

High Power Laser Diode YCM Detachable Fiber

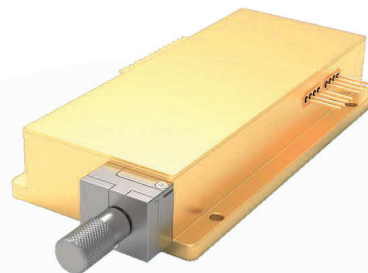


Part Number: YCMDF-101

High Power YCMDF Detachable Fiber Module
Multi-Mode Fabry-Perot
CW Wavelength at 1940nm

Features

- 10W 1940nm
- Detachable Fiber
- 10W @ 4.5A
- Cost Effective Fiber Coupled Design
- High Output Power
- High Dynamic Range
- High Efficiency
- Aiming Beam
- PD & Thermistor Included



Application

- Professional Medical
- 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.

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High Power Laser Diode YCM Detachable Fiber



Specification

YCMDF-101



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1940	nm (± 20)
Output Power (CW)*	P_{out}	10	Watts ($\pm 10\%$)
Spectral Width FWHM	$\Delta\lambda$	10	nm
Slope Efficiency	η	2	W/A
Detachable Optical Fiber Core Dia.		400	μm
Optical Fiber NA		0.22	
Electrical	Symbol	Typ.	Units
Power Conversion Eff.	η	14	%
Operating Current	I_{op}	4.5	A
Threshold Current	I_{TH}	0.3	A
Operating Voltage	V_{op}	16	V
Optical Fiber (Optional)			Units
Connector Type		SMA	
Detachable Fiber Length		1	meters
Thermistor			
Thermistor Constant	β	3477	β
Thermistor Resistance	R	10	K ohm
Aiming Beam			
Output Power	P_a	2	mW
Wavelength	λ_a	635 $\pm$ 10	Nm
Voltage	V_a	2.3	V
Current	I_a	45	mA
		Range	
Operating Temp.**		-20 to 60	$^{\circ}C$
Storage Temp.		-40 to 80	$^{\circ}C$

**High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.

WARNING - FIBER HANDLING

- Do NOT bend the fiber tighter than 26 mm radius during installation or handling.
- Do NOT bend the fiber tighter than 52 mm radius during normal operation or long-term use.
- Exceeding these limits may cause permanent fiber damage and increased optical loss.

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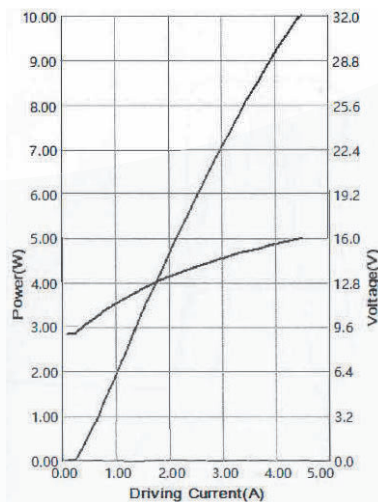


SemiNex Laser Diodes 2CM-201

Graphs & Data

Typical YCM Detachable Fiber

L-I-V Characteristics

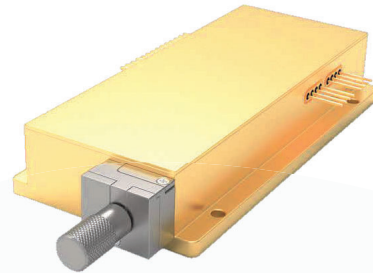
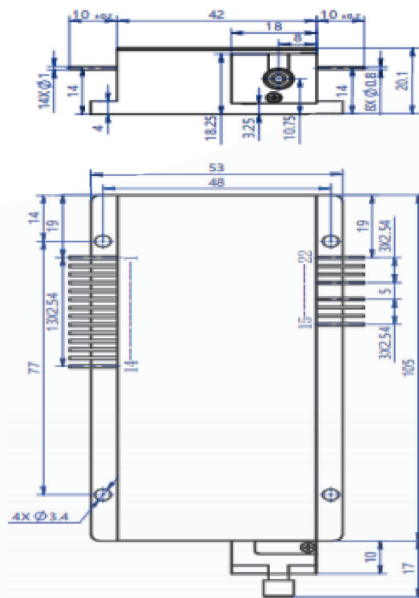


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Mechanical Drawing



Pin	Function	Pin	Function
1	LD (+)	12	
2	LD (-)	13	Aiming Beam(+)
3		14	Aiming Beam(-)
4		15	FOC LED(-)
5		16	FOC LED (+) &FOC PD(N)
6		17	FOC PD(P)
7		18	
8		19	-
9		20	-
10		21	Thermistor
11		22	Thermistor

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