



Single Mode Lasers

High Power Single Mode SemiNex Lasers
 Up to 600 mW of CW Power
 1310, 1550, or 1625 nm Wavelengths
 B-Mount or C-Mount Options Now Available

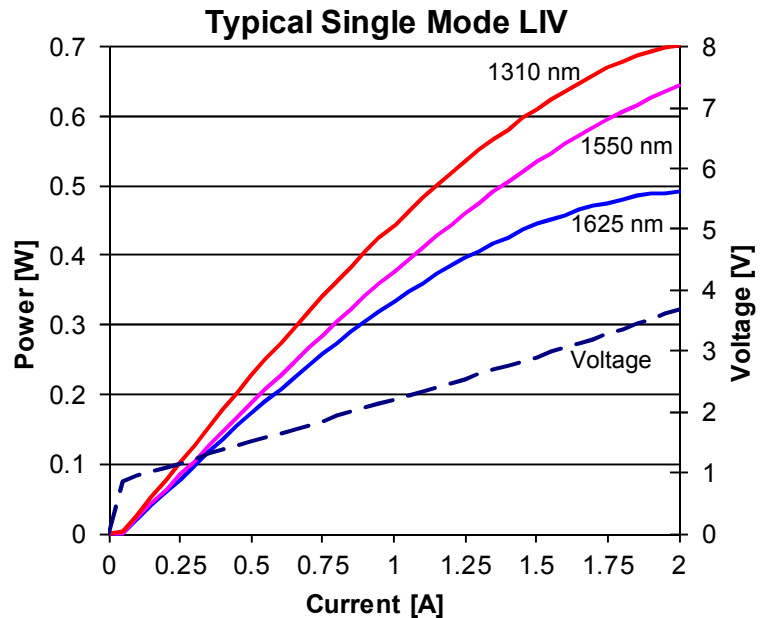
Features

- High output power
- CW and QCW operation
- High efficiency

Applications

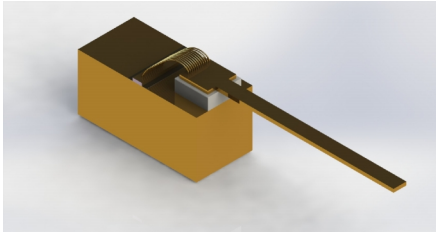
- OTDR
- Remote Sensing
- Illumination
- LIDAR
- Free Space Optical Communications
- Military / Aerospace

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.



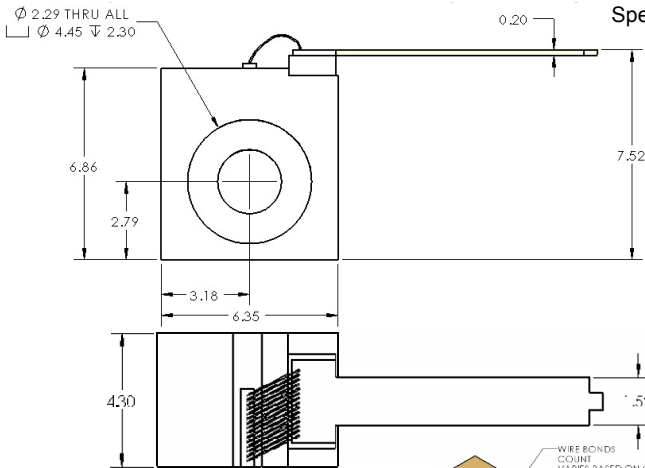


Single Mode

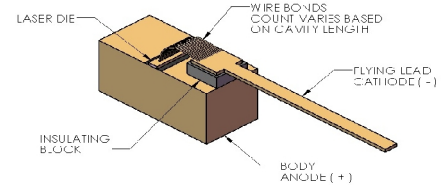
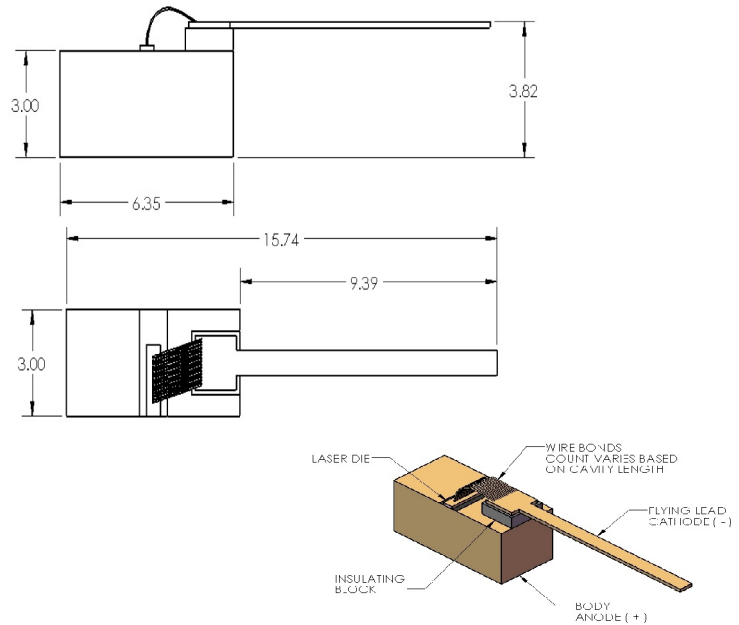
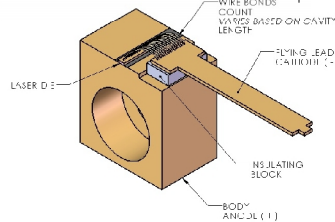


	PN	B-102 / C-125	B-115 / C-121	B-124 / C-123	Units
Optical					
	Symbol				
Center Wavelength	λ_c	1310	1560	1650	nm
Output power (CW)	P_o	630	600	450	mW
Emitter Width	W	5	4	4	μm
Emitter Height	H	1	1	1	μm
Spectral Width	$\Delta\lambda$	15	15	15	nm 3dB
Slope Efficiency	η_o	0.4	0.3	0.3	W/A
Fast Axis Divergence	θ_{perp}	30	30	30	deg FWHM
Slow Axis Divergence	θ_{parallel}	13	13	13	deg FWHM
Electrical					
Power conversion Efficiency	η	13	11	9	%
Threshold Current	I_{th}	50	50	50	mA
Operating Current	I_{op}	1.6	1.8	1.6	A
Operating Voltage	V_{op}	3	3.1	3	V
Series Resistance	R_s	1.3	1.2	1.4	ohm
Mechanical					
Weight		0.5 / 1.4	0.5 / 1.4	0.5 / 1.4	g
Operating Temperature		10 to 30	10 to 30	10 to 30	$^{\circ}\text{C}$
Storage Temperature		-20 to 80	-20 to 80	-20 to 80	$^{\circ}\text{C}$

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



NOTE: Dimensions are in mm



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