

R-Series High Power Laser Diode Module



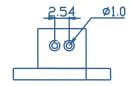
Features

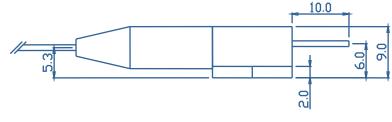
- ♦ High output power of 10 W
- ♦ 105µm/0.22NA multimode optical fiber
- ◆ Center wavelength 915±10nm

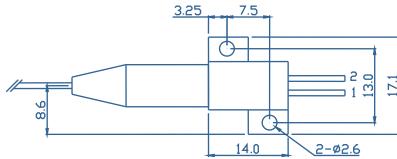
Applications

- Fiber laser pumping
- Material processing

Package Dimensions (mm)







| Pin-out Assignment | | | | |
|--------------------|----------|--|--|--|
| Pin | Function | | | |
| 1 | LD (+) | | | |
| 2 | LD (-) | | | |

www.tc-semi.com 129 20-06-04 1



Typical Device Performance (25°C)

| y picar Device i cirorii | Min | Typical | Max | Unit | | | |
|-----------------------------------|-----|---------|-----|-------|--|--|--|
| Optical | | | | | | | |
| CW Output Power | - | 10 | - | W | | | |
| Center Wavelength | - | 915±10 | - | nm | | | |
| Spectral Width (90% of Power) | - | <10.0 | - | nm | | | |
| Wavelength Shift with Temperature | - | 0.3 | - | nm /℃ | | | |
| Electrical | | | | • | | | |
| Threshold Current | - | 1 | - | A | | | |
| Operating Current | - | 11 | - | A | | | |
| Operating Voltage | - | 1.8 | - | V | | | |
| Slope Efficiency | - | 1 | - | W/A | | | |
| Power Conversion Efficiency | - | 50 | - | % | | | |
| Fiber* | | | | | | | |
| Fiber Core Diameter | - | 105 | - | μm | | | |
| Fiber Cladding Diameter | - | 125 | - | μm | | | |
| Fiber Buffer Diameter | - | 250 | - | μm | | | |
| Numerical Aperture | - | 0.22 | - | - | | | |
| Fiber Length | - | 1-5 | - | m | | | |
| Fiber Connector | - | - | - | - | | | |

^{*} Customized fiber and connector available.

Absolute Ratings

| | Min | Max | Unit |
|---------------------------------------|-----|---------------------|------------|
| Operating Temperature | 15 | 35 | $^{\circ}$ |
| Operating Relative Humidity | - | 75 | % |
| Cooling Mode | - | Water cooling (25℃) | - |
| Storage Temperature | -20 | 80 | $^{\circ}$ |
| Storage Relative Humidity | - | 90 | % |
| Lead Soldering Temperature (10 s max) | - | 250 | $^{\circ}$ |

This instruction is for reference only. Han's TCS improves its products continually, therefore may change specifications without notice to customers, for details, please contact with Han's TCS sales. @2022 Han's TianCheng Semiconductor Co., Ltd. All rights reserved.

www.tc-semi.com 129 20-06-04 2