

14-Pin BF Single-Mode

Applications

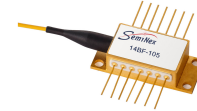
- OTDR
- LiDAR
- Free Space Communications
- Network Test equipment

Features

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

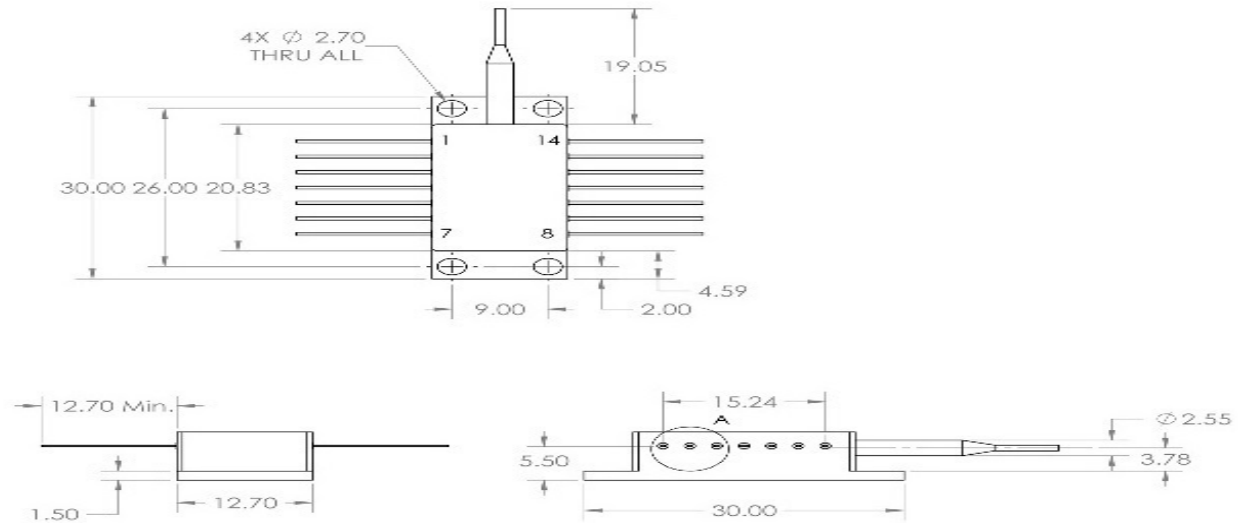
SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary we will further optimize the design of our InP laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.





| | Symbol | 14BF-285 | Units |
|-------------------------------|---------------------|-----------|-------------------|
| Optical | | | |
| Wavelength | λ_c | 1550 | nm (± 20) |
| Output Power@1000mA | P_{out} | 240 | mW ($\pm 10\%$) |
| Aperture Width | AW | 9 | μm |
| Aperture Height | AH | 1 | μm |
| Spectral Width | $\delta\lambda$ | 85 | nm @ 3dB |
| Gain @ $P_{in}=10\mu W$ | G | 45 | dB |
| Beam Exit Angle | Θ_{EXT} | 19.5 | degree |
| Noise Figure | NF | 0 | dB |
| Polarization Extinction Ratio | PER | 0 | dB |
| Fast Axis Div. | Θ_{perp} | 8 | deg FWHM |
| Slow Axis Div. | $\Theta_{parallel}$ | 8 | deg FWHM |
| Front Facet Reflectivity | | <0.1% | |
| Rear Face Reflectivity | | <0.1% | |
| Waveguide | | Curved | |
| Electrical | | | |
| Operating Voltage | V_{op} | 2 | V |
| Operating Current | I_{op} | 1 | A |
| Mechanical | | | |
| Chip Length | CL | 0 | μm |
| Chip Width | W | 500 | μm |
| Weight | | 88 | g |
| Operating Temp.** | | -20 to 75 | $^{\circ}C$ |
| Storage Temp. | | -40 to 85 | $^{\circ}C$ |

**Specified operating conditions are based on 20°C heat sink temperature. High temperature operation will reduce performance and MTTF.
 **Specified values are based on the P-side down configuration and rated at a constant heat sink temperature of 20°C.
 Unless otherwise indicated all values are nominal.



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