

C-Mount

High Power Multi-Mode Lasers
Up to 5 watts CW Power
1320, 1475, 1540 and 1560 nm
Custom Wavelengths Available

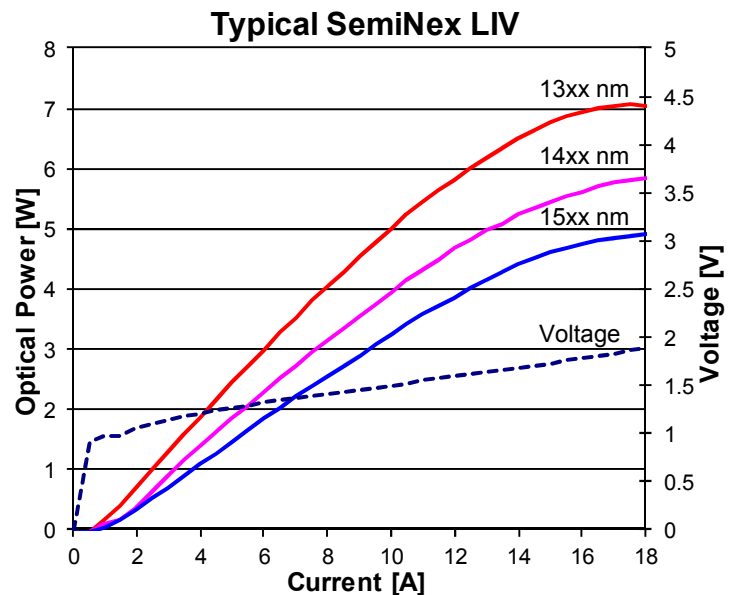
Features

- High Output Power
- High Dynamic power range
- High Efficiency
- Standard Low Cost Mount

Applications

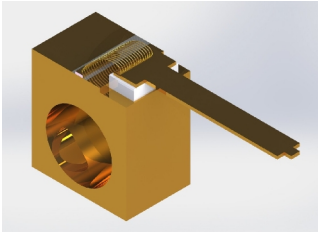
- Medical laser equipment
- LIDAR
- Free Space Communication
- DPSS pump lasers
- Military / Aerospace

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



All statements, technical information and recommendation related to the product herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness hereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. SemiNex Incorporated reserves the right to change at any time without notice, the design, specification, deduction, fit or form of its described herein, including withdrawal at any time of a product offered for sale herein. SemiNex Incorporated makes no representations that the products herein are free from any intellectual property claims of others. Please contact SemiNex Incorporated for more information. © 2012 Copyright SemiNex Incorporated. All rights reserved.



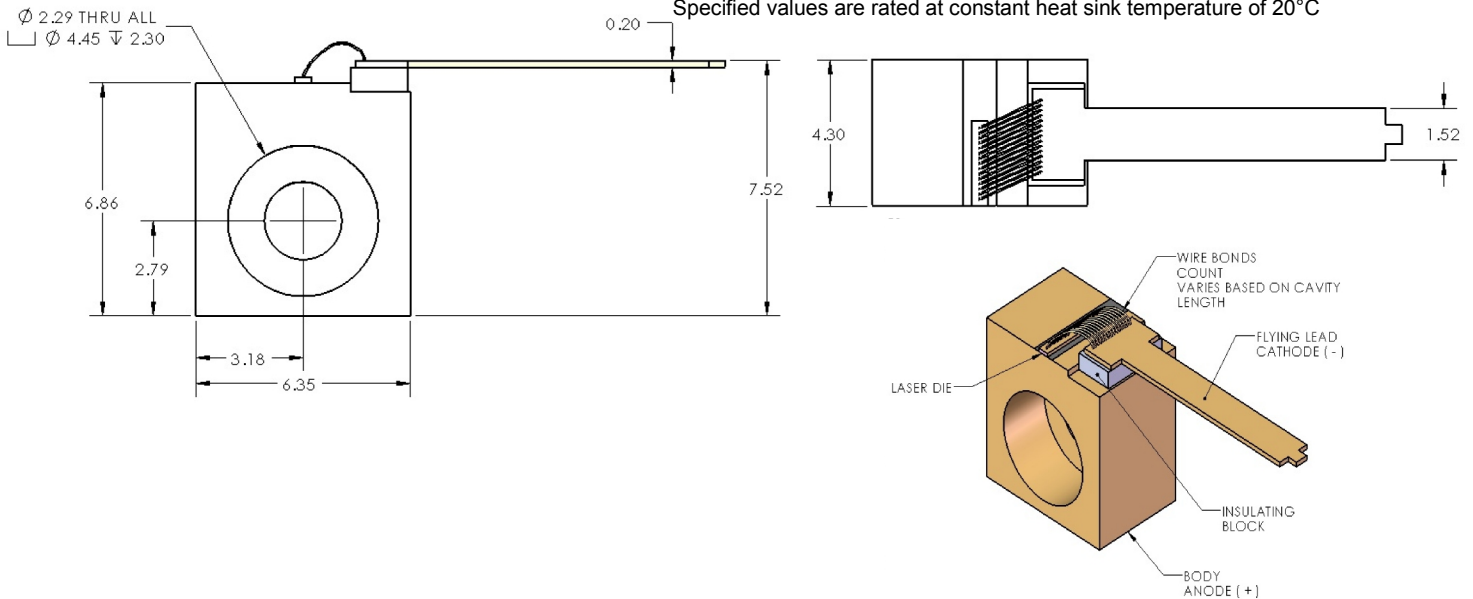


C-Mount



	Symbol	C-124	C-106	C-109	C-116	Units
Optical						
Center Wavelength	λ_c	1320	1480	1540	1560	nm
Output power (CW)	P_o	6.2	5	4.2	4.2	watts
Emitter Width	W	95	95	95	95	μm
Emitter Height	H	1	1	1	1	μm
Spectral Width	$\Delta\lambda$	15	15	15	15	nm 3dB
Slope Efficiency	η_p	0.5	0.4	0.35	0.35	W/A
Fast Axis Divergence	θ_{perp}	28	28	28	28	deg FWHM
Slow Axis Divergence	θ_{parallel}	9	9	9	9	deg FWHM
Electrical						
Power conversion Efficiency	η	0.27	0.21	0.18	0.18	%
Threshold Current	I_{th}	0.45	0.45	0.45	0.45	A
Operating Current	I_{op}	13	14	14	14	A
Operating Voltage	V_{op}	1.8	1.7	1.7	1.7	V
Series Resistance	R_s	0.05	0.05	0.05	0.05	ohm
Mechanical						
Weight		1.4	1.4	1.4	1.4	g
Operating Temperature		10 to 30	10 to 30	10 to 30	10 to 30	$^{\circ}\text{C}$
Storage Temperature		-20 to 80	-20 to 80	-20 to 80	-20 to 80	$^{\circ}\text{C}$

Specified values are rated at constant heat sink temperature of 20°C



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DANGER

VISIBLE / INVISIBLE LASER RADIATION
AVOID DIRECT EXPOSURE TO BEAM

CLASS IIIb and IV LASER PRODUCTS

This product complies with 21 CFR 1040 as applicable. Laser aperture is on the test station. Laser radiation from this product is considered an acute hazard to the skin and eyes.