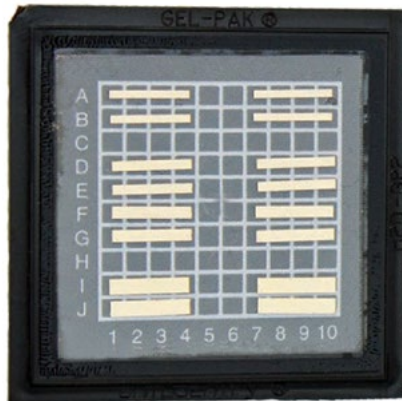




Laser Bars

High Power Multi-Mode Laser Bars
25 Watts of CW Power
1310, 1470, 1532, 1550 and 1625 nm
Wavelengths
Custom Wavelengths Available

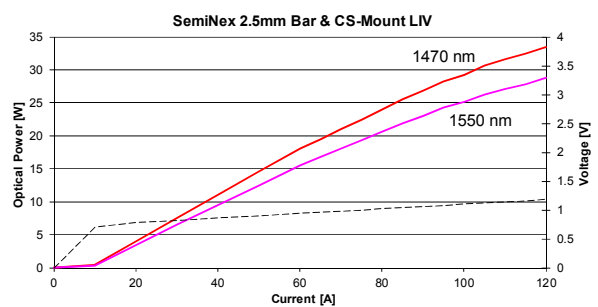
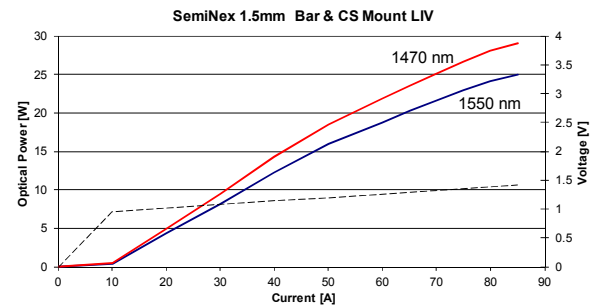
Features

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

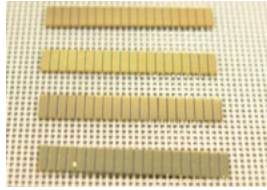
Applications

- 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

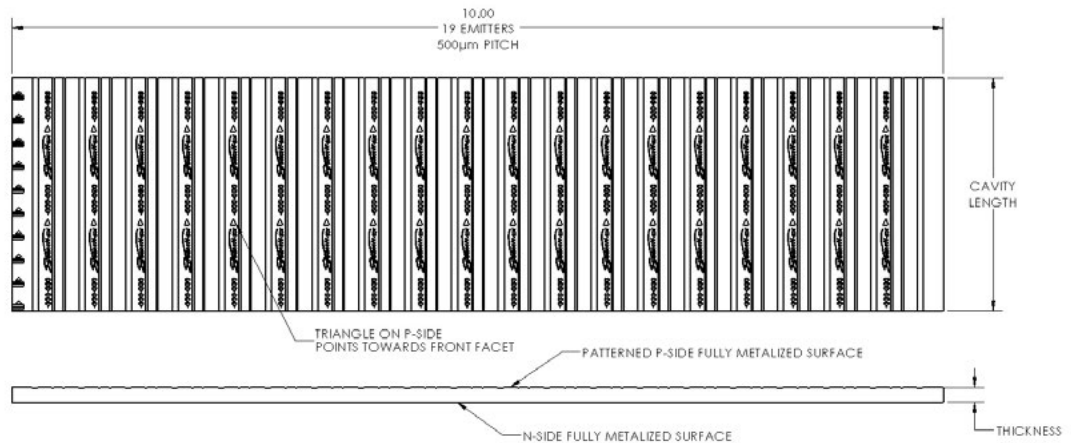


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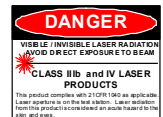
**Laser Bars**

	Symbol	BAR-119	BAR-125	BAR-105	BAR-107	BAR-109	BAR-113	BAR-111	BAR-114	BAR-130	BAR-131	Units
Optical												
Wavelength	λ_c	1310	1350	1470	1470	1532	1550	1550	1560	1615	1625	nm (± 20)
Optical Power*	P_o	25	25	20	25	20	20	25	25	13	13	W
Chip Cavity Length		1500	1500	1500	2500	1500	1500	2500	2500	1500	1500	μm (± 10)
Emitter Width	W	95	95	95	95	95	95	95	95	95	95	μm
Emitter Height	H	1	1	1	1	1	1	1	1	1	1	μm
Number of emitters		19	19	19	19	19	19	19	19	19	19	
Spectral Width	$\Delta\lambda$	15	15	15	15	15	15	15	15	15	15	nm 3dB
Slope Efficiency	η_o	0.5	0.5	0.4	0.33	0.3	0.3	0.3	0.27	0.24	0.24	W/A
Fast Axis Div.	θ_{perp}	25	25	25	25	25	25	25	25	25	25	deg FWHM
Slow Axis Div.	θ_{parallel}	8	8	8	8	8	8	8	8	8	8	deg FWHM
Electrical												
Power Conversion Eff	η	0.37	0.37	0.3	0.25	0.25	0.25	0.25	0.23	0.15	0.15	
Threshold Current	I_{th}	9	9	10	12	10	10	10	12	10	10	A
Operating Current	I_{op}	50	50	60	85	65	65	65	100	65	65	A
Operating Voltage	V_{op}	1.3	1.3	1.3	1.0	1.3	1.3	1.3	1.1	1.3	1.3	V
Series Resistance	R_s	7	7	6	4	6	6	6	4	6	6	mohm

*CW As measured on a CS-Mount with Indium solder
Specified values are rated at a constant heat sink temperature of 20°C



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