	1.8	1.8	1.8	1.8	V
Typical Fast Axis Divergence FWHM	37	27	27	27	27	°
Typical Fast Axis Divergence 86 %	48	36	36	36	36	°
Typical Fast Axis Divergence 95 %	63	47	47	47	47	°
Typical Slow Axis Divergence FWHM	6	6	6	7	7	°
Typical Slow Axis Divergence 86 %	6	6	6	7	7	°
Typical Slow Axis Divergence 95 %	7	8	8	9	9	°
Anode Connector	Hole for screw M4					
Cathode Connector	Hole for screw M4					
Operation Conditions	Cleanroom class 100, non-condensing atmosphere					
Expected Lifetime (constant current)	> 5,000 h	> 20,000 h (under qualification)	> 20,000 h (under qualification)	> 5,000 h	> 5,000 h	

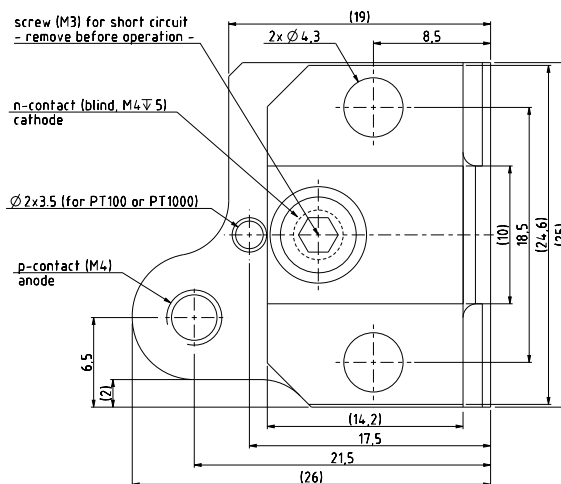
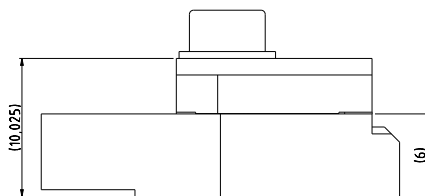
Cooling:

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 heatsink

See General User Information!



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