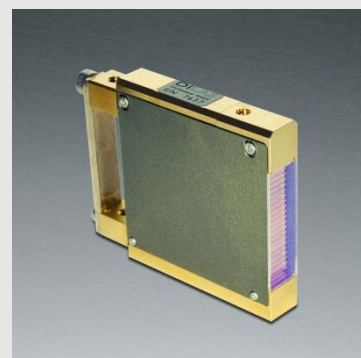


852nm, Water-Cooled, Vertical Diode Laser Stack

Features

- Uniform divergence
- Low thermal resistance CW operation
- Customized geometries and housings available
- Optional standard coatings or customized low AR coatings are available
- Optional FAC/SAC are available
- Optional Volume Bragg Grating are available (to ensure that very little pump energy is wasted)



Device Specification

| Optical Parameters ¹ | Units | |
|--|---------|-------------|
| Center Wavelength Range ³ | nm | 852 |
| Center Wavelength Tolerance ³ | nm | ±3 |
| Output Power per Bar ² | W | 80 |
| Number of Bars ³ | # | 20 |
| Bar-to-Bar Spacing ³ | mm | Approx. 1.8 |
| Spectral Width (FWHM) ⁶ | nm | <5 |
| Slope Efficiency per Bar | W/A | >1.19 |
| Fast-Axis Divergence ⁴ (90%) | degrees | <60 |
| Slow-Axis Divergence (95%) | degrees | <8 |

| Electrical Parameters ¹ | | |
|--|---|------|
| Power Conversion Efficiency | % | >58 |
| Threshold Current (I_{TH}) | A | <11 |
| Operating Current (I_{OP}) | A | ≤80 |
| Operating Voltage per Bar (V_{OP}) | V | <1.8 |

| Thermal Parameters | | |
|---|----|-----------|
| Operating Temperature Range ^{3, 5} | °C | +20 to 30 |
| Storage Temperature Range ⁵ | °C | 0 to 55 |

Please refer to DILAS water specification for cooling requirements.

¹Data at 25°C water temperature, unless otherwise stated.

²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

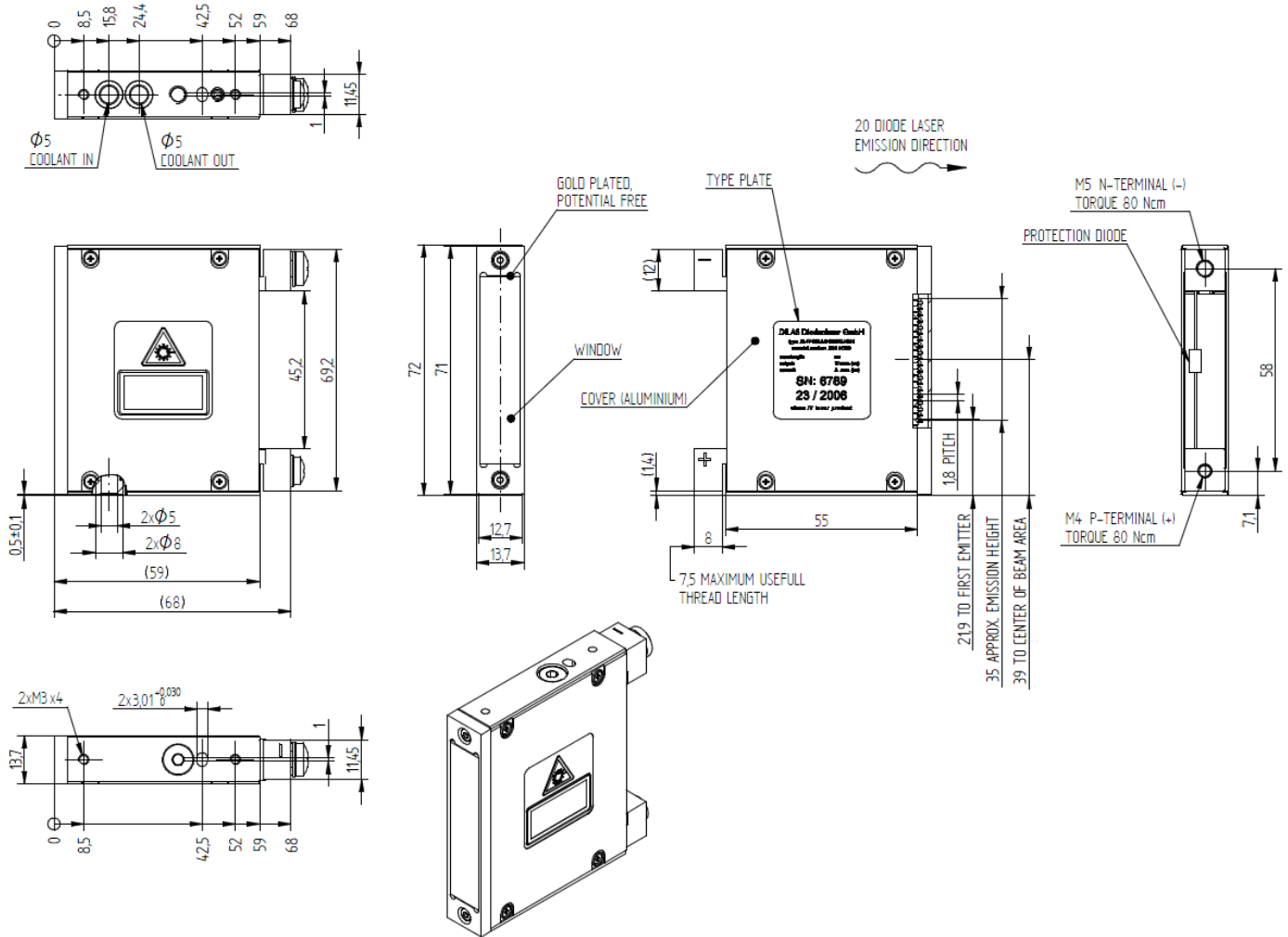
⁴For fast-axis collimation using FAC lens: divergence <8mrad.

⁵A non-condensing environment is required for storage and operation below the ambient dew point.

⁶With volume Bragg gratings, spectral line narrowing will result in ≤1nm FWHM per bar.

852nm, Water-Cooled, Vertical Diode Laser Stack

Package Dimension



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