

High Power Multit-Mode SemiNex Lasers
 4* Watts of Continuous Operation Power
 1300 nm to 1600 nm Wavelength
 4-Pin Fiber-Coupled

	Symbol	Typical	Units
Optical			
Output power (CW)	P_o	4	watts
Center Wavelength Range	λ_c	1470 or 1550	nm
Emitter Width	W	95	μm
Emitter Height	H	1	μm
Spectral Width	$\Delta\lambda$	10	nm 3dB
Slope Efficiency	η_o	0.5	W/A
Fast Axis Divergence	θ_{perp}	26	deg FWHM
Slow Axis Divergence	θ_{parallel}	8	deg FWHM
Wavelength Temp. Coeff.	λ_{coef}	0.7	nm/C

Electrical			
Power conversion Efficiency	η	0.5	W/A
Threshold Current	I_{th}	0.45	A
Operating Current	I_{op}	8 - 9	A
Operating Voltage	V_{op}	1.5 - 2.0	V
Series Resistance	R_s	0.05	ohm

SemiNex delivers the highest available CW power at infrared wavelengths. SemiNex will optimize the design of its laser chips to meet customers' optical and electrical performance specifications. Diodes are mounted and tested to meet custom applications. Typical results and packaging options are shown below. Contact SemiNex for additional details or to discuss your application.

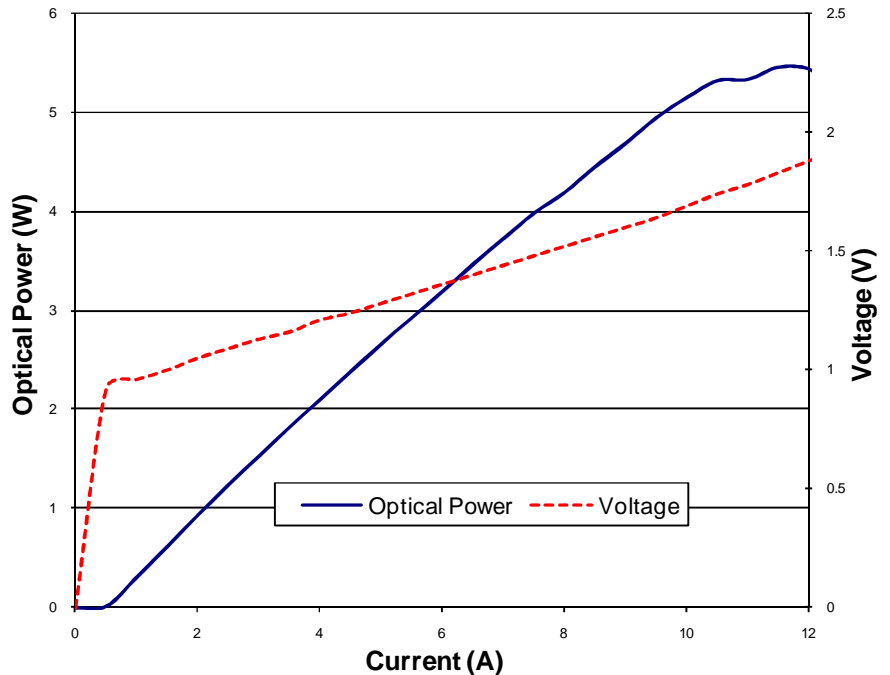
Key Features

- High output power
- High dynamic power range
- High efficiency
- Custom packaging

Applications

- Medical laser equipment
- LIDAR
- Free Space Optical Communication
- DPSS pump lasers
- Military / Aerospace

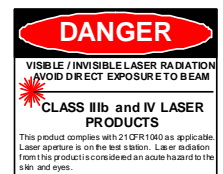
Typical CW LIV Optical Power Chart

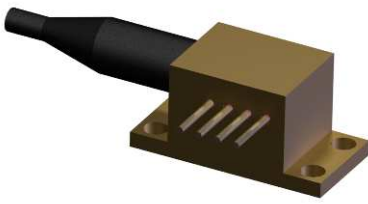


* 5 Watts of Continuous Operation Power available soon

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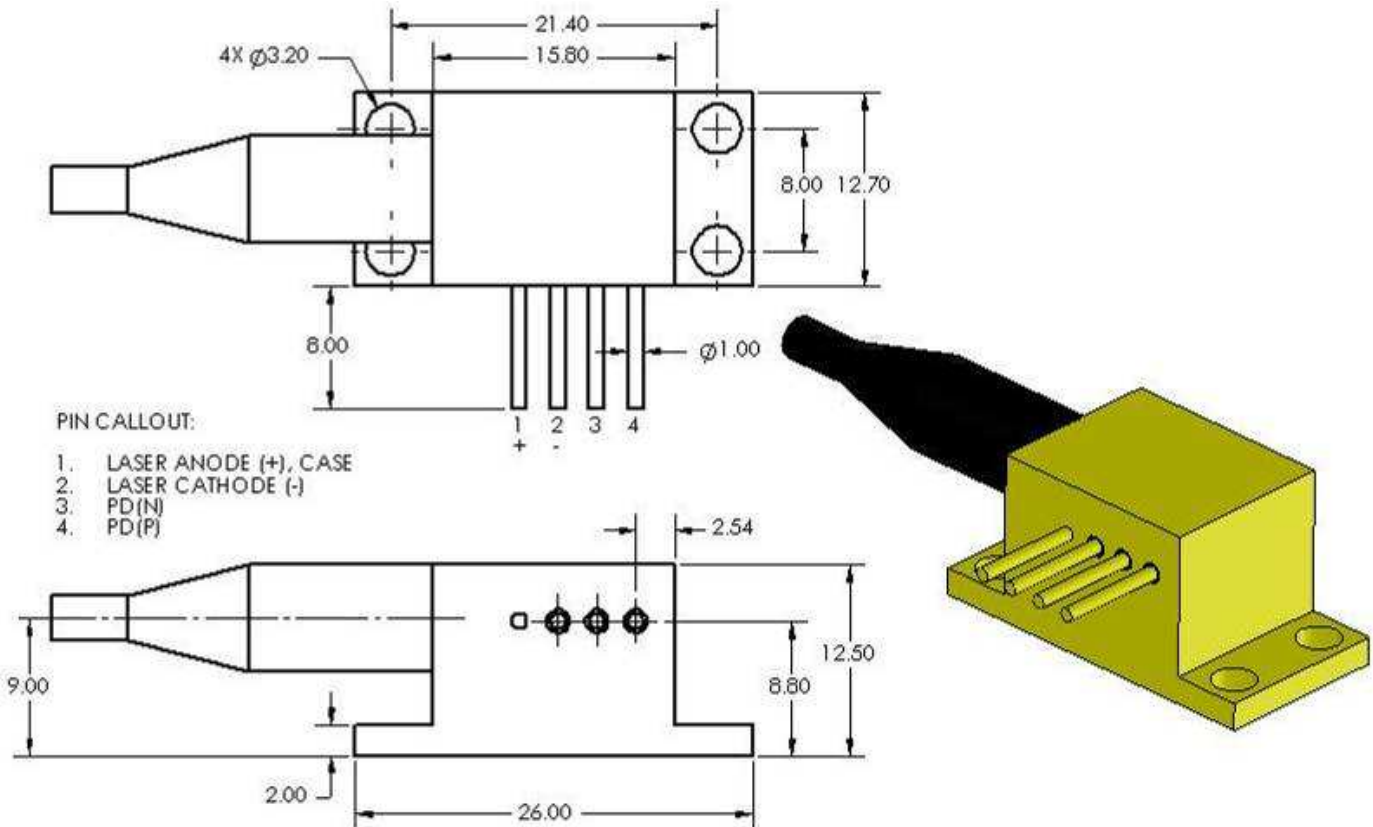
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	Symbol	4PN-1470-6-95	4PN-1550-6-95	4PN-1532-6-95	LE-808-6-95	Units
Optical						
Output power (CW)	P_o	4	3.8	4	3.8	watts
Center Wavelength	λ_c	1470	1550	1532	808	nm
Emitter Width	W	95	95	95	TBA	μm
Emitter Height	H	1	1	1	TBA	μm
Spectral Width	$\Delta\lambda$	10	10	10	TBA	nm 3dB
Slope Efficiency	η_o	0.5	0.5	0.5	TBA	W/A
Optical Fiber Core Diameter		105	105	105	TBA	μm
Optical Fiber NA		0.22	0.22	0.22	TBA	

Electrical						
Power conversion Efficiency	η	0.5	0.5	0.5	TBA	W/A
Threshold Current	I_h	0.45	0.45	0.45	TBA	A
Operating Current	I_{op}	9	9	9	TBA	A
Operating Voltage	V_{op}	1.8	1.8	1.8	TBA	V
Series Resistance	R_s	0.05	0.05	0.05	TBA	ohm
Lead Soldering Temperature	$^{\circ}\text{C}$	250	250	250	TBA	$^{\circ}\text{C}$



NOTE: Dimensions are in mm [in]

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