

Laser Bars

High Power Multi-Mode Laser Bars
 25 Watts of CW Power
 1470, 1532, and 1550 nm Wavelengths
 Custom Wavelengths Available

Features

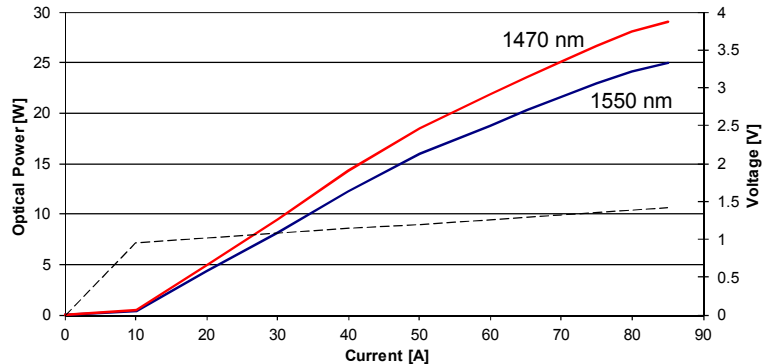
- High output power
- High dynamic power range
- High efficiency
- 19 emitters standard

Applications

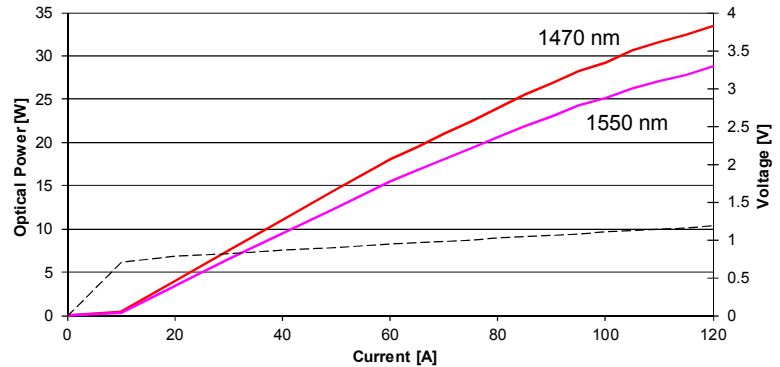
- Medical laser equipment
- LIDAR
- Free Space Optical Communication
- DPSS pump lasers
- Military / Aerospace

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

SemiNex 1.5mm Bar & CS Mount LIV

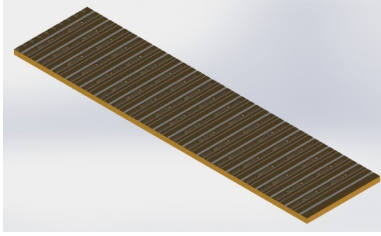


SemiNex 2.5mm Bar & CS-Mount LIV



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.





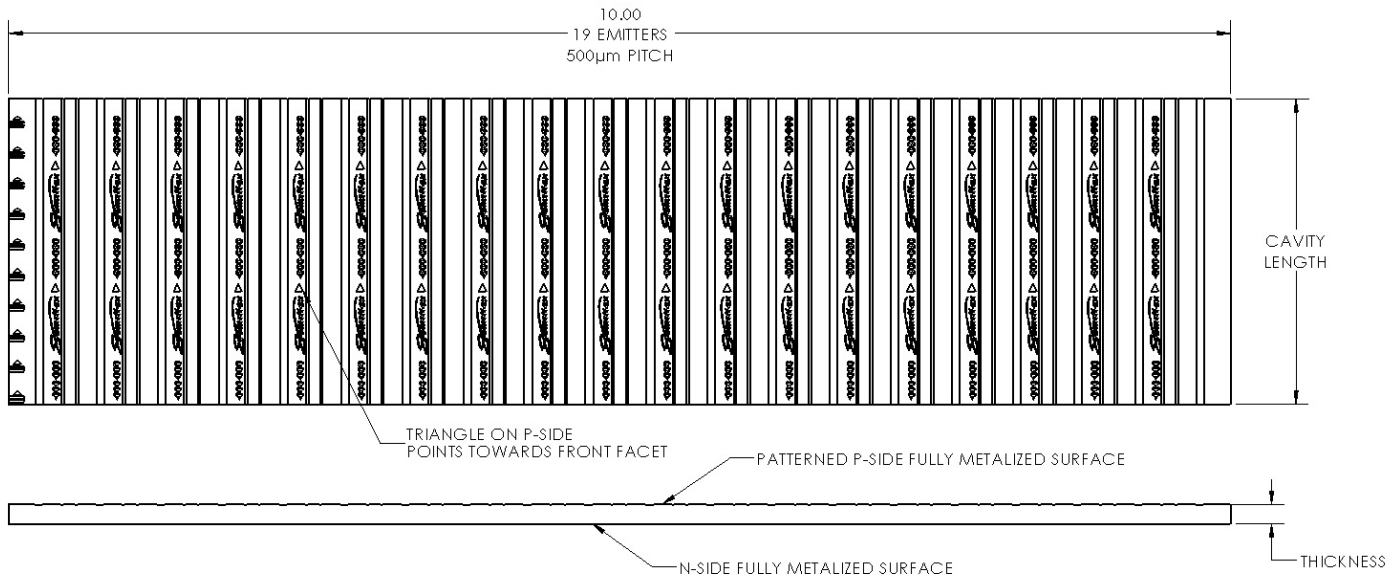
Laser Bars



		BAR-125	BAR-105	BAR-107	BAR-109	BAR-113	BAR-114	Units
Optical								
Center Wavelength	λ_c	1355	1460	1480	1540	1550	1570	nm
Expected Optical Power		25	20	25	20	20	25	W
Chip Cavity Length (typical)		1500	1500	2500	1500	1500	2500	μm
Emitter Width	W	95	95	95	95	95	95	μm
Emitter Height	H	1	1	1	1	1	1	μm
Number of emitters		19	19	19	19	19	19	
Spectral Width	$\Delta\lambda$	15	15	15	15	15	15	nm 3dB
Slope Efficiency	η_o	0.5	0.4	0.31	0.32	0.32	0.27	W/A
Fast Axis Divergence	θ_{perp}	25	25	25	25	25	25	deg FWHM
Slow Axis Divergence	θ_{parallel}	8	8	8	8	8	8	deg FWHM

Electrical								
Power conversion Efficiency	η	0.37	0.3	0.25	0.25	0.25	0.23	
Threshold Current	I_{th}	9	10	12	10	10	12	A
Operating Current	I_{op}	50	60	85	65	65	100	A
Operating Voltage	V_{op}	1.3	1.3	1.0	1.3	1.3	1.1	V
Series Resistance	R_s	7	6	4	6	6	4	mohm

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.

