

Conduction Cooled Vertical Stack Diode Laser

Vsilk 2-1800



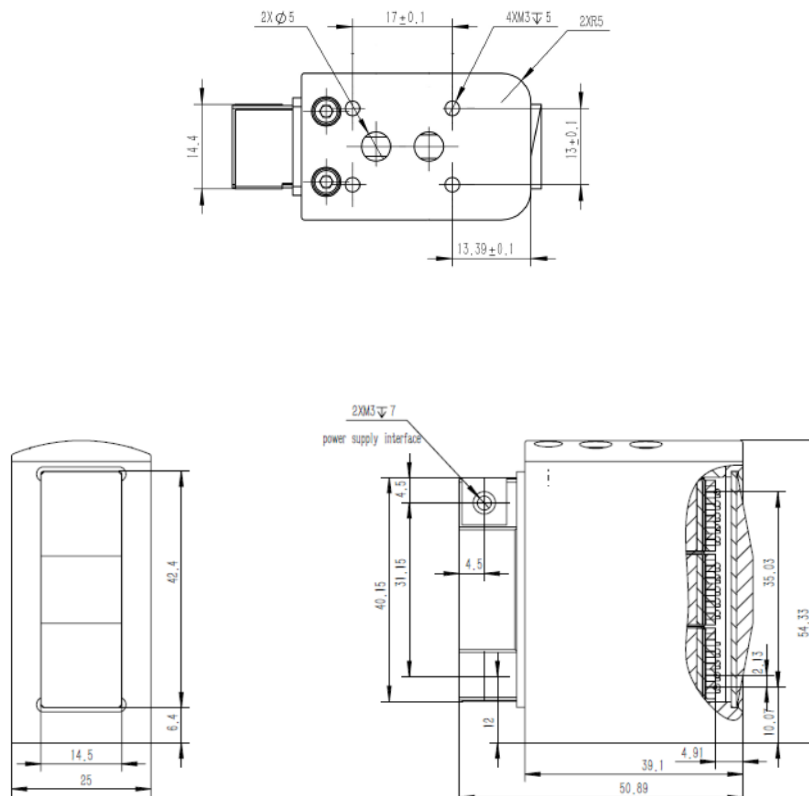
Features

- High effective energy
- High beam quality
- High reliability

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	HAR300089-1
Part No. ¹	FL-Vsilk2-1800-808

Optical Data ²	Unit	Value
Centroid Wavelength	nm	808
Wavelength Tolerance	nm	± 15
Output Power ³	W	1800
Number of bars	-	15
Bar to Bar Pitch	mm	2.1
Fast Axis Divergence 95%	°	5 ~ 7
Slow Axis Divergence 95%	°	12 ~ 14
Spot Size ⁴	mm	12 × 36
Wavelength Temp. Coefficient	nm/°C	~ 0.28

Electrical Data ²		
Operation Current	A	≤ 115
Threshold Current	A	≤ 25
Operating Voltage	V	≤ 30
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 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

Vsilk 2-1800 Energy Table														
Energy(J)		Frequency(Hz)										Iop		
		1	2	3	4	5	6	7	8	9	10		≈106A	
Pulse Width (ms)	10	18	18	18	18	18	18	18	18	18	18	18		≈91A
	20	36	36	36	36	36	36	36	36	36	36	36		≈55A
	30	54	54	54	54	54	54	54	54	54	54	54	Water Temperature T=25±3°C Flow Rate: 3~4L/min	
	40	72	72	72	72	72	72	72						
	50	87	87	87	87	87	87							
	60	90	90	90	90	90								
	70	105	105	105	105									
	80	120	120	120										
	90	135	135											
	100	150												
	200	150												
	300	225												
400	300													