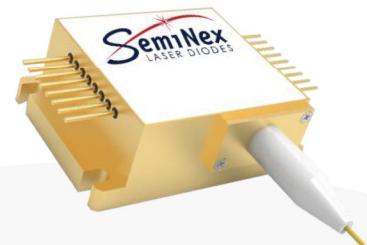


# High Power Laser Diode 2CM Fiber Module



## Part Number: 2CM-004-189

High Power 2CM Fiber Coupled Module  
Multi-Mode Fabry-Perot  
CW Wavelength at 1550nm



## Features

- Two Laser Chip Package
- Cost Effective Fiber Coupled Design
- High Output Power
- High Dynamic Range
- High Efficiency
- High Heat Load Package
- Red Aiming Beam Included

## Application

- 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 Fiber Module



## Specification

2CM-004-189



Optical	Symbol	Typ.	Units
Center Wavelength	$\lambda_c$	1550	nm ( $\pm 20$ )
Output Power (CW)*	$P_{out}$	5.0	Watts ( $\pm 10\%$ )
Spectral Width FWHM	$\Delta\lambda$	10	nm
Slope Efficiency	$\eta$	0.52	W/A
Optical Fiber Core Dia.		105	$\mu m$
Optical Fiber NA		0.22	
Electrical	Symbol		Units
Power Conversion Eff.	$\eta$	16	%
Operating Current	$I_{op}$	10.5	A
Threshold Current	$I_{TH}$	0.5	A
Operating Voltage	$V_{op}$	3.2	V
Aiming Beam	Symbol		Units
Output Power	$P_a$	10	mW
Wavelength	$\lambda_a$	635	nm
Operating Current	$I_{op}$	65	mA
Voltage Limit	$V_{max}$	2.3	V
Mechanical			Units
Connector Type		SMA905	
Fiber Length		1	meters
Thermistor Constant		3477	$\beta$
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.

Suffix	Description
-189	10mW Red Aiming Beam Option

# High Power Laser Diode 2CM Fiber Module

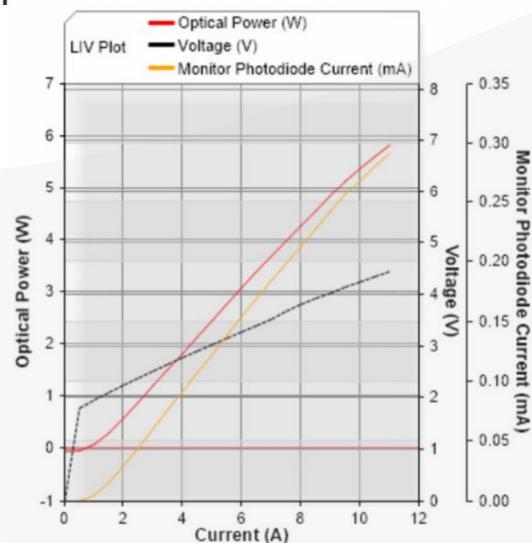


## SemiNex Laser Diodes 2CM-004

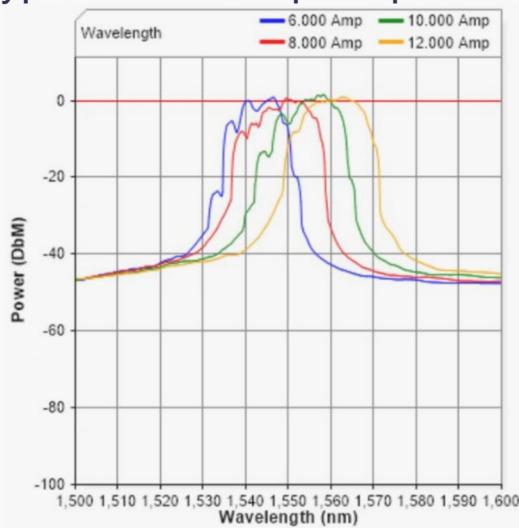
### Graphs & Data



### Typical 2CM L-I-V Characteristics



### Typical 2CM Output Spectrum



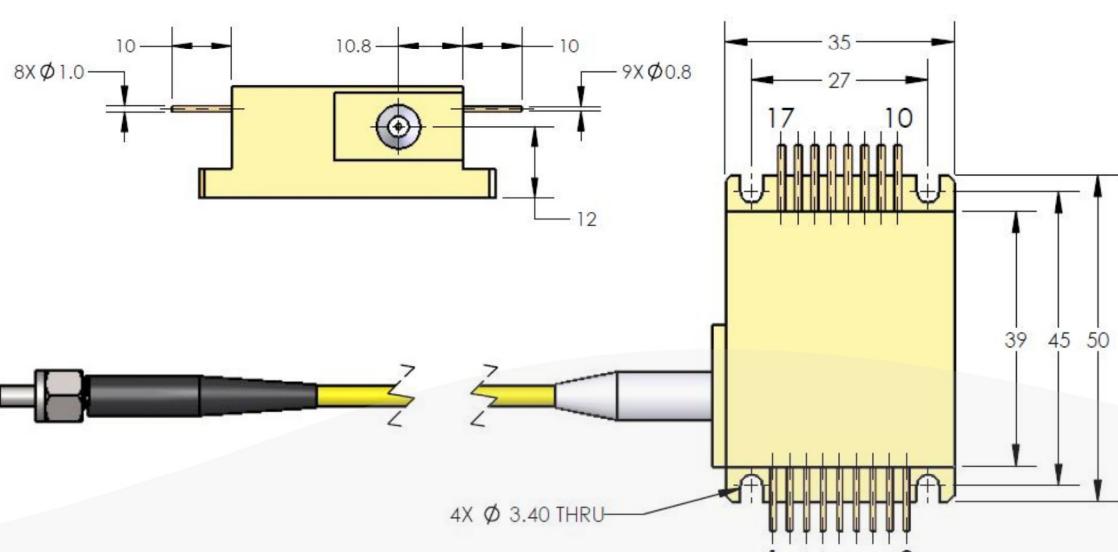
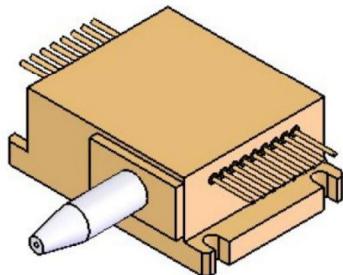
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# High Power Laser Diode 2CM Fiber Module



## 2CM with attached fiber Mechanical Drawing

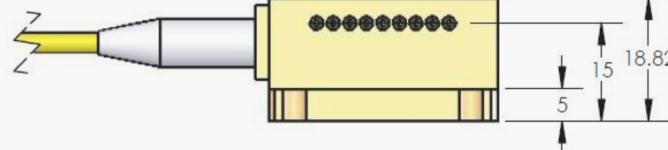
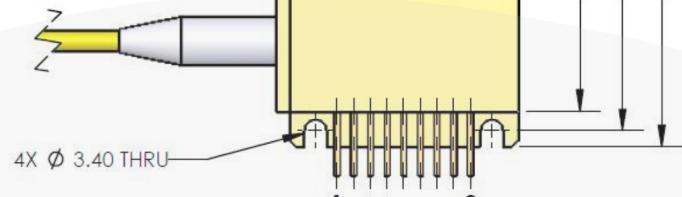
Unless otherwise specified, dimensions are in mm



### PIN OUT:

#### A. SMA-905 INPUT

1. N/C
2. N/C
3. N/C
4. N/C
5. N/C
6. PD { + }
7. PD { - }
8. THERMISTOR
9. THERMISTOR
10. LD ANODE { + }
11. LD CATHODE { - }
12. N/C
13. N/C
14. N/C
15. N/C
16. AIMING BEAM { + }
17. AIMING BEAM { - }



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