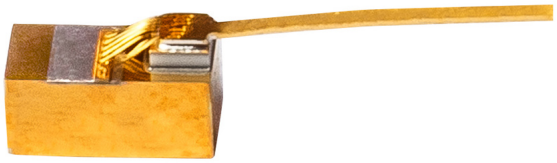
B-Mount

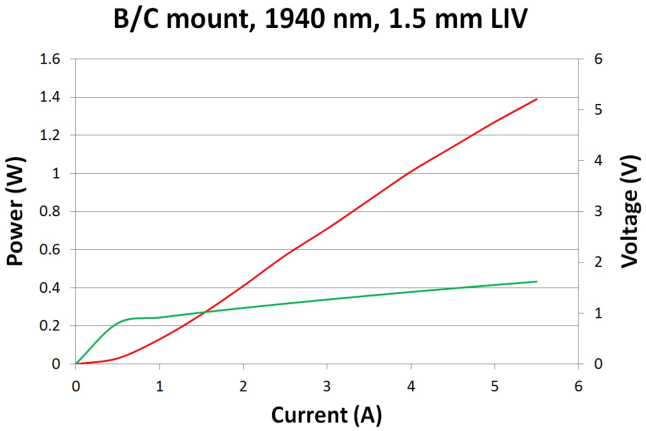
High Power Single-Mode and Multi-Mode SemiNex Lasers
12xx to 19xx nm
Custom Wavelengths Available
Lensed Options Available

Applications
- OEM Medical
- DPSS pump source
- LiDAR
- Military / Aerospace

Features
- Cost effective
- High Output Power
- High Dynamic Range
- High Efficiency
- Standard Low Cost Package



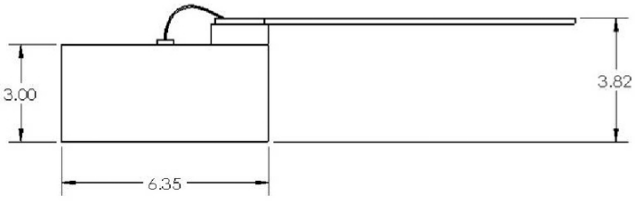
SemiNex delivers the highest available power at infrared wavelengths between 12xxnm and 16xxnm as well 19xxnm to 24xxnm. When necessary we will further optimize the design of our InP or GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages 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.

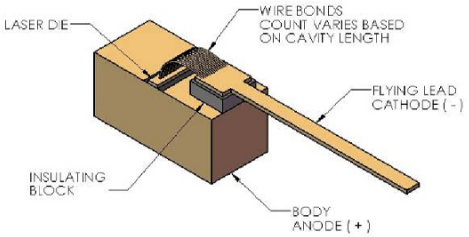


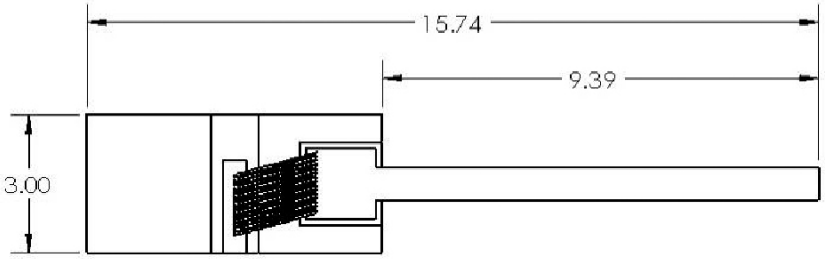
B-Mount

	Symbol	B-165	Units
Optical			
Wavelength	λ_c	1940	nm (±20)
Output Power (CW)	$P_\circ$	1.10	watts (±10%)
Chip Cavity Length	CL	1500	µm
Emitter Width	W	150	µm
Emitter Height	H	1	µm
Spectral Width	δλ	10	nm 3dB
Slope Efficiency	$\eta_\circ$	0.30	W/A
Fast Axis Div.*	Θ_perp	2.8	deg FWHM
Slow Axis Div.	Θ_parallel	11	deg FWHM
Electrical			
Power Conversion Eff.	η	20	%
Threshold Current	I_{th}	0.35	A
Operating Current	I_{op}	4	A
Operating Voltage	V_{op}	1.3	V
Mechanical			
Weight		0.5	g
Operating Temp.**		+15 to 35	°C
Storage Temp.		-40 to 80	°C
Operating Voltage Min.		1	V
Operating Voltage Max.		2	V

Specified values are rated at a constant heat sink temperature of 20°C.
**Specified operating conditions are based on 20C heat sink temperature. High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.
*Fast Axis Divergence can be changed with lens option.







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