2CM Packaged Laser Diode

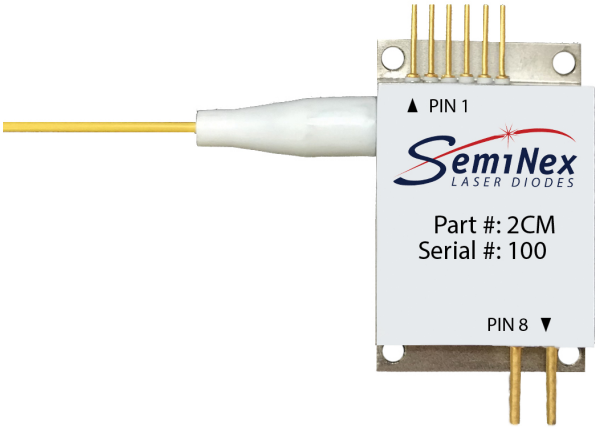
High Power Multi-Mode SemiNex Lasers
12xx to 19xx nm
Custom Wavelengths Available
Fiber Coupled

Applications

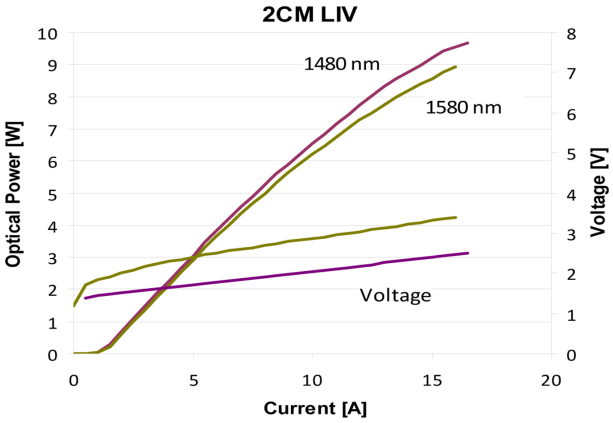
- Professional Medical
- DPSS pump source
- LiDAR
- Free Space Communications
- Military / Aerospace

Features

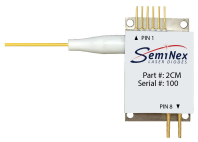
- Two Laser Chip Package
- Cost effective fiber coupled design
- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low Cost Package



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.

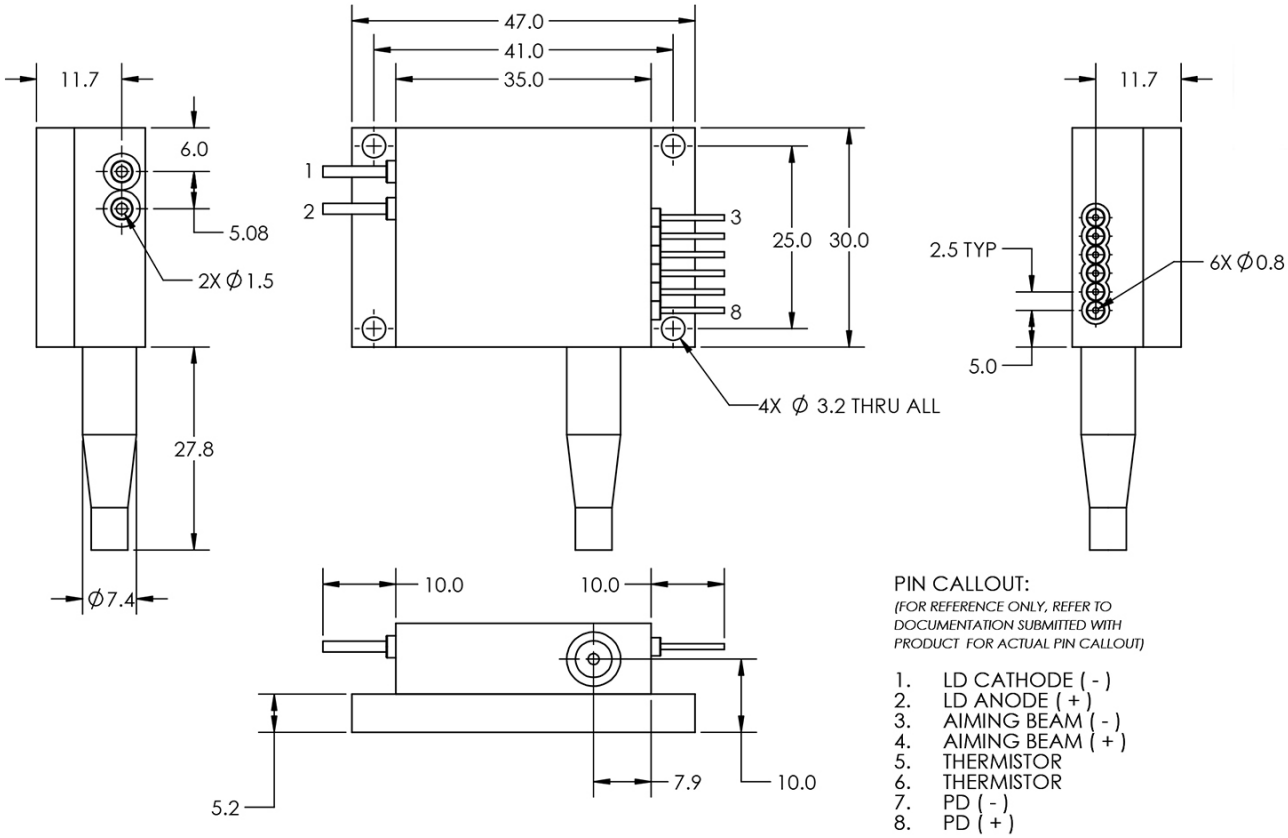


2CM



	Symbol	2CM-105	Units
Optical			
Center Wavelength	λ_c	1470	nm (±20)
Output Power (CW)	P_o	8.00	watts (±10%)
Spectral Width	δλ	10	nm 3dB
Slope Efficiency	η_s	0.55	W/A
Optical Fiber Core Dia.	η_f	200	µm
Optical Fiber NA		0.22	
Fiber Length		1	meters
Connector		SMA905	
Electrical			
Power Conversion Eff.	η	20.00	%
Threshold Current	I_{th}	1	A
Operating Current	I_{op}	13.5	A
Operating Voltage	V_{op}	2.9	V
Lead Soldering Temp.	°C	250	°C
Aiming Beam			
Output Power	P_a	2	mW
Wavelength	λ_a	635	nm
Operating Current**	I_{op}	65	mA
Voltage Limit	V_{max}	2.3	V
Mechanical			
Weight		170	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.



PIN CALLOUT:

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

1. LD CATHODE (-)
2. LD ANODE (+)
3. AIMING BEAM (-)
4. AIMING BEAM (+)
5. THERMISTOR
6. THERMISTOR
7. PD (-)
8. PD (+)

SemiNex Corporation ● 153 Andover St ● Danvers, MA 01923 ● 978-326-7700 ● Email: info@seminex.com ● www.seminex.com

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