

Conduction Cooled Vertical Stack Diode Laser

Vsilk 2 Pro-1000



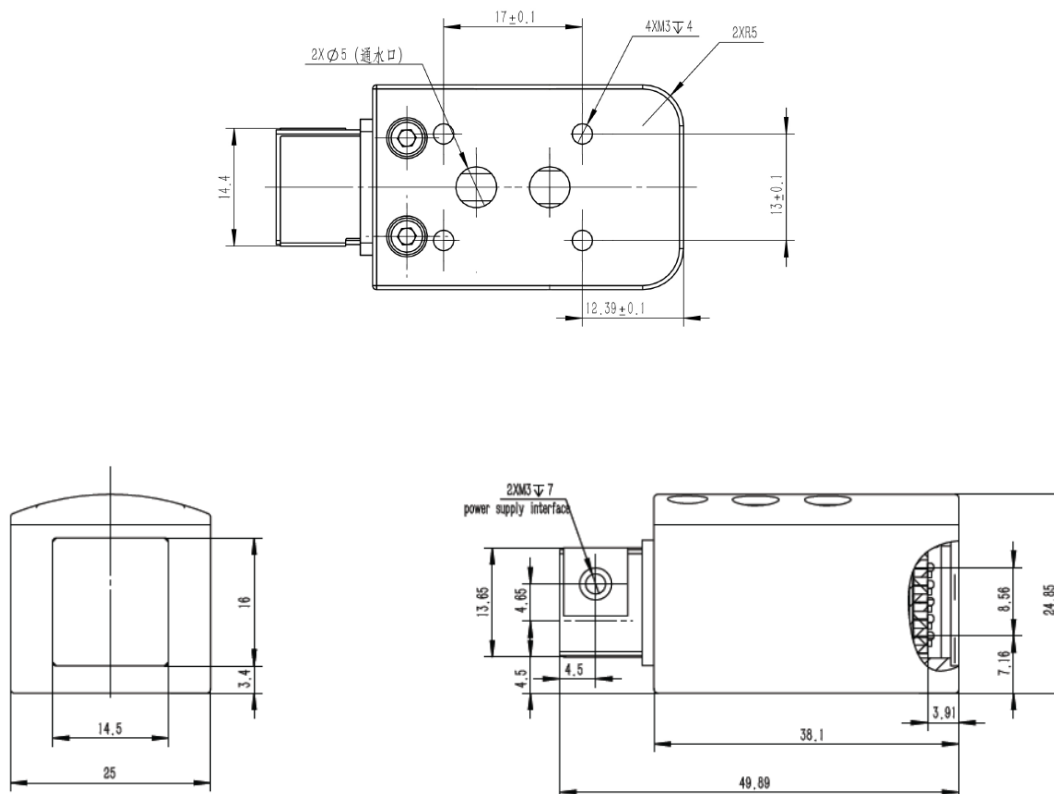
Features

- High power 200W/bar
- High beam quality
- High reliability
- Small size
- Light weight

Applications

- Hair removal

Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

Product Specifications

Product Code

HAR300098

Part No. ¹

FL-Vsilk2Pro-1000-808

| Optical Data ² | Unit | Value |
|------------------------------|-------|---------|
| Centroid Wavelength | nm | 808 |
| Wavelength Tolerance | nm | ± 15 |
| Output Power ³ | W | 1000 |
| Number of bars | - | 5 |
| Bar to Bar Pitch | mm | 2.1 |
| Fast Axis Divergence 95% | ° | 5 ~ 7 |
| Slow Axis Divergence 95% | ° | 12 ~ 14 |
| Spot Size ⁴ | mm | 12 × 12 |
| Wavelength Temp. Coefficient | nm/°C | ~ 0.28 |

Electrical Data ²

| | | |
|-----------------------------|-----|-------|
| Operation Current | A | ≤ 185 |
| Threshold Current | A | ≤ 30 |
| Operating Voltage | V | ≤ 10 |
| Slope Efficiency per bar | W/A | ≥ 1.1 |
| Power Conversion Efficiency | % | ≥ 48 |
| Max. Pulse Width | ms | 400 |
| Max. Duty Cycle | % | 30 |

Miscellaneous Data

| | | |
|------------------------------------|-------|-------------------------------|
| Operating Temperature ⁵ | °C | 22 ~ 28 |
| Coolant | - | Distilled water or pure water |
| Flow Rate | L/min | 3 ~ 4 |

¹ Part No. = Brand Code - Series - Power - Centroid Wavelength.

² Data at 25°C unless otherwise stated.

³ Reduced lifetime if used above nominal operating conditions.

⁴ At the distance of 32mm from light emitting surface.

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



Recommended Operation Condition

| VsilK2 Pro-1000 Energy Table | | | | | | | | | | | | | | | |
|------------------------------|-----|---------------|----|----|----|----|----|----|----|----|----|----|-----|-------|--|
| Energy(J) | | Frequency(Hz) | | | | | | | | | | | Iop | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20 | | <185A | |
| Pulse width (ms) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | <165A |
| | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | | | <145A |
| | 15 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | | | <115A |
| | 20 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 15 | 15 | 15 | | | | <100A |
| | 30 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | | | | <60A |
| | 40 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | | | | | | Water Temperature: T=25±3°C Flow Rate: 3~4L/min |
| | 50 | 29 | 29 | 29 | 29 | 29 | 29 | | | | | | | | |
| | 60 | 30 | 30 | 30 | 30 | 30 | | | | | | | | | |
| | 70 | 35 | 35 | 35 | 35 | | | | | | | | | | |
| | 80 | 40 | 40 | 40 | | | | | | | | | | | |
| | 90 | 45 | 45 | | | | | | | | | | | | |
| | 100 | 50 | | | | | | | | | | | | | |
| | 200 | 50 | | | | | | | | | | | | | |
| | 300 | 75 | | | | | | | | | | | | | |
| 400 | 100 | | | | | | | | | | | | | | |