

15-Pin Fiber-Coupled Laser Diode w/TEC

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

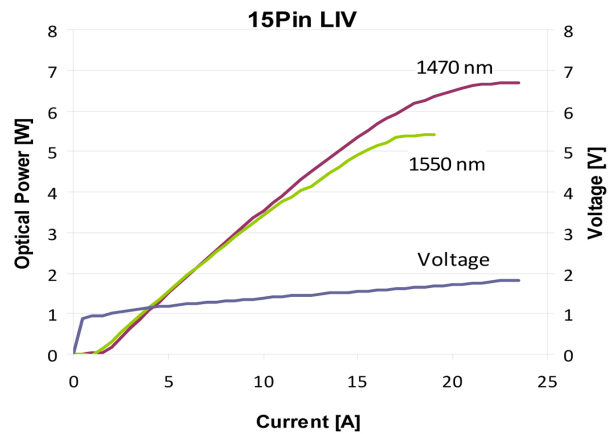
Applications

- Medical Lasers for OEM
- LiDAR
- DPSS Pumping Source
- Free Space Communications
- Research
- Military / Aerospace

Features

- High Output Power
- High Dynamic Power 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.



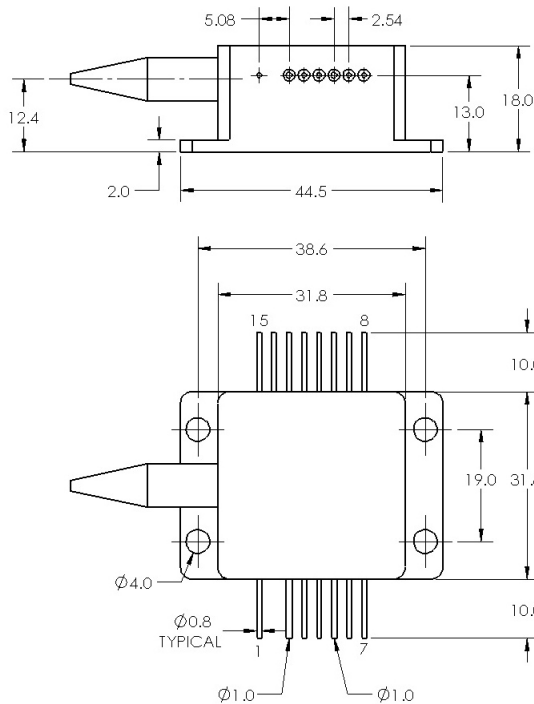


15 Pin Fiber Module



	Symbol	15P-103	Units
Optical			
Wavelength	λ_c	1560	nm (± 20)
Output Power (CW)	P_o	4.90	watts ($\pm 10\%$)
Spectral Width	$\delta\lambda$	15	nm 3dB
Slope Efficiency	η_r	0	W/A
Optical Fiber Core Dia.	η_c	200	μm
Optical Fiber NA		0.22	
Electrical			
Power Conversion Eff.	η	20.40	%
Threshold Current	I_{th}	0.5	A
Operating Current	I_{op}	15	A
Operating Voltage	V_{op}	1.6	V
Lead Soldering Temp.	$^{\circ}\text{C}$	250	$^{\circ}\text{C}$
Aiming Beam			
Output Power	P_a	2	mW
Wavelength	λ_a	650	nm
Operating Current**	I_{op}	25	mA
Voltage Limit	V_{max}	2.2	V
TEC			
TEC Voltage	V	9.8	V
TEC Current	A	6	A
Mechanical			
Weight		100	g
Operating Temp.**		-40 to 60	$^{\circ}\text{C}$
Storage Temp.		-40 to 80	$^{\circ}\text{C}$
Fiber Length		1.5	meters
Connector		SMA905	
Thermistor			
Thermistor Constant	β	3477	β
Thermistor Resistance	R	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.
 **Aiming beam is current driven



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

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

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