11/30/23, 4:21 PM PI Sheet





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

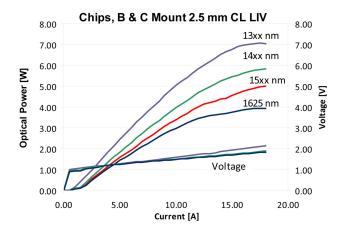
12xx to 19xx nm

Custom Wavelengths Available Lensed Options Available

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

## **Features**

- Cost effective High Output Power
- High Dynamic Range
- High EfficiencyStandard Low Cost Package



11/30/23, 4:21 PM PI Sheet

11/30/23, 4:21 PM PI Sheet

## C-Mount



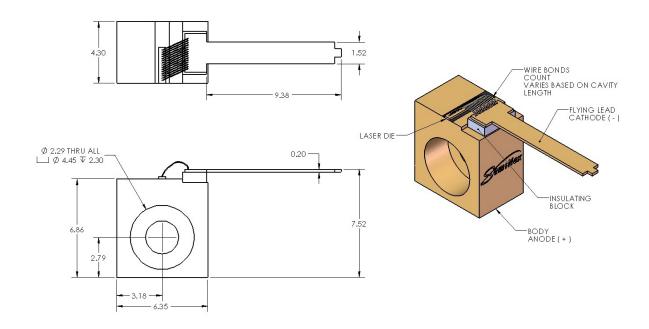


|                       | Symbol              | C-128     | Units        |
|-----------------------|---------------------|-----------|--------------|
| Optical               |                     |           |              |
| Wavelength            | $\lambda_{_{ m C}}$ | 1460      | nm (±20)     |
| Output Power (CW)     | P∘                  | 5.00      | watts (±10%) |
| Chip Cavity Length    | CL                  | 2500      | μm           |
| Emitter Width         | W                   | 95        | μm           |
| Emitter Height        | Н                   | 1         | μm           |
| Spectral Width        | δλ                  | 15        | nm 3dB       |
| Slope Efficiency      | η∘                  | 0.40      | W/A          |
| Fast Axis Div.*       | Θ_perp              | 28        | deg FWHM     |
| Slow Axis Div.        | Θ_parallel          | 9         | deg FWHM     |
| Electrical            |                     |           |              |
| Power Conversion Eff. | η                   | 21        | %            |
| Threshold Current     | I <sub>th</sub>     | 0.45      | A            |
| Operating Current     | I <sub>op</sub>     | 14        | A            |
| Operating Voltage     | $V_{op}$            | 1.7       | 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.



All statements, technical information and recommendations related to the product herein are based upon information believed to be reliable or accurate. The accuracy or completeness herein is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use o a product or its application. SemiNex Corporation 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. Users are encouraged to visit www.seminex.com for the latest data. SemiNex Corporation makes no representations that the products herein are free from any intellectual property claims of others. Please contact SemiNex for more information. • 2016 SemiNex Corporation



SemiNex Corporation ● 153 Andover St ● Danvers, MA 01923 ● 978-326-7700 ● Email: info@seminex.com ● www.seminex.com

Date Created: Nov 30 2023 10:18PM UTC