

High Power 14-Pin Short Pulse SOA Butterfly Fiber Module



Part Number: 14BF-315L-001

High Power 14-Pin SOA Butterfly Fiber Coupled Module
Single-Mode Short Pulse SOA
Center Wavelength at 1595nm L-band



Features

- High Output Power
- High Efficiency
- Polarization Maintenance Fiber
- Isolator Included before Output Fiber

Application

- LiDAR
- Free Space Communications
- Optical Fiber Communications
- Network Test Equipment



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

14BF-315L-001



Optical	Symbol	Typical	Units
Center Wavelength	λ_c	1595	nm
3dB Bandwidth	BW	80	nm
Output Power @ 1.2A*	P _{out}	23	dBm
PDL	PDL	0.1	dB
Return Loss (In)		40	dB
Return Loss (out)		50	dB
Gain @ Pin = 10μW	G	30	dB
Noise Figure	NF	7	dB
Rise / Fall time		1	nsec
Switching Speed		1	nsec
Electrical	Symbol		Units
Operating Current	I _{op}	1	A
Operating Voltage	V _{op}	2.5	V
Optical Fiber	Symbol		Units
Fiber Core		8	μm
Fiber Type		900μm jacket	
Connector Type		FC / APC	
Fiber Length		1	m
Pinout Type		Type 1	
Thermistor & TEC			
Thermistor Constant	β	3930	β
Thermistor Resistance	R	10	K ohm
Voltage (TEC) – Typ, Max	V _{TEC}	4.2, 8.2	V
Current (TEC) – Typ, Max	I _{TEC}	0.8, 2.6	A
		Range	
Operating Temp.**		-20 to 75	°C
Storage Temp.		-40 to 85	°C

*Optical Output Power for 14BF-315L has an SOA current @ 1.2A and Pin @ 10dBm into fiber

*Specified values are rated at a constant heat sink temperature of 20°C.

**High temperature operation will reduce performance and MTTF.

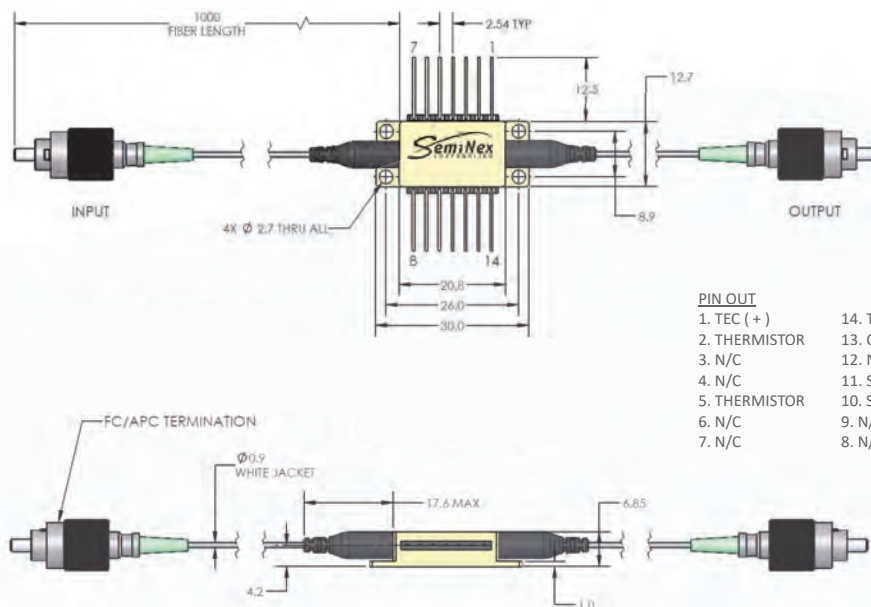
Unless otherwise indicated all values are nominal.

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Mechanical Drawing



PIN OUT

- | | |
|---------------|-----------------------|
| 1. TEC (+) | 14. TEC (-) |
| 2. THERMISTOR | 13. CASE |
| 3. N/C | 12. N/C |
| 4. N/C | 11. SOA CATHODE (-) |
| 5. THERMISTOR | 10. SOA ANODE (+) |
| 6. N/C | 9. N/C |
| 7. N/C | 8. N/C |

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