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SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary wavelengths between 12xx and 19xx 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. requirements.



## **C-Mount**

High Power Single-Mode and Multi-Mode SemiNex Lasers

12xx to 19xx nm

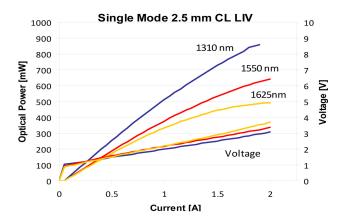
Custom Wavelengths Available Lensed Options Available

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

## **Features**

- Cost effective High Output Power

- High Dynamic RangeHigh EfficiencyStandard Low Cost Package



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## C-Mount



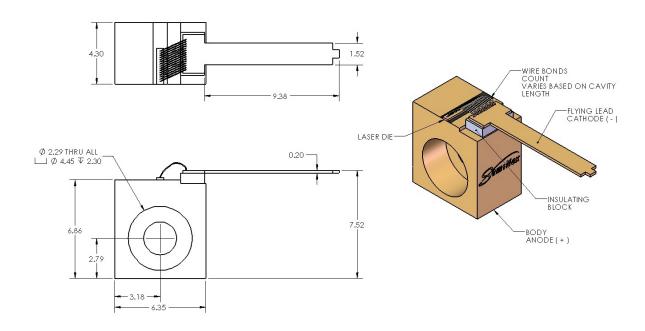


	Symbol	C-123	Units
Optical			
Wavelength	$\lambda_{c}$	1625	nm (±20)
Output Power (CW)	P∘	0.40	watts (±10%)
Chip Cavity Length	CL	2500	μm
Emitter Width	W	4	μm
Emitter Height	Н	1	μm
Spectral Width	δλ	15	nm 3dB
Slope Efficiency	η∘	0.30	W/A
Fast Axis Div.*	Θ_perp	30	deg FWHM
Slow Axis Div.	Θ_parallel	10	deg FWHM
Electrical			
Power Conversion Eff.	η	11	%
Threshold Current	I <sub>th</sub>	0.05	A
Operating Current	I <sub>op</sub>	1.6	A
Operating Voltage	V <sub>op</sub>	3.1	V
Mechanical	·		
Weight		1.3	g
Operating Temp.**		-40 to 60	°C
Storage Temp.		-40 to 80	°C

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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Date Created: Nov 30 2023 10:18PM UTC