



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:

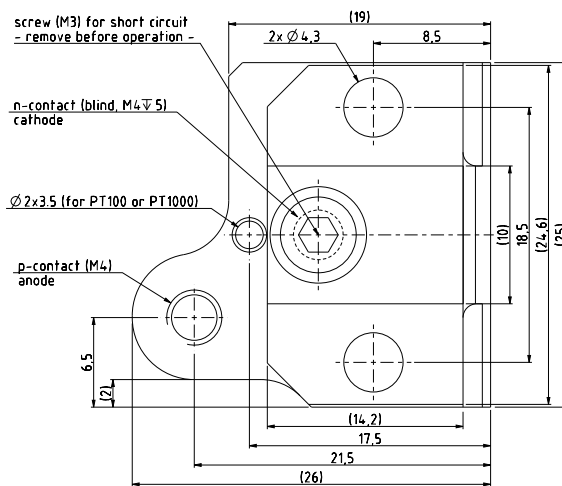
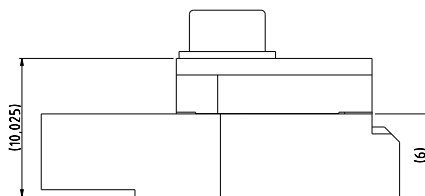
- Pumping of solid-state lasers
- Print applications
- Medical applications

New: Open Heat Sink Diode Lasers

cw, passively cooled

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)		> 5,000 h		
Cooling:	Via thermally conductive foil (thickness 25 ... 100 µm) on cooled surface (water cooled plate or TEC)					
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!					



pat. pend.



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