

14Pin DF

High Power Multi-Mode SemiNex Lasers
 6.0 Watts of CW power
 1470, 1550 nm Wavelengths
 Custom Wavelengths Available

Features

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

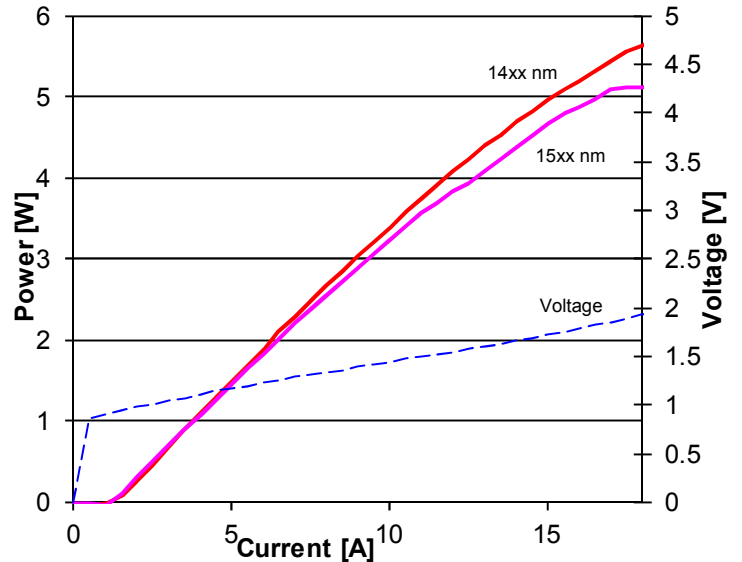
Applications

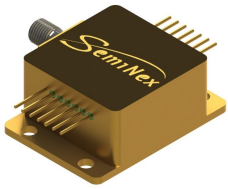
- Medical laser equipment
- LIDAR
- Free Space Optical Communication
- DPSS pump lasers
- Military / Aerospace

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

SemiNex 14Pin-DF LIV





14Pin DF



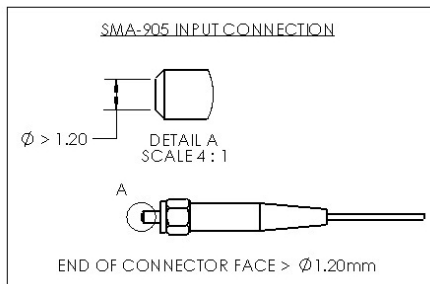
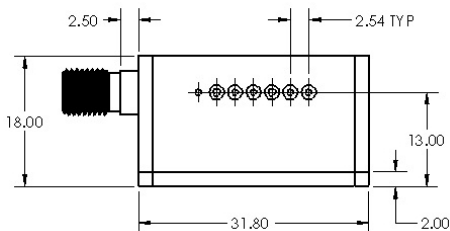
	Symbol	14P-101	Units
Optical			
Center Wavelength	λ_c	1475	nm
Output power (CW)	P_o	5.2	watts
Spectral Width	$\Delta\lambda$	10	nm 3dB
Slope Efficiency	η_o	0.35	W/A
Electrical			
Power conversion Efficiency	η	0.19	
Threshold Current	I_{th}	0.7	A
Operating Current (Max)*	I_{op}	17	A
Operating Voltage	V_{op}	1.6	V
Series Resistance	R_s	0.06	ohm
Lead Soldering Temperature	$^{\circ}C$	250	$^{\circ}C$
Aiming Beam			
Output Power	P_a	>2	mW
Wavelength	λ_a	650 +/- 10	nm
Thermistor			
Resistance	R	10 +/- 5% @ 25 $^{\circ}C$	K ohm
Thermistor Constant	β	3477 +/- 3%	β
TEC (Optional)			
TEC Voltage	V	9.8	V
TEC Current	A	6	A

Preliminary

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

Note: 14-Pin requires use of 200 μm , 0.22NA fiber with SMA905 connector, with controlled length, see physical dimensions for specs.

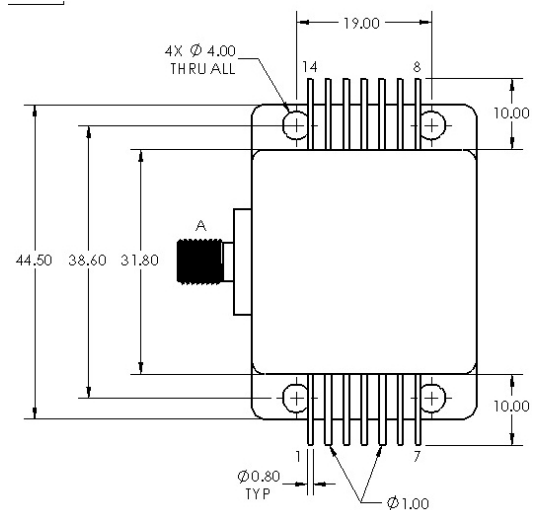
* Driving beyond stated current will damage unit.



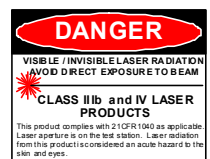
PIN OUT: (FOR REFERENCE ONLY, REFER TO DOCUMENTATION SUBMITTED WITH PRODUCT FOR ACTUAL PIN OUT)

A. SMA-905 INPUT

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



All statements, technical information and recommendations related to the product herein are based upon information believed to be reliable or accurate. The accuracy or completeness herein is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. SemiNex Corporation reserves the right to change at any time without notice the design, specification, deduction, fit or form of its described herein, including withdrawal at any time of a product offered for sale herein. Users are encouraged to visit www.seminex.com for the latest data. SemiNex Corporation makes no representations that the products herein are free from any intellectual property claims of others. Please contact SemiNex for more information. © 2014 SemiNex Corporation



SemiNex Corporation • 100 Corporate Place • Peabody, MA 01960 • 978-326-7700 • Email: info@seminex.com • www.seminex.com