

## B-Mount

High Power Multi-Mode SemiNex Lasers  
 5.0 Watts of CW power  
 1300, 1480, 1570, and 1650 nm  
 Custom Wavelengths Available

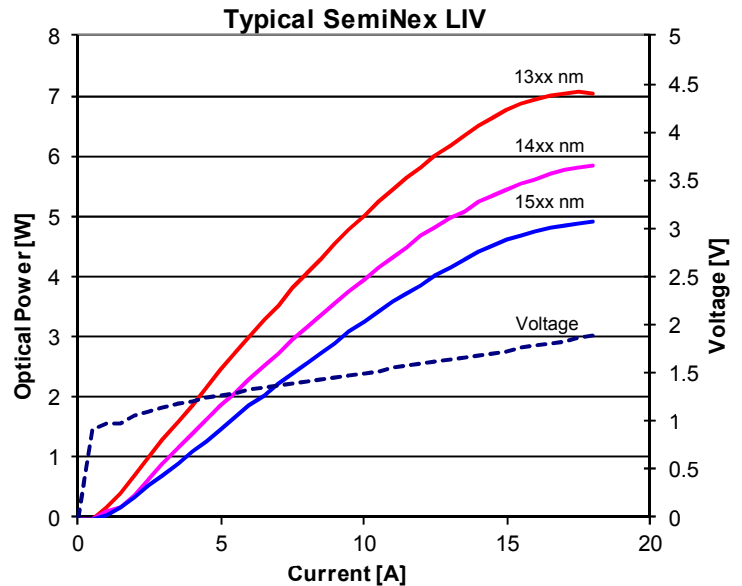
### Features

- High output power
- High dynamic power range
- High efficiency
- Standard Low Cost Package

### Applications

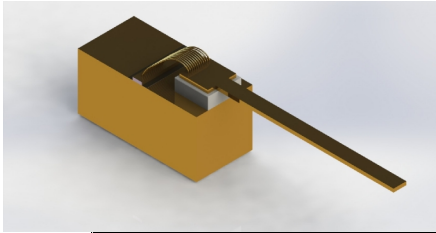
- Medical laser equipment
- LIDAR
- Free Space Optical Communication
- DPSS pump lasers
- Military / Aerospace

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.



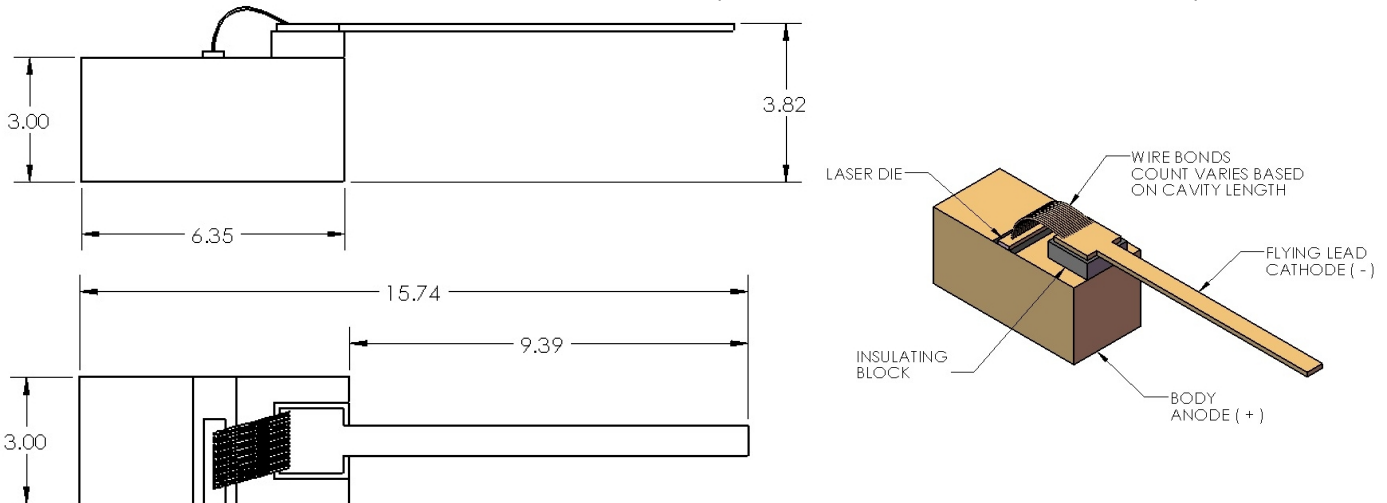


## B – Mount



	Symbol	B-123	B-106	B-109	B-118	Units
<b>Optical</b>						
Center Wavelength	$\lambda_c$	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	$\mu\text{m}$
Emitter Height	H	1	1	1	1	$\mu\text{m}$
Spectral Width	$\Delta\lambda$	15	15	10	15	nm 3dB
Slope Efficiency	$\eta_o$	0.5	0.4	0.35	0.35	W/A
Fast Axis Divergence	$\theta_{\text{perp}}$	28	28	28	28	deg FWHM
Slow Axis Divergence	$\theta_{\text{parallel}}$	9	9	9	9	deg FWHM
<b>Electrical</b>						
Power conversion Efficiency	$\eta$	0.27	0.21	0.18	0.18	
Threshold Current	$I_{\text{th}}$	0.5	0.5	0.5	0.5	A
Operating Current	$I_{\text{op}}$	13	14	14	14	A
Operating Voltage	$V_{\text{op}}$	1.8	1.7	1.7	1.7	V
Series Resistance	$R_s$	0.05	0.05	0.05	0.05	ohm
<b>Mechanical</b>						
Weight		0.5	0.5	0.5	0.5	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



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.

