

## 4-pin Fiber Coupled

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

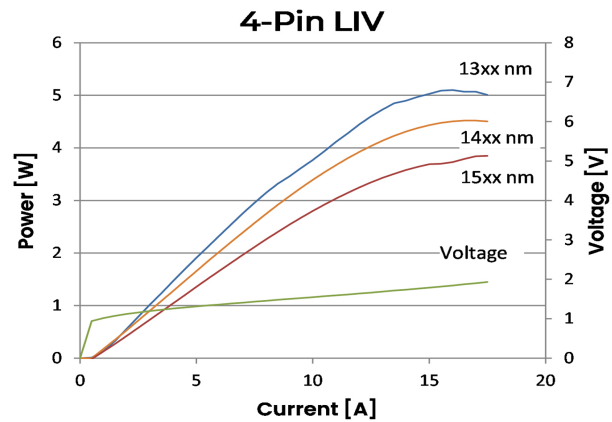
### Applications

- OEM Medical
- DPSS pump source
- LiDAR
- Free Space Communications
- Military / Aerospace

### Features

- Cost effective
- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low Cost Package
- Designed for Volume Applications

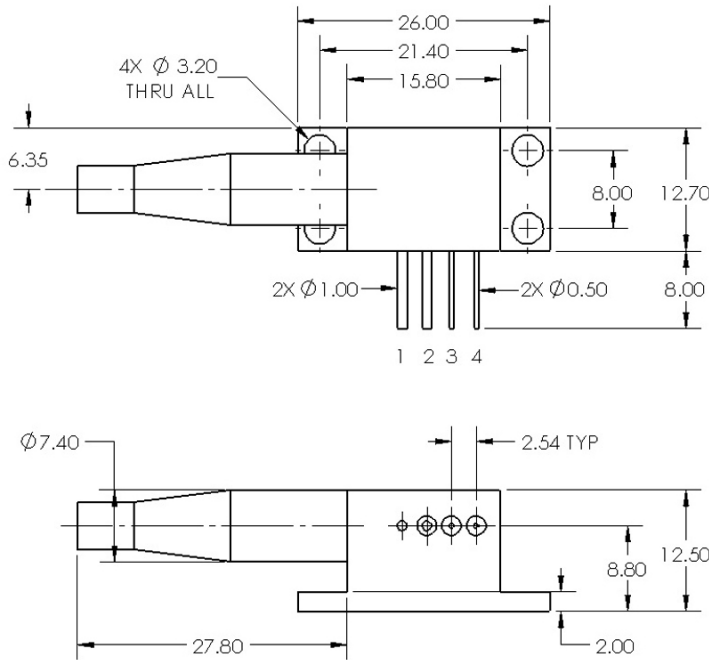
SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary we will further optimize the design of our InP laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.





	Symbol	4PN-104	Units
<b>Optical</b>			
Wavelength	$\lambda_c$	1480	nm ( $\pm 20$ )
Output Power (CW)	$P_o$	3.80	watts ( $\pm 10\%$ )
Spectral Width	$\delta\lambda$	10	nm 3dB
Slope Efficiency	$\eta_s$	0.35	W/A
Optical Fiber Core Dia.	$\eta_c$	105	$\mu\text{m}$
Optical Fiber NA		0.22	
<b>Electrical</b>			
Power Conversion Eff.	$\eta$	19.00	%
Threshold Current	$I_{th}$	0.5	A
Operating Current	$I_{op}$	12	A
Operating Voltage	$V_{op}$	1.7	V
Lead Soldering Temp.	$^{\circ}\text{C}$	250	$^{\circ}\text{C}$
<b>Mechanical</b>			
Weight		25	g
Operating Temp.**		-40 to 60	$^{\circ}\text{C}$
Storage Temp.		-40 to 80	$^{\circ}\text{C}$
Fiber Length		1.5	meters
Connector		SMA905 PD Stand.	
<b>Thermistor</b>			
Thermistor Constant	$\beta$		$\beta$
Thermistor Resistance	R		K ohm

PLEASE NOTE: The 4 Pin laser package is not electrically isolated. The package body is the anode connection. Care should be taken in mounting and installation. 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. LD ANODE (+)
2. LD CATHODE (-)
3. PD (-) or THERMISTOR
4. PD (+) or THERMISTOR

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