

## **Conduction Cooled Vertical Stack Diode Laser**

# Vsilk 2 Pro-2000 plus



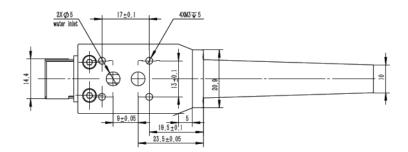
#### **Features**

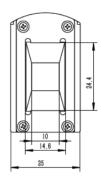
- High power 200W/bar
- High beam quality
- High reliability
- Small size
- · Light weight

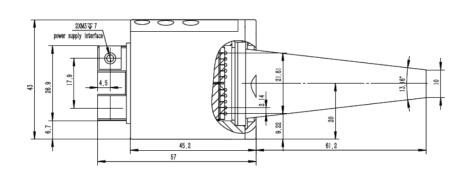
#### **Applications**

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**

Part No. 1 FL-Vsilk2Pro-2000-808-P

| Optical Data <sup>2</sup>                 | Unit  | Value                         |
|---|-------|-------------------------------|
| Centroid Wavelength                       | nm    | 808                           |
| Wavelength Tolerance                      | nm    | ± 15                          |
| Output Power after LD <sup>3</sup>        | W     | 2000                          |
| Output Power after Waveguide <sup>3</sup> | W     | 1700                          |
| Number of bars                            | -     | 10                            |
| Spot Size <sup>4</sup>                    | mm    | 10×10                         |
| Wavelength Temp. Coefficient              | nm/°C | ~ 0.28                        |
|   |       |                               |
| Electrical Data <sup>2</sup>              |       |                               |
| Operation Current                         | А     | ≤185                          |
| Threshold Current                         | А     | ≤ 30                          |
| Operating Voltage                         | V     | ≤ 20                          |
| Slope Efficiency per bar                  | W/A   | ≥ 1.1                         |
| Power Conversion Efficiency               | %     | ≥ 48                          |
| Max. Pulse Width                          | ms    | 400                           |
| Max. Duty Cycle                           | %     | 30                            |
|   |       |                               |
| Miscellaneous Data <sup>2</sup>           |       |                               |
| Operating Temperature <sup>5</sup>        | °C    | 22 ~ 28                       |
| Coolant                                   | -     | Distilled water or pure water |
| Flow Rate                                 | L/min | 3 ~ 4                         |

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



<sup>&</sup>lt;sup>2</sup> Data at 25°C unless otherwise stated.

<sup>&</sup>lt;sup>3</sup> Reduced lifetime if used above nominal operating conditions.

<sup>&</sup>lt;sup>4</sup> At the 32mm working distance.

 $<sup>^{5}</sup>$  A non-condensing environment is required for storage and operation below ambient dew level.



## **Recommended Operation Condition**

| Vsilk 2 Pro-2000-808 Energy Table |     |               |    |    |    |    |    |    |    |    |    |     |                         |        |
|-----------------------------------|-----|---------------|----|----|----|----|----|----|----|----|----|-----|-------------------------|--------|
| Energy(J)                         |     | Frequency(Hz) |    |    |    |    |    |    |    |    |    | lop |                         |        |
|                                   |     | 1             | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 20  |                         | <185A  |
|                                   | 5   | 10            | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10  |                         | <165A  |
|                                   | 10  | 20            | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |     |                         | <145A  |
|                                   | 15  | 26            | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |     |                         | <115A  |
|                                   | 20  | 34            | 34 | 34 | 34 | 34 | 34 | 34 | 30 | 30 | 30 |     |                         | <100A  |
|                                   | 30  | 36            | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |     |                         | <60A   |
|                                   | 40  | 48            | 48 | 48 | 48 | 48 | 48 | 48 |    |    |    |     |                         |        |
| Pulse                             | 50  | 58            | 58 | 58 | 58 | 58 | 58 |    |    |    |    |     |                         |        |
| width                             | 60  | 60            | 60 | 60 | 60 | 60 |    |    |    |    |    |     |                         |        |
| (ms)                              | 70  | 70            | 70 | 70 | 70 |    |    |    |    |    |    |     | Water Temper-<br>ature: | emper- |
|                                   | 80  | 80            | 80 | 80 |    |    |    |    |    |    |    |     | T=25±3                  | s°C    |
|                                   | 90  | 90            | 90 |    |    |    |    |    |    |    |    |     |                         |        |
|                                   | 100 | 100           |    |    |    |    |    |    |    |    |    |     | Flow Rate:<br>3~4L/min  |        |
|                                   | 200 | 100           |    |    |    |    |    |    |    |    |    |     | 1 .2                    |        |
|                                   | 300 | 150           |    |    |    |    |    |    |    |    |    |     |                         |        |
|                                   | 400 | 200           |    |    |    |    |    |    |    |    |    |     |                         |        |