

14-Pin BF Single-Mode w/TEC

High Power Single Mode SemiNex Lasers
 12xx to 19xx nm
 Custom Wavelengths Available

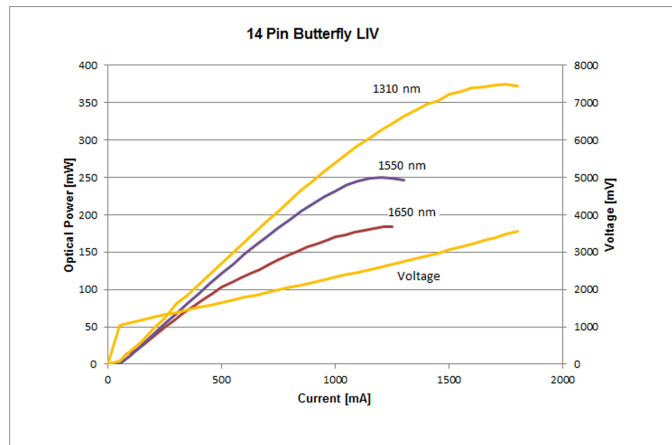
Applications

- OTDR
- LiDAR
- Free Space Communications
- Network Test equipment

Features

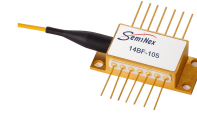
- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low Cost Package
- Thermal Electric Cooler

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 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.



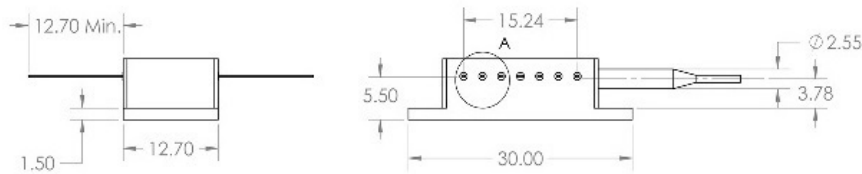
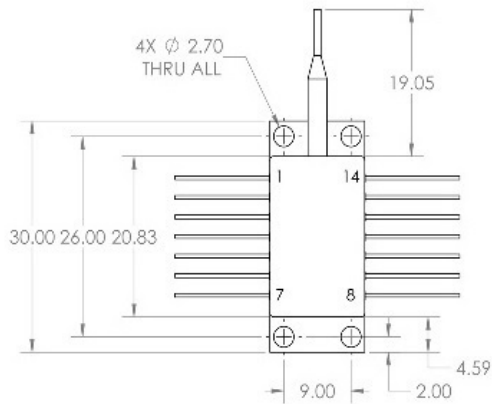


14 Pin Single Mode Butterfly



	Symbol	14BF-110	Units
Optical			
Center Wavelength	λ_c	1625	nm (± 20)
Output Power (CW)	P_o	0.16	watts ($\pm 10\%$)
Spectral Width	$\delta\lambda$	10	nm 3dB
Slope Efficiency	η_r	0.15	W/A
FBG		No	
Electrical			
Power Conversion Eff.	η	8.00	%
Threshold Current	I_{th}	0.05	A
Operating Current	I_{op}	1	A
Operating Voltage	V_{op}	2	V
Lead Soldering Temp.	$^{\circ}C$	250	$^{\circ}C$
Mechanical			
Weight		88	g
Operating Temp.**		-40 to 60	$^{\circ}C$
Storage Temp.		-40 to 80	$^{\circ}C$
Fiber Length		1	meters
Connector		FC/PC	
Pinout Type		F-series	
Thermistor			
Thermistor Constant	β	3950	β
Thermistor Resistance	R	10000	K ohm
TEC			
TEC Voltage (Vmax)		3.2	V
TEC Current (Imax)		2	A

Specified values are rated at a constant heat sink temperature of 20°C.
 **Specified operating conditions are based on 20C heat sink temperature. High temperature operation will reduce performance and MTTF.
 Unless otherwise indicated all values are nominal.



F SERIES (FLOATING THERMISTOR)	
Pin	Function
1	TEC anode(+)
2,3,4,6,13	no connection
5	laser anode(+), ground
7	PD cathode(-) (optional)
8	PD anode(+)(optional)
9	laser cathode(-)
10	ground
11,12	thermistor
14	TEC cathode(-)



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