

14 Pin Single Mode Butterfly

High Power Single Mode SemiNex Lasers
Up to 300 mW of CW power
1310, 1550, 1560, and 1655 nm
Custom Wavelengths Available

Features

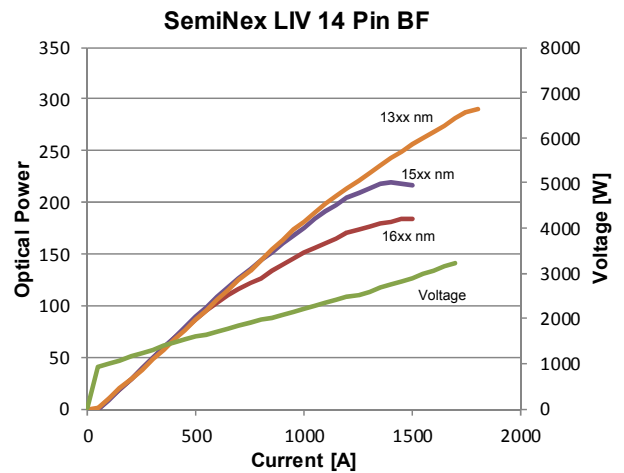
- High output power
- High dynamic power range
- High efficiency
- Standard Low Cost Package

Applications

- LIDAR
- Free Space Optical Communication
- OTDR
- Military / Aerospace

SemiNex delivers the highest available power at infrared wavelengths between 13xx and 17xx 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

Preliminary



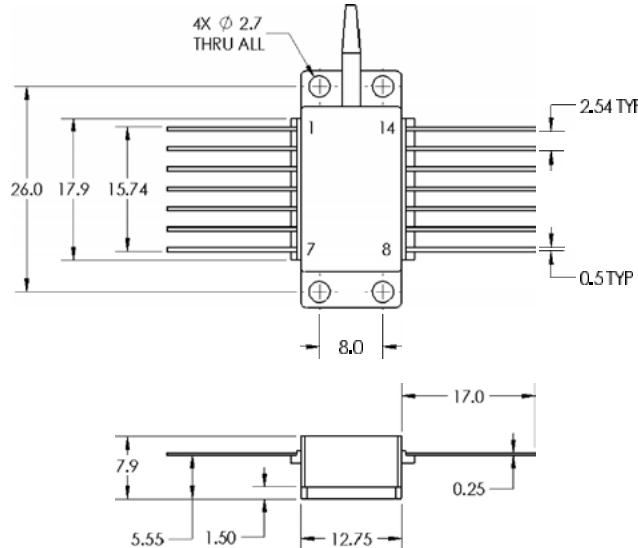
701-920-002 Rev 3



14 Pin Single Mode Butterfly

	Symbol	14BF-104	14BF-101	14BF-105	14BF-107	14BF-102	14BF-103	Units
Optical								
Center Wavelength	λ_c	1310	1320	1550	1560	1565	1655	nm (± 20)
Output power (CW)	P_o	300	300	200	190	200	160	mW
Spectral Width	$\Delta\lambda$	10	10	10	10	10	10	nm 3dB
Slope Efficiency	η_o	0.18	0.25	0.15	0.2	0.23	0.14	W/A
Electrical								
Power conversion Eff.	η	0.10	0.1	0.10	0.1	0.1	0.08	
Threshold Current	I_{th}	55	55	55	55	55	55	mA
Operating Current	I_{op}	1.2	1.2	0.9	0.9	0.9	0.95	A
Operating Volt	V_{op}	2.5	2.5	2.2	2.2	2.2	2.2	V
Series Resistance	R_s	1.40	1.40	1.40	1.4	1.40	1.40	ohm
Lead Soldering Temp	$^{\circ}\text{C}$	250	250	250	250	250	250	$^{\circ}\text{C}$ @ 10 sec
Thermistor								
Resistance	R	10 +/- 5% @ 25 $^{\circ}\text{C}$						K ohm
Thermistor Constant	β	3477 +/- 3%						β
TEC								
TEC Voltage	V	3.2	NA	3.2	NA	NA	NA	V
TEC Current	A	2	NA	2	NA	NA	NA	A

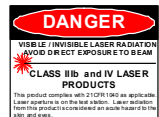
Specified values are rated at a constant heat sink temperature of 20 $^{\circ}\text{C}$



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

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

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