

14-Pin BF Single-Mode

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

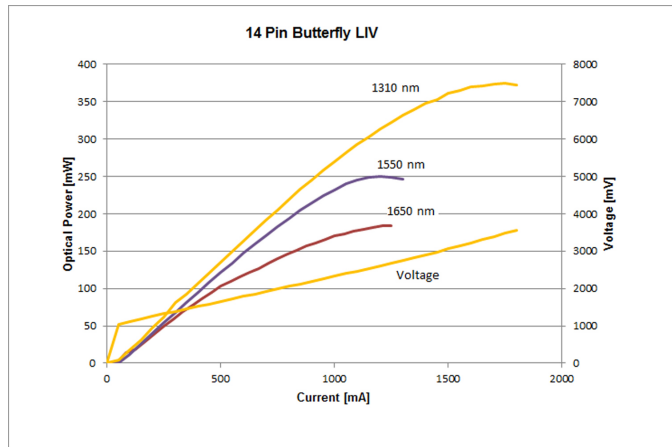
Applications

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

Features

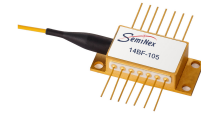
- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low Cost Package

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.



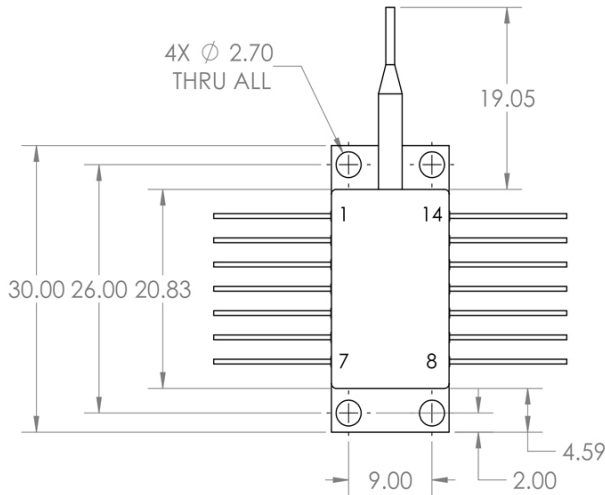


14 Pin Single Mode Butterfly



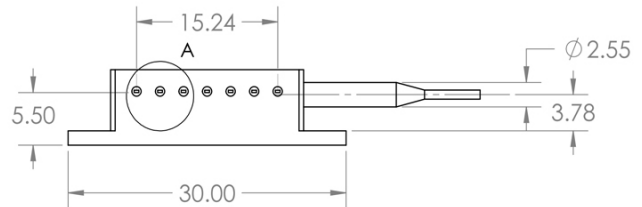
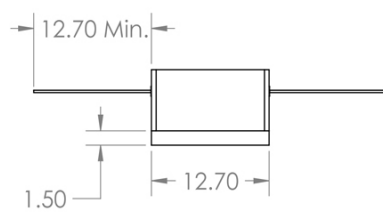
	Symbol	14BF-101	14BF-105	14BF-107	14BF-102	14BF-110	14BF-117	14BF-103	14BF-106	Units
Optical										
Center Wavelength	λ_c	1310	1550	1560	1565	1625	1625	1655	1655	nm (± 20)
Output Power (CW)	P_o	0.28	0.20	0.23	0.23	0.16	0.16	0.16	0.18	watts
Spectral Width	$\delta\lambda$	10	10	10	10	10	10	10	10	nm 3dB
Slope Efficiency	η_s	0.25	0.2	0.2	0.2	0.15	0.15	0.14	0.2	W/A
Electrical										
Power Conversion Eff.	η	13.00	10.00	10.00	10.00	8.00	8.00	8.00	9.00	%
Threshold Current	I_{th}	0.055	0.05	0.055	0.055	0.05	0.05	0.055	0.05	A
Operating Current	I_{op}	1.1	0.95	0.95	0.95	1	1	0.95	1	A
Operating Voltage	V_{op}	2.5	2.2	2.2	2.2	2	2	2.2	2	V
Series Resistance	R_s	0.9	1.4	1.4	1.4	0.12	0.12	1.4	1.4	ohm
Lead Soldering Temp.	$^{\circ}C$	250	250	250	250	250	250	250	250	$^{\circ}C$
Mechanical										
Weight		88	88	88	88	88	88	88	88	g
Operating Temp.**		-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	$^{\circ}C$
Storage Temp.		-40 to 80	-40 to 80	-40 to 80	-40 to 80	-40 to 80	-40 to 80	-40 to 80	-40 to 80	$^{\circ}C$
Fiber Length		1	1	1	1	1	1	1	1	meters
Connector		FC/PC	FC/PC	FC/PC	FC/PC	FC/PC	FC/PC	FC/PC	FC/PC	
Thermistor										
Thermistor Constant	β	3950	3950	3950	3950	3950	3950	3950	3950	β
Thermistor Resistance	R	10000	10000	10000	10000	10000	10000	10000	10000	K ohm

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.



PIN OUT: (FOR REFERENCE ONLY, REFER TO DOCUMENTATION SUBMITTED WITH PRODUCT FOR ACTUAL PIN OUT)

1. TEC (+) (OPTIONAL)
2. NONE
3. NONE
4. NONE
5. LD ANODE (+), CASE
6. NONE
7. PD (-) (OPTIONAL)
8. PD (+) (OPTIONAL)
9. LD CATHODE (-)
10. LD ANODE (+), CASE
11. THERMISTOR (OPTIONAL)
12. THERMISTOR (OPTIONAL)
13. NONE
14. TEC (-) (OPTIONAL)



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