

# 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.

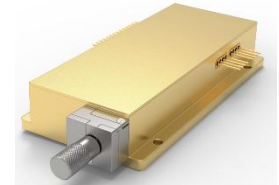
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## Specification

YCMDF-101



Optical	Symbol	Typ.	Units
Center Wavelength	$\lambda_c$	1940	nm ( $\pm 20$ )
Output Power (CW)*	$P_{out}$	10	Watts ( $\pm 10\%$ )
Spectral Width FWHM	$\Delta\lambda$	10	nm
Slope Efficiency	$\eta$	2	W/A
Detachable Optical Fiber Core Dia.		400	$\mu m$
Optical Fiber NA		0.22	
Electrical	Symbol	Typ.	Units
Power Conversion Eff.	$\eta$	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	$\beta$	3477	$\beta$
Thermistor Resistance	R	10	K ohm
Aiming Beam			
Output Power	$P_a$	2	mW
Wavelength	$\lambda_a$	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.

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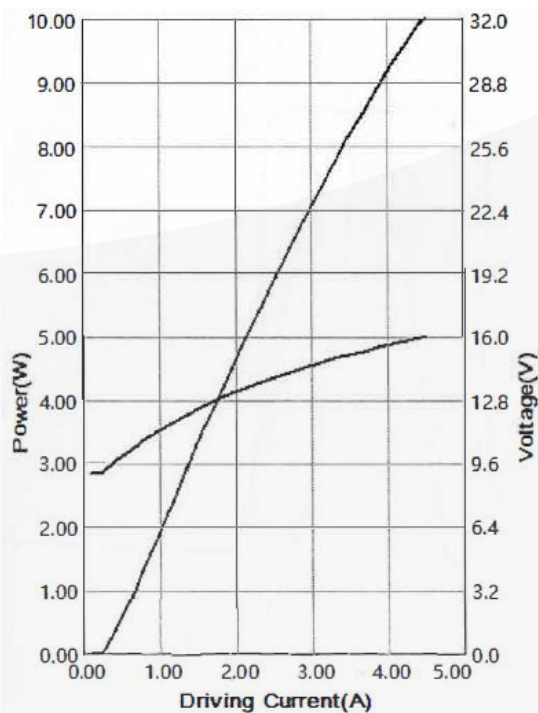


## SemiNex Laser Diodes 2CM-201

### Graphs & Data

### Typical YCM Detachable Fiber

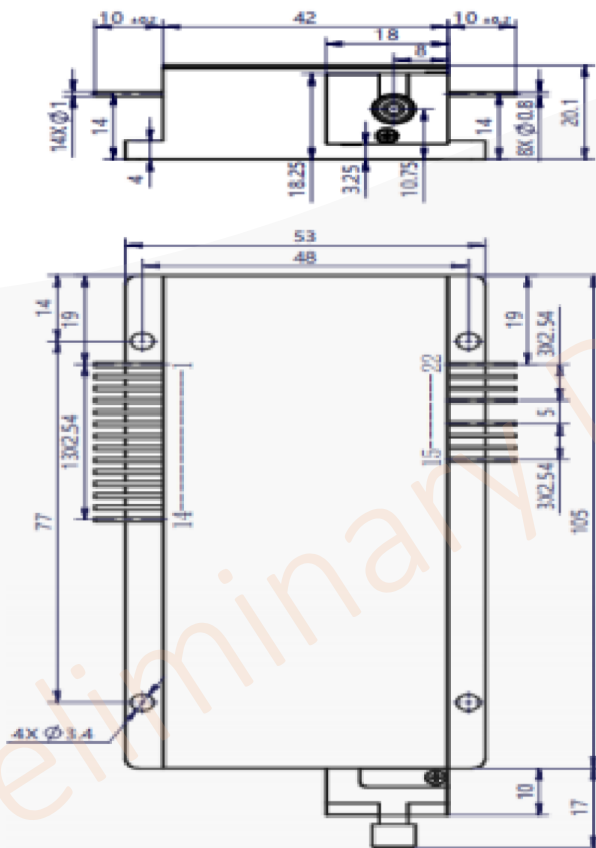
### L-I-V Characteristics



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## Mechanical Drawing



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

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