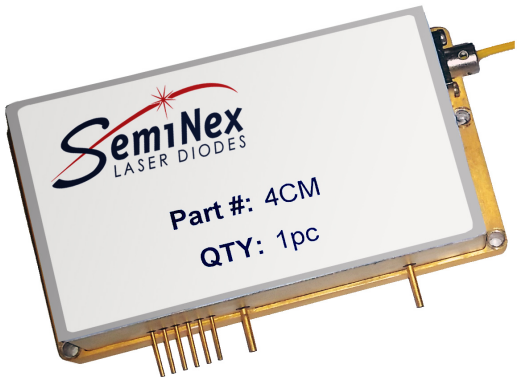
4CM Packaged Laser Diode
PRELIMINARY

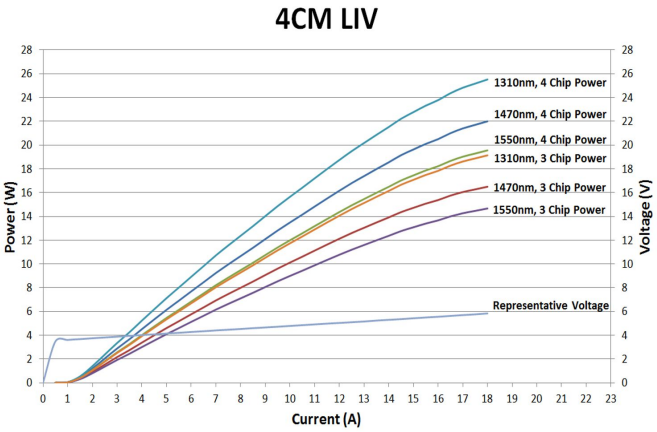
High Power Multi-Mode SemiNex Lasers
12xx to 19xx nm
Custom Wavelengths Available
Fiber Coupled

Applications
- Medical
- Thermal Processing
- DPSS Pump Lasers

Features
- 1470nm wavelength
- Custom Wavelengths Available
- Red Aiming Beam
- Thermistor
- Monitor Photodiode



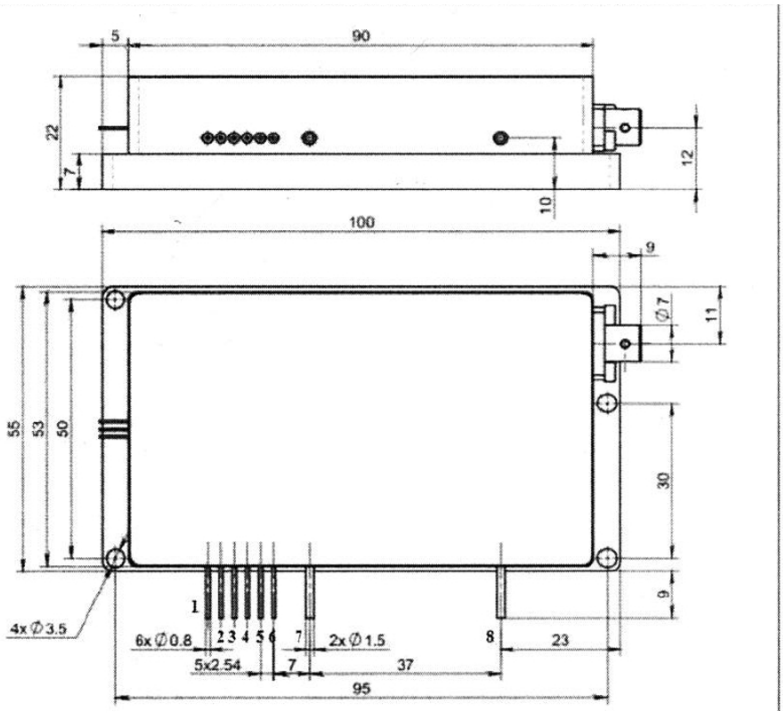
SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary we will further optimize the design of our InP laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and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



4CM

	Symbol	4CM-104	Units
Optical			
Center Wavelength	λ_c	1485	nm (±20)
Output Power (CW)	$P_\circ$	18.00	watts (±10%)
Spectral Width	δλ	20	nm 3dB
Slope Efficiency	$\eta_\circ$	1.4	W/A
Optical Fiber Core Dia.	$\eta_\circ$	400	µm
Optical Fiber NA		0.22	
Fiber Length		1.5	meters
Connector		SMA905	
Electrical			
Power Conversion Eff.	η	22.00	%
Threshold Current	I_{th}	0.9	A
Operating Current	I_{op}	14	A
Operating Voltage	V_{op}	5.4	V
Lead Soldering Temp.	°C	250	°C
Aiming Beam			
Output Power	P_a	2	mW
Wavelength	λ_a	635	nm
Operating Current**	I_{op}	50	mA
Voltage Limit	V_{max}	2.2	V
Mechanical			
Weight		400	g
Operating Temp.**		-40 to 60	°C
Storage Temp.		-40 to 80	°C
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.



Pins	Function
1	PD (P) *
2	PD (N) *
3	Red Aim (+)
4	Red Aim (-)
5	Thermistor*
6	Thermistor*
7	LD (-)
8	LD (+)

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Date Created: Jun 27 2023 8:49PM UTC