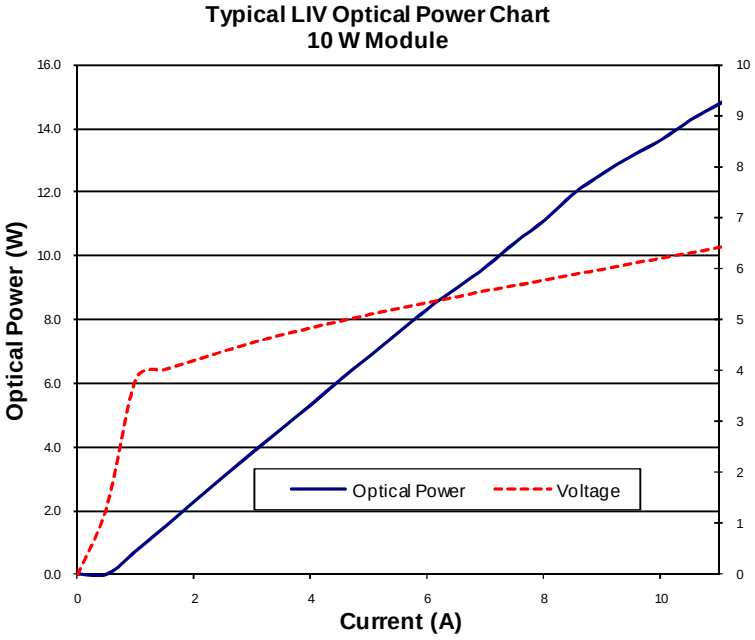
High Power Multi-Mode SemiNex Lasers
10 to 25 Watts of CW Power
1470, 1532, or 1550 nm Wavelength
Multi-Chip Module with Integrated Cooling System

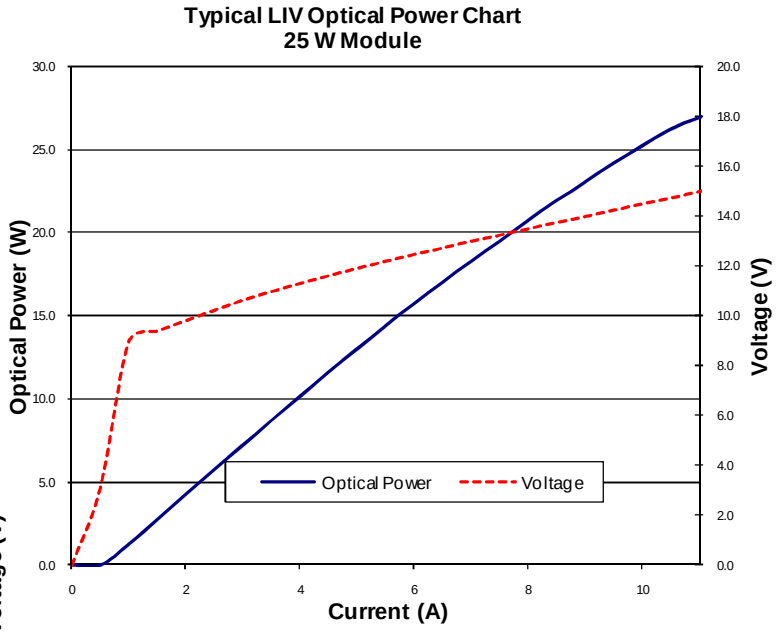
	Symbol	Typical	Units
Optical			
Output Power (CW)	P_o	10 - 25	watts
Center Wavelength Range	λ_c	1470, 1532, 1550	nm
Spectral Width	$\Delta\lambda$	15	nm 3dB
Optical Fiber Core Diameter		375	µm
Optical Fiber NA		0.22	
Wavelength Temp. Coeff.	λ_{coef}	0.7	nm/C
Electrical			
Threshold Current	I_{th}	0.4 - 0.7	A
Operating Current	I_{op}	8 - 11	A
Operating Voltage	V_{op}	6 or 14	V
Series Resistance	R_s	0.25 or 0.5	ohm

SemiNex offers our high power multi-chip module with an integrated cooling solution for optical output powers up to 25 watts while extracting up to 200 watts of thermal heat. This compact cooling system can be easily integrated with your existing controls and laser driver to reduce design time required to manage the heat.

Key Features
- High output power
- High dynamic power range
- High efficiency
- Custom packaging

Applications
- Medical laser equipment
- DPSS pump lasers
- Military / Aerospace
- Industrial
- Material Processing





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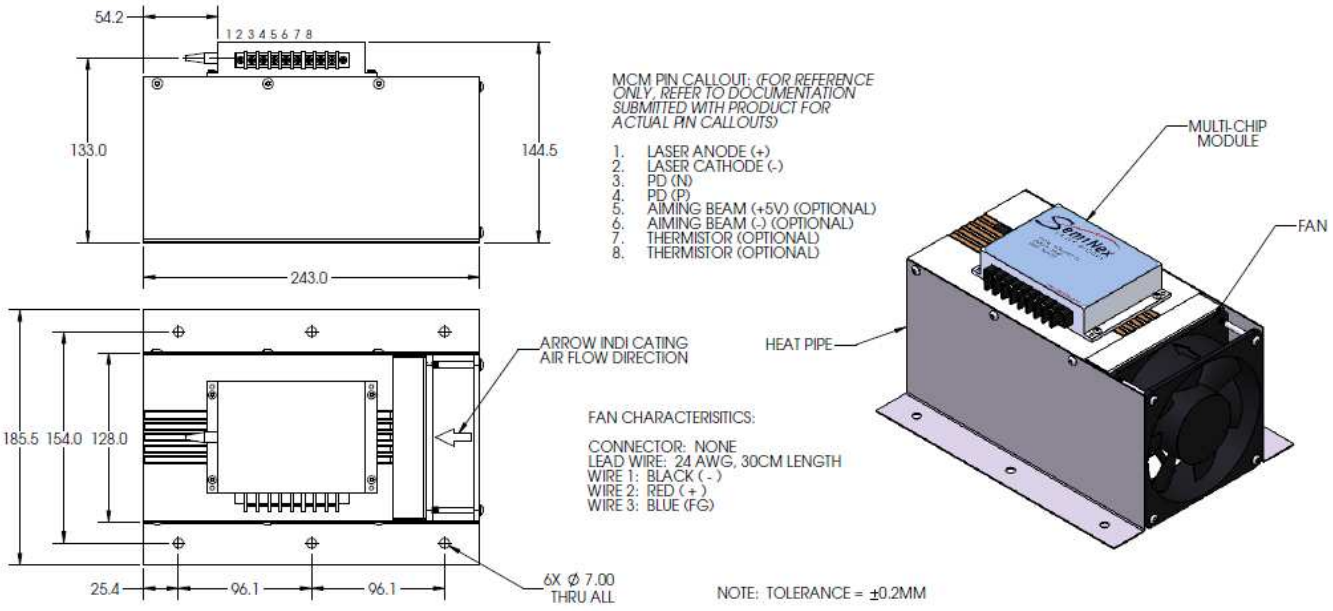
	Symbol	MCM-1470-10-ICS	MCM-1470-15-ICS	MCM-1470-20-ICS	MCM-1470-25-ICS	MCM-1550-10-ICS	MCM-1550-20-ICS	Units
Optical								
Output power (CW)	P_o	10	15	20	25	10	20	watts
Center Wavelength	λ_c	1470	1470	1470	1470	1550	1550	nm
Spectral Width	$\Delta\lambda$	10	10	10	10	10	10	nm 3dB
Slope Efficiency	η_o	1.4	2	2.1	3	2	2	W/A
Optical Fiber Core Diameter		375	375	375	375	375	375	µm
Optical Fiber NA		0.22	0.22	0.22	0.22	0.22	0.22	
Photodiode Current	I_m	1.25	1.25	1.25	1.25	1.25	1.25	mA
Electrical								
Power conversion Efficiency	η	0.22	0.2	0.19	0.17	0.15	0.15	W/W
Threshold Current	I_{th}	0.5	0.5	0.5	0.5	0.7	0.7	A
Operating Current	I_{op}	7	10.5	9.6	11	9.5	11	A
Operating Voltage	V_{op}	6	7.5	11.4	12	7	14	V
Series Resistance	R_s	0.30	0.30	0.55	0.55	0.30	0.55	ohm
Lead Soldering Temperature	℃	250	250	250	250	250	250	℃
Electrical - Fan								
Operating Current	I_{op}	2	2	2	2	2	2	A
Operating Voltage	V_{op}	12	12	12	12	12	12	V
Open Area for Discharge	A_{dis}	144	144	144	144	144	144	cm^2
Aiming Beam								
Output Power	P_a	>2	>2	>2	>2	>2	>2	mW
Wavelength	λ_a	650 +/- 10	650 +/- 10	650 +/- 10	650 +/- 10	650 +/- 10	650 +/- 10	nm



NOTE: Dimensions are in mm

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