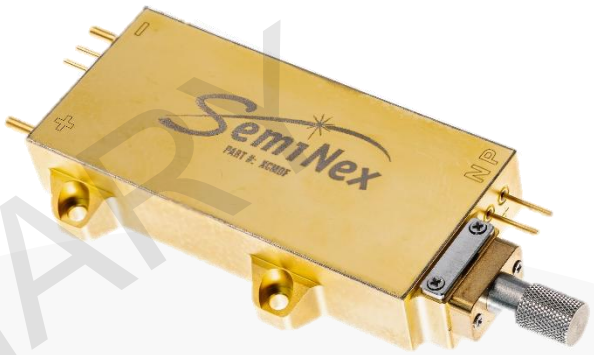
High Power Laser Diode
XCMDF Detachable Fiber

Part Number: XCMDF-104



High Power XCMDF Detachable Fiber Module
Multi-Mode Fabry-Perot
CW Wavelength at 1726nm

Features

- 100W 1726nm
- Detachable Fiber
- Cost Effective Fiber Coupled Design
- High Output Power
- High Dynamic Range
- High Efficiency
- PD & Thermistor Included
- Red Aiming Beam Optional

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
XCM Detachable Fiber

Specification

XCMDF-104

Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1726	nm (±20)
Output Power (CW)*	P_{out}	100	Watts (±10%)
Spectral Width FWHM	$\Delta\lambda$	10	nm
Detachable Optical Fiber Core Dia.		600	µm
Optical Fiber NA		0.22	
Electrical	**Symbol**	**Typ.**	**Units**
Power Conversion Eff.	η	14	%
Operating Current	I_{op}	24	A
Threshold Current	I_{TH}	1.5	A
Operating Voltage	V_{op}	30	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
Red Aiming Beam			
Output Power	P_a	2	mW
Wavelength	λ_a	635+/-10	nm
Voltage	V_a	2.1	V
Current	I_a	175	mA
		Range	
Operating Temp.**		-20 to 60	°C
Storage Temp.		-40 to 80	°C

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

Suffix	Description
-004	635nm WL Red Aiming Beam Option

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