

Datasheet: Necsel™ Green Novalum VHP Laser

These specifications are for the Necsel green Novalum VHP package. The centroid of the wavelength spectrum will be within the indicated wavelength range.



| Model # | Symbol | Min. (nm) | Typical (nm) | Max. (nm) |
|---------------|-----------|-----------|--------------|-----------|
| Green-VHP-52x | λ | 520 | 525 | 528 |

Operating Wavelengths

| Laser Parameter | Symbol | Min. | Typical | Max. | Unit |
|--|------------------|------|---------|------|-------|
| Operating Power (CW) | P_{op} | - | 9 | - | W |
| Module Operating Temperature [non-condensing atmosphere] | $T_{Thermistor}$ | - | 35 | - | °C |
| Center Wavelength [at 25°C and P_{op}] | λ_m | 520 | 525 | 528 | nm |
| Wavelength Temperature Coefficient | - | - | 0.1 | - | nm/°C |
| Threshold Current | I_{th} | - | 300 | - | mA |
| Slope Efficiency | η | - | 6 | - | W/A |
| Laser Power Conversion Efficiency | PCE | - | 10 | - | % |

Power Supply Requirements

| | | | | | |
|---|----------|---|-----|-----|----|
| Operating Voltage (4 strings in series) | V_{op} | - | 54 | 72 | V |
| Allowable Reverse Current | I_r | - | - | 85 | mA |
| Operating Current | I_{op} | - | 1.7 | 1.8 | A |

Fiber Specifications

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



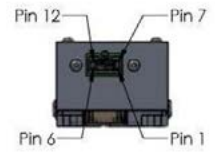
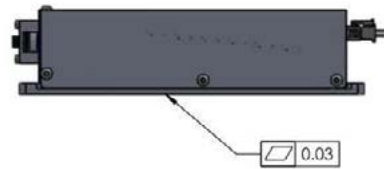
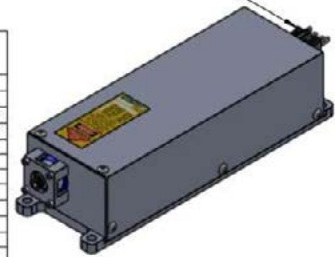
Outline Drawing and Electrical Connections



header: Samtec IPL1-106-01-L-D-K
receptacle: IPD1-06-D-K
Pins: CC79L-2024-01-L

| Pin | Function | String |
|-----|------------|-------------|
| 1 | Laser -ve | right, far |
| 2 | Laser +ve | right, near |
| 3 | Laser -ve | right, near |
| 4 | Laser +ve | left, near |
| 5 | Laser -ve | left, near |
| 6 | Laser +ve | left, far |
| 7 | Laser +ve | right, far |
| 8 | thermistor | right |
| 9 | thermistor | right |
| 10 | thermistor | left |
| 11 | thermistor | left |
| 12 | Laser -ve | left, far |

shown with shorting clip installed



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