

Conduction Cooled Vertical Stack Diode Laser

Vsilk 2-1200plus



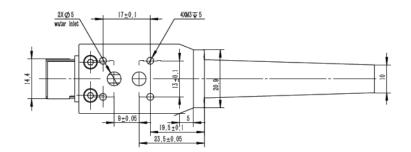
Features

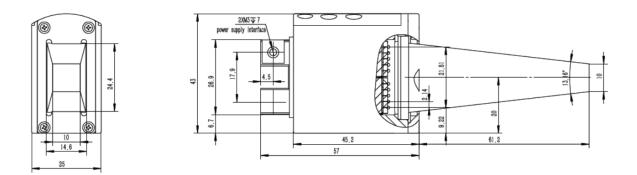
- High effective energy
- High beam quality
- High reliability
- Small size
- Light weight

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-Vsilk2-1200-808-P

| Optical Data ² | Unit | Value |
|---|-------|-------------------------------|
| Centroid Wavelength | nm | 808 |
| Wavelength Tolerance | nm | ± 15 |
| Output Power after LD ³ | W | 1200 |
| Output Power after waveguide ³ | W | 1000 |
| Number of bars | - | 10 |
| Spot Size ⁴ | mm | 10 × 10 |
| Wavelength Temp. Coefficient | nm/°C | ~ 0.28 |
| | | |
| Electrical Data ² | | |
| Operation Current | А | ≤ 125 |
| Threshold Current | А | ≤ 25 |
| Operating Voltage | V | ≤ 20 |
| Slope Efficiency per bar | W/A | ≥ 1.0 |
| 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 |

¹Part No. = Brand Code - Series - Power - Centroid Wavelength - P (with waveguide).

² Data at 25°C unless otherwise stated.

³ Reduced lifetime if used above nominal operating conditions.

⁴ Output from the waveguide.

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



2



Recommended Operation Condition

| Vsilk 2-1200plus Energy Table | | | | | | | | | | | | | |
|-------------------------------|-----|---------------|----|----|----|----|----|----|----|----|-----|--|-------|
| Energy(J) 1 | | Frequency(Hz) | | | | | | | | | Іор | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | ~120A |
| | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | | ~105A |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | ~70A |
| | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | Water Tempera- ture T=25±3°C Flow Rate: 3~4L/min | |
| | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | | | | | |
| | 50 | 48 | 48 | 48 | 48 | 48 | 48 | | | | | | |
| Pulse | 60 | 50 | 50 | 50 | 50 | 50 | | | | | | | |
| Width | 70 | 58 | 58 | 58 | 58 | | | | | | | | |
| (ms) | 80 | 67 | 67 | 67 | | | | | | | | | |
| | 90 | 75 | 75 | | | | | | | | | | |
| | 100 | 83 | | | | | | | | | | | |
| | 200 | 83 | | | | | | | | | | J4L/ | |
| | 300 | 125 | | | | | | | | | | 1 | |
| | 400 | 167 | | | | | | | | | |] | |

Focuslight Technologies Inc.

3