



Datasheet: Necsel™ Red High Power FC Bar

These specifications are for the Necsel red high power fiber-coupled bar package. The centroid of the wavelength spectrum will be within the indicated wavelength range.



| Model # | Symbol | Min. (nm) | Typical (nm) | Max. (nm) |
|---------------|-----------|-----------|--------------|-----------|
| Red-HP-FC-65x | λ | 653 | 657 | 661 |

Operating Wavelengths

| Laser Parameter | Symbol | Min. | Typical | Max. | Unit |
|--|------------------|------|---------|------|-------|
| Operating Power (CW) | P_{op} | - | 6.0 | - | W |
| Module Operating Temperature [non-condensing atmosphere] | $T_{Thermistor}$ | - | 25 | 30 | °C |
| Center Wavelength [at 25°C and P_{op}] | λ | 653 | 657 | 661 | nm |
| Spectral Width @ FWHM | $\Delta\lambda$ | - | 1 | 3 | nm |
| Wavelength Temperature Coefficient | - | - | 0.2 | - | nm/°C |
| Threshold Current | I_{th} | - | 3.5 | - | A |
| Slope Efficiency | η | - | 0.8 | - | W/A |

Power Supply Requirements

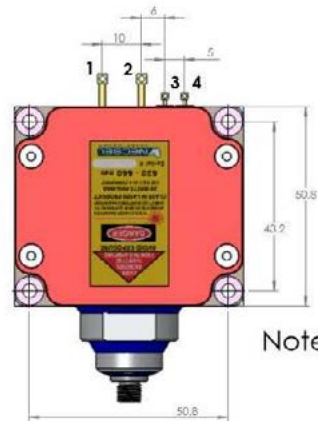
| | | | | | |
|-------------------|----------|---|-----|-----|---|
| Operating Voltage | V_{op} | - | 2.4 | 3.0 | V |
| Operating Current | I_{op} | - | 10 | 12 | A |

Fiber Specifications

| | | |
|--|---------|----|
| Fiber Core Diameter (Centration $\leq 10 \mu m$) | 0.400 | mm |
| Connector Type (Nose length 0.3850 - 0.3863 in., 9.779 – 9.812 mm) | SMA-905 | |
| Numerical Aperture | 0.22 | |

USHIO

Outline Drawing and Electrical Connections

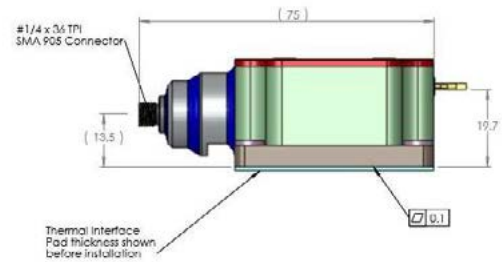
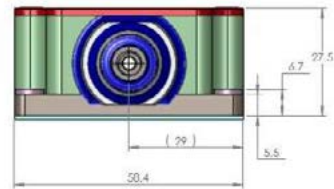


| Contact # | Description |
|-----------|-------------|
| 1 | Laser (+) |
| 2 | Laser (-) |
| 3 | Thermistor |
| 4 | Thermistor |



Note: Package is electrically positive

nylon shoulder washer electrical insulator shown in all views



Necsel follows a policy of continuous product improvement and may change product descriptions and specifications at any time without notice. Necsel offers a limited product warranty to ensure customer satisfaction. Standard terms and conditions can be found on the web at <http://necsel.com/terms-conditions>. This product is solely intended to be integrated into a laser product certified by the Customer. The Customer acknowledges that their product(s) that incorporate Necsel laser products must comply with the applicable regulations before it can be sold.

