



Datasheet: Necsel™ Red High Power CS Mounted Bar

These specifications are for the Necsel red high power CS mounted bar with FAC/SAC lensing. The centroid of the wavelength spectrum will be within the indicated wavelength range.



| Model # | Symbol | Min. (nm) | Typical (nm) | Max. (nm) |
|------------|-----------|-----------|--------------|-----------|
| Red-HP-63x | λ | 634 | 637 | 642 |

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 | 634 | 637 | 642 | nm |
| Spectral Width @ FWHM | $\Delta\lambda$ | - | 1 | 3 | nm |
| Wavelength Temperature Coefficient | - | - | 0.2 | - | nm/°C |
| Threshold Current | I_{th} | - | 4.0 | - | A |
| Slope Efficiency | η | - | 0.95 | - | W/A |

Array Specifications

| Array Specifications | Symbol | Min. | Typical | Max. | Unit |
|------------------------|----------|------|---------|------|---------------|
| Number of Output Beams | N | 18 | 20 | 20 | - |
| Emitting Area Width | W_{ea} | - | 40 | - | μm |
| Emitting Area Period | L_{ea} | - | 200 | - | μm |
| Fill Factor | FF | - | 20 | - | % |

Lensing

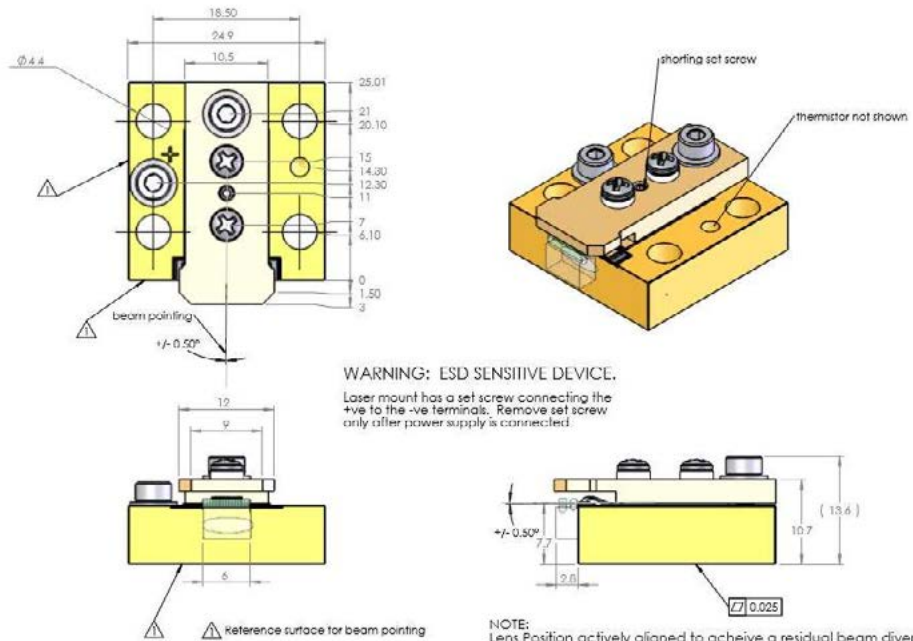
| Lensing | Symbol | Min. | Typical | Max. | Unit |
|-----------------------|--------|------|---------|------|------|
| Fast-Axis Collimation | FAC | - | 3 | 4 | mRad |
| Slow-Axis Collimation | SAC | - | 33 | 40 | mRad |

Power Supply Requirements

| Power Supply Requirements | Symbol | Min. | Typical | Max. | Unit |
|---------------------------|----------|------|---------|------|------|
| Operating Voltage | V_{op} | - | 2.4 | 3.0 | V |
| Operating Current | I_{op} | - | 10 | 12 | A |

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Outline Drawing and Electrical Connections



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