



15 Pin Fiber Coupled Laser

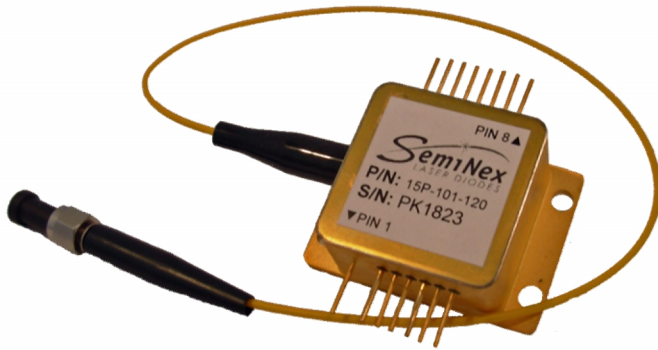
High Power Multi-Mode SemiNex Lasers
 6.0 Watts of CW Power
 1470, 1550 nm Wavelengths
 Custom Wavelengths Available

Features

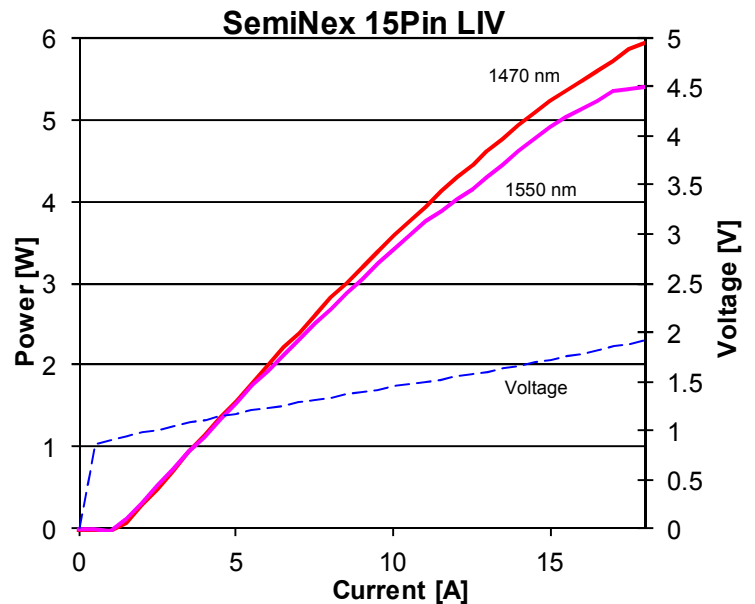
- High output power
- High dynamic power range
- High efficiency
- Standard low cost package

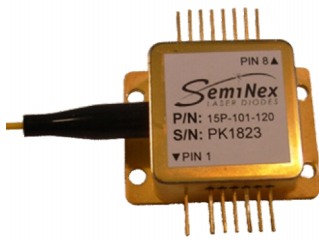
Applications

- 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





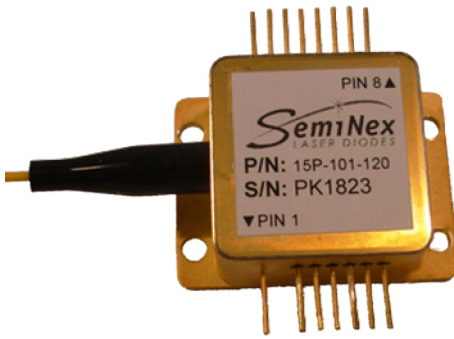
15 Pin Fiber Module



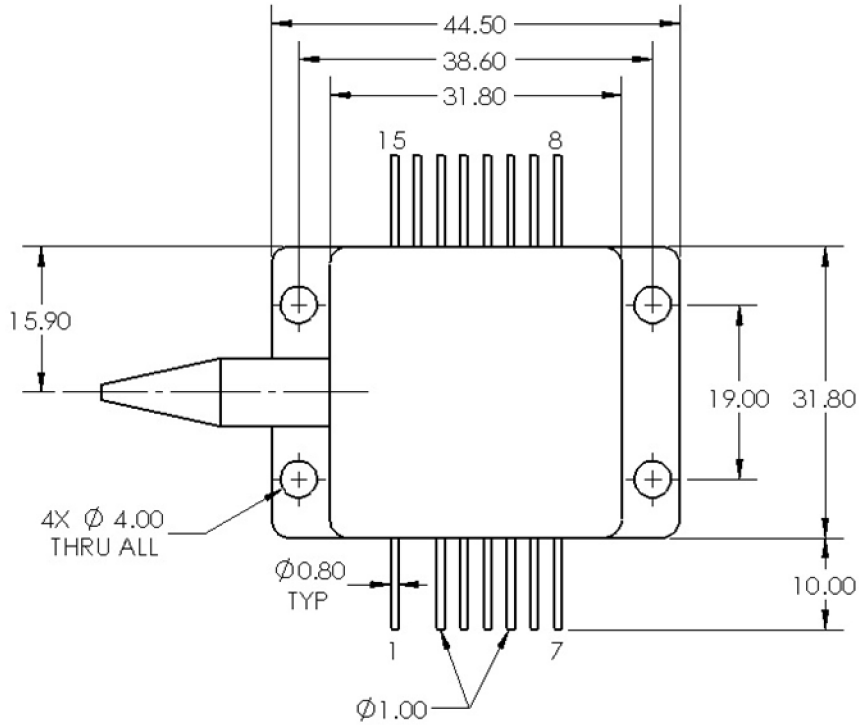
	Symbol	15P-101	15P-109	15P-110	15P-111	Units
Optical						
Wavelength*	λ_c	1470	1480	1570	1580	nm (+/- 20)
Output Power (CW)	P_o	5.4	5.9	4.9	5.2	watts
Spectral Width	$\Delta\lambda$	10	10	10	10	nm 3dB
Slope Efficiency	η_o	0.37	0.30	0.34	0.34	W/A
Optical Fiber Core Dia.		200	200	200	200	μm
Optical Fiber NA		0.22	0.22	0.22	0.22	
Electrical						
Power conversion Eff.	η	0.21	0.15	0.19	0.14	
Threshold Current	I_{th}	0.7	0.7	0.7	0.7	A
Operating Current	I_{op}	16	20	15	19	A
Operating Voltage	V_{op}	1.6	2.0	1.7	1.9	V
Series Resistance	R_s	0.06	0.06	0.06	0.06	ohm
Lead Soldering Temp.	$^{\circ}\text{C}$	250	250	250	250	$^{\circ}\text{C}$
Aiming Beam						
Output Power	P_a		>2			mW
Wavelength	λ_a		650 +/- 10			nm
Operating Current**	I_{op}		22 to 25			mA
Voltage Limit	V_{max}		2.2			V
Thermistor						
Resistance	R		10 +/- 5% @ 25 $^{\circ}\text{C}$			K ohm
Thermistor Constant	β		3477 +/- 3%			β
TEC						
TEC Voltage	V	9.8	No	9.8		V
TEC Current	A	6	No	6		A
Mechanical						
Weight		99.5	82.0	99.5	82.0	grams
Operating Temp.			10 to 30			$^{\circ}\text{C}$
Storage Temp.			-20 to 80			$^{\circ}\text{C}$
Fiber Length			1.5			meters
Connector			SMA-905			

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

**Aiming beam is current driven

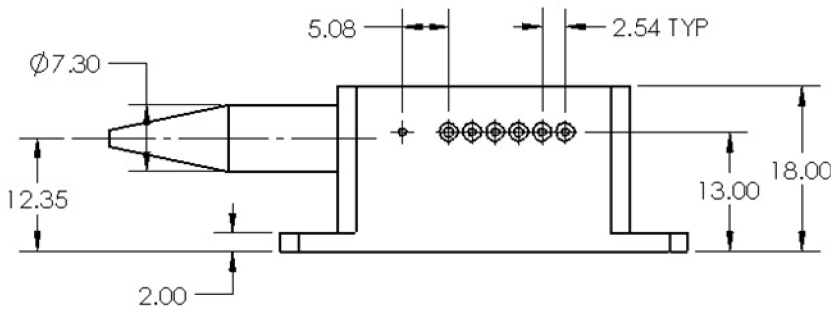


15 Pin Fiber Module



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

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. NONE
13. AIMING BEAM LD (+)
14. AIMING BEAM LD (-)
15. TEC (+) (OPTIONAL)



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