

# Conduction Cooled Vertical Stack Diode Laser

## Vsilk 2-1200



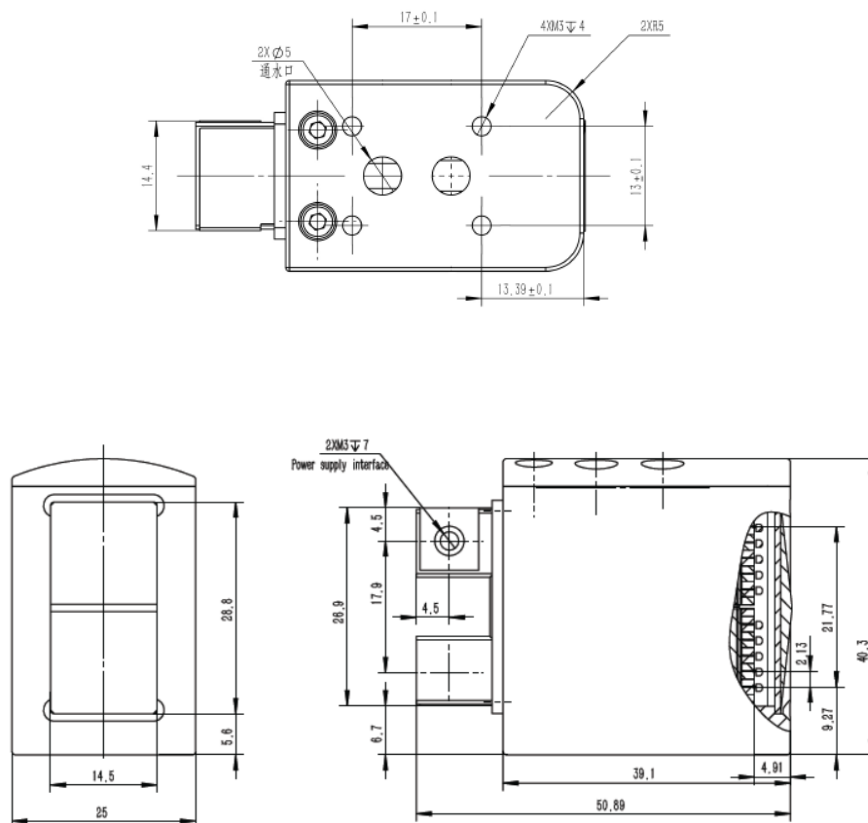
### Features

- 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

<b>Product Code</b>	<b>HAR300086-1</b>
Part No. <sup>1</sup>	FL-Vsilk2-1200-808

Optical Data <sup>2</sup>	Unit	Value
Centroid Wavelength	nm	808
Wavelength Tolerance	nm	± 15
Output Power <sup>3</sup>	W	1200
Number of bars	-	10
Bar to Bar Pitch	mm	2.1
Fast Axis Divergence 95%	°	5 ~ 7
Slow Axis Divergence 95%	°	12 ~ 14
Spot Size <sup>4</sup>	mm	12 × 24
Wavelength Temp. Coefficient	nm/°C	~ 0.28

Electrical Data <sup>2</sup>		
Operation Current	A	≤ 115
Threshold Current	A	≤ 25
Operating Voltage	V	≤ 20
Slope Efficiency per bar	W/A	≥ 1.1
Power Conversion Efficiency	%	≥ 50
Max. Pulse Width	ms	400
Max. Duty Cycle	%	30

Miscellaneous Data		
Operating Temperature <sup>5</sup>	°C	22 ~ 28
Coolant	-	Distilled water or pure water
Flow Rate	L/min	3 ~ 4

<sup>1</sup> Part No. = Brand Code - Series - Power - Centroid Wavelength .

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

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

<sup>4</sup> At the distance of 32mm from light emitting surface.

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



**Recommended Operation Condition**

Vsilk 2-1200 Energy Table														
Energy(J)		Frequency(Hz)										Iop		
		1	2	3	4	5	6	7	8	9	10		≈106A	
Pulse Width (ms)	10	12	12	12	12	12	12	12	12	12	12	12		≈91A
	20	24	24	24	24	24	24	24	24	24	24	24		≈55A
	30	36	36	36	36	36	36	36	36	36	36	36	Water Temperature T=25±3°C  Flow Rate: 3~4L/min	
	40	48	48	48	48	48	48	48						
	50	58	58	58	58	58	58							
	60	60	60	60	60	60								
	70	70	70	70	70									
	80	80	80	80										
	90	90	90											
	100	100												
	200	100												
	300	150												
400	200													