

## Datasheet: Necsel™ Blue DE Laser

These specifications are for the Necsel blue direct emitting package. The centroid of the wavelength spectrum will be within the indicated wavelength range.

| Model #     | Symbol | Min. (nm) | Typical (nm) | Max. (nm) |
|-------------|--------|-----------|--------------|-----------|
| Blue-DE-46x | λ      | 460       | 464          | 468       |



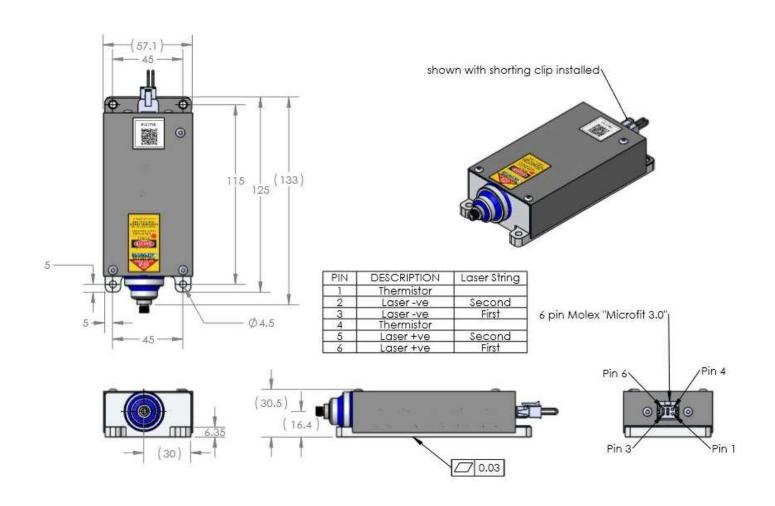
## **Operating Wavelengths**

| Laser Parameter  | Symbol           | Min. | Typical | Max. | Unit  |
|--|------------------|------|---------|------|-------|
| Operating Power (CW)   | P <sub>op</sub>  | -    | 9.0     | -    | W     |
| Module Operating Temperature [non-condensing atmosphere]                 | $T_{Thermistor}$ | -    | 30      | -    | °C    |
| Center Wavelength [at 25°C and $P_{op}$ ]                                | λ                | 460  | 464     | 468  | nm    |
| Wavelength Temperature Coefficient                                       | -                | -    | -       | 0.1  | nm/°C |
| Threshold Current  | $I_{th}$         | -    | 450     | -    | mA    |
| Slope Efficiency   | η                | -    | 7.0     | -    | W/A   |
| Laser Power Conversion Efficiency  | PCE              | -    | 24      | -    | %     |
| Power Supply Requirements  |                  |      |         |      |       |
| Operating Voltage (5 in series)  | $V_{op}$         | 12.0 | 22.5    | 24.0 | V     |
| Operating Voltage String 2 (3 in series)                                 | $V_{op}$         | 6.0  | 13.5    | 14.4 | V     |
| Operating Voltage String 1 (2 in series)                                 | $V_{op}$         | 6.0  | 9.0     | 9.6  | V     |
| Operating Current  | $I_{op}$         | -    | 1.7     | 1.9  | Α     |
| Allowable Reverse Current  | l <sub>r</sub>   | -    | -       | 85   | mA    |
| Fiber Specifications   |                  |      |         |      |       |
| Fiber Core Diameter  |                  |      | 0.400   |      | mm    |
| (Centration ≤ 10 um)   |                  |      | 0.100   |      |       |
| Connector Type<br>(Nose length 0.3850 - 0.3863 in.,<br>9.779 – 9.812 mm) |                  |      | SMA-905 |      |       |
| Numerical Aperture   |                  |      | 0.22    |      |       |





## **Outline Drawing and Electrical Connections**



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