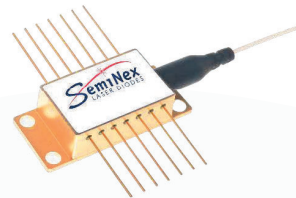


High Power Laser Diode 14BF Fiber Module



Part Number: 14BF-105

High Power 14-Pin Butterfly Fiber Coupled Module
Single-Mode Fabry-Perot
CW Wavelength at 1550nm



Features

- High Output Power
- High Dynamic Range
- High Efficiency
- 14BF Fiber Coupled Module
- Cost Effective

Application

- Optical Communications



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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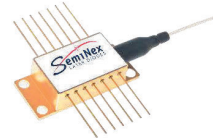
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High Power Laser Diode 14BF Fiber Module



Specification

14BF-105



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1550	nm (± 20)
Output Power (CW)*	P_{out}	0.2	watts ($\pm 10\%$)
Spectral Width FWHM	$\Delta\lambda$	10	nm
Slope Efficiency	η	0.2	W/A
Optical Fiber Core Dia.		9	μm
Optical Fiber NA		SMF-28	
Electrical	Symbol		Units
Power Conversion Eff.	η	10	%
Operating Current	I_{op}	1	A
Threshold Current	I_{TH}	0.05	A
Operating Voltage	V_{op}	2.2	V
Mechanical	Symbol		Units
Fiber Type		900 μm jacket	
Connector Type		FC/PC	
Fiber Length		1	meters
Pinout Type		Type 1	
Thermistor			
Thermistor Constant	β	3950	β
Thermistor Resistance	R	10	K ohm
		Range	
Operating Temp.**		-40 to 60	$^{\circ}C$
Storage Temp.		-40 to 80	$^{\circ}C$

*Specified values are rated at a constant heat sink temperature of 20 $^{\circ}C$.

**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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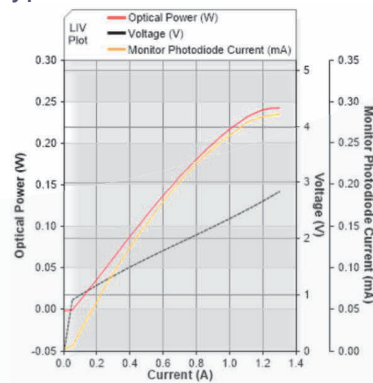
High Power Laser Diode 14BF Fiber Module



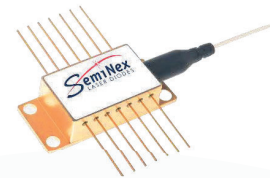
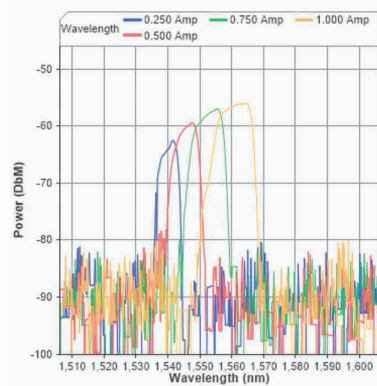
SemiNex Laser Diodes 14BF-105

Graphs & Data

Typical 14BF L-I-V Characteristics



Typical 14BF Output Spectrum

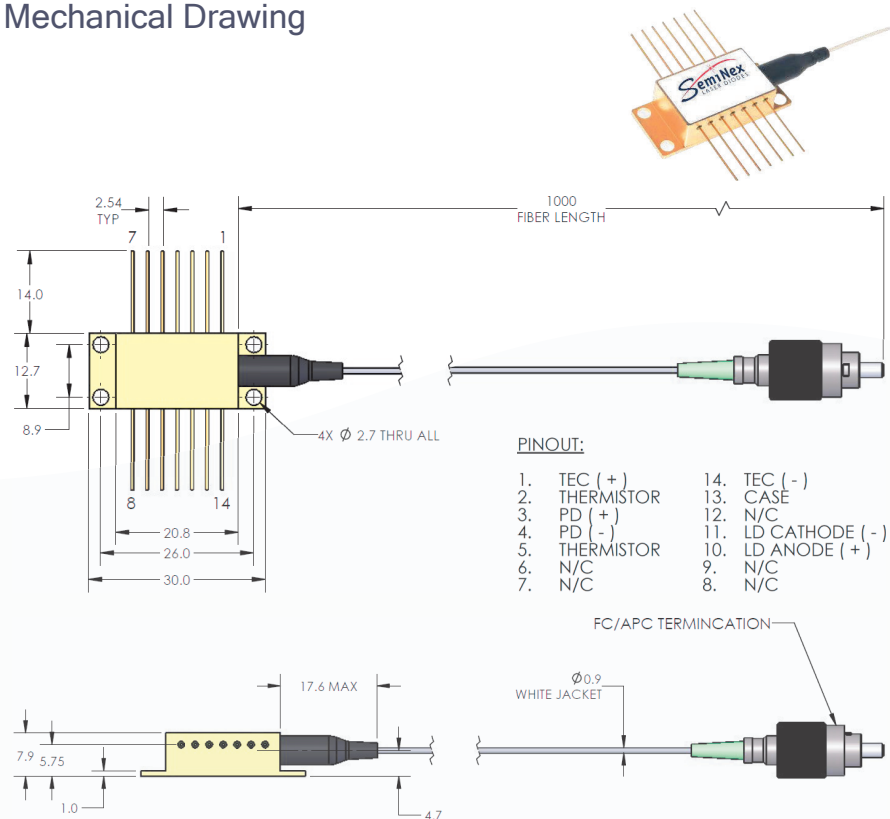


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High Power Laser Diode 14BF Fiber Module



Mechanical Drawing



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