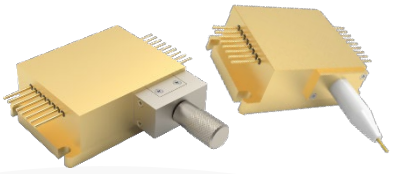
High Power Laser Diode 2CM Module

Part Number: 2CM-401



High Power 2CM Fiber Coupled Module
Multi-Mode Fabry-Perot
Detachable Fiber Available
CW Wavelength at 1480nm

Features

- Two Laser Chip Package
- Cost Effective Fiber Coupled Design
- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low-Cost Package
- Red Aiming Beam Included
- PD & Thermistor Included

Application

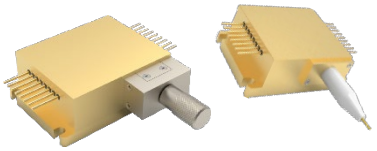
- Professional Medical
- DPSS Pump Source
- Defense / Aerospace

SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary, we will further optimize the design of our InP & GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.

High Power Laser Diode
2CM Module

Specification

2CM-401



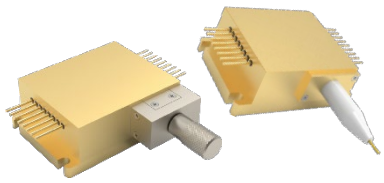
Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1480	nm (±20)
Output Power (CW)*	P_{out}	9	Watts (±10%)
Spectral Width FWHM	$\Delta\lambda$	10	nm
Slope Efficiency	η	0.55	W/A
Optical Fiber Core Dia.		400	µm
Optical Fiber NA		0.22	
Electrical	**Symbol**		**Units**
Power Conversion Eff.	η	20	%
Operating Current	I_{op}	17	A
Threshold Current	I_{TH}	2	A
Operating Voltage	V_{op}	2.9	V
Aiming Beam	**Symbol**		**Units**
Output Power	P_a	2	mW
Wavelength	λ_a	635	nm
Operating Current	I_{op}	65	mA
Voltage Limit	V_{max}	2.3	V
Mechanical			**Units**
Connector Type		SMA905	
Fiber Length		1.5	meters
Thermistor		**Range**	
Thermistor Constant		3477	b
Thermistor Resistance		10	K ohm
		Range	
Operating Temp.**		-40 to 60	°C
Storage Temp.		-40 to 80	°C

*Specified values are rated at a constant heat sink temperature of 20°C.
**High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.

*Detachable Fiber

Part Number	Description
2CMDF-401	2CM-401 with detachable fiber

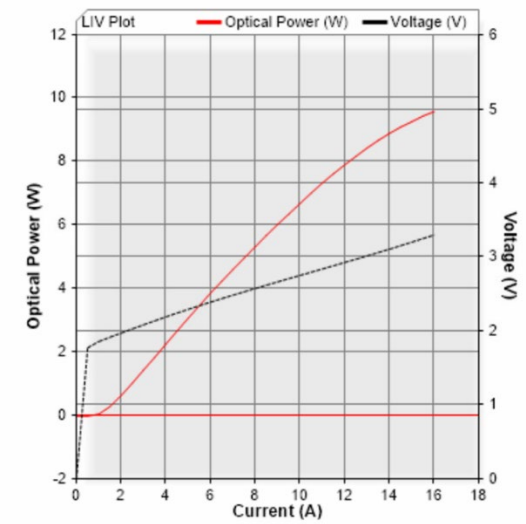
High Power Laser Diode 2CM Module



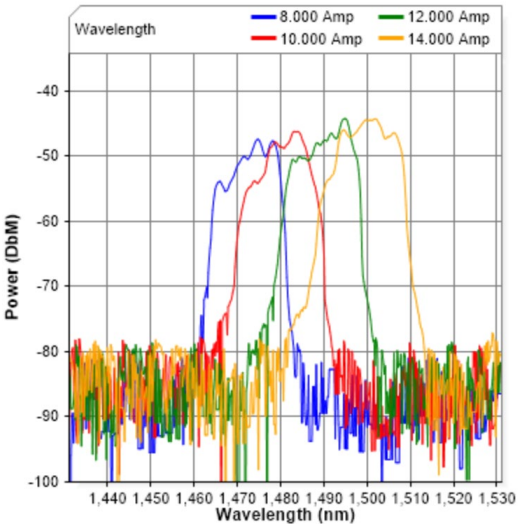
SemiNex Laser Diodes 2CM-401

Graphs & Data

Typical 2CM L-I-V Characteristics

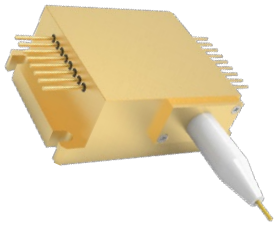


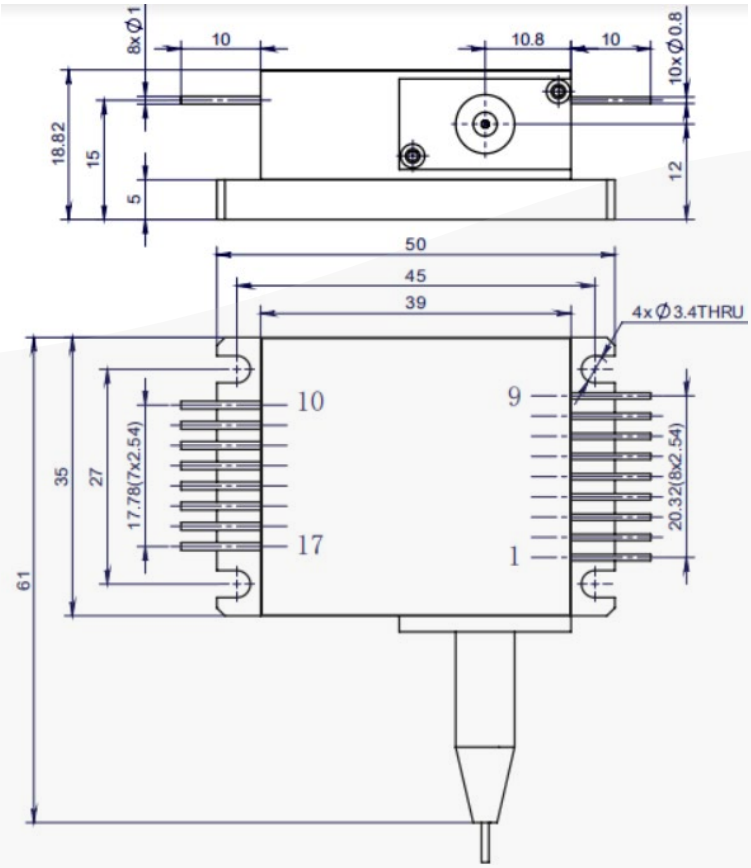
Typical 2CM Output Spectrum



High Power Laser Diode
2CM Module

Mechanical Drawing
Part Number: 2CM-401

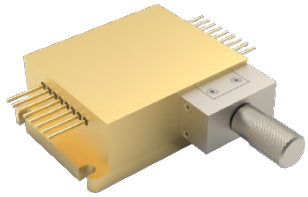


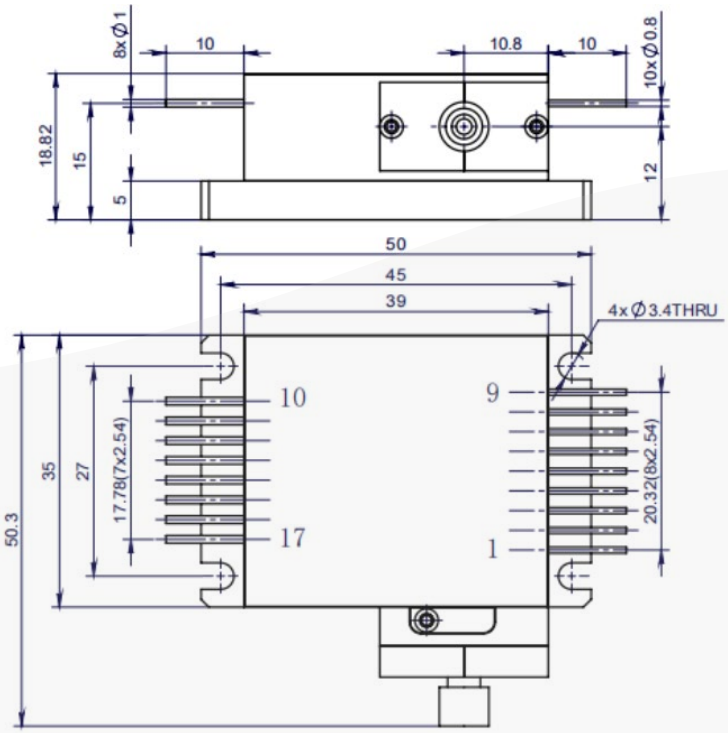


	2CM
PD (+)	#6
PD (-)	#7
Thermistor	#8
Thermistor	#9
LD (+)	#10
LD (-)	#11
Red Aiming Beam (+)	#16
Red Aiming Beam (-)	#17

High Power Laser Diode
2CM Module

Mechanical Drawing
Part Number: 2CMDF-401





	2CM pin
PD (+)	#6
PD (-)	#7
Thermistor	#8
Thermistor	#9
LD (+)	#10
LD (-)	#11
Red Aiming Beam (+)	#16
Red Aiming Beam (-)	#17

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