



# Vshiny™ Micro-Channel Water Cooled Vertical Stack Diode Laser

## HVS77



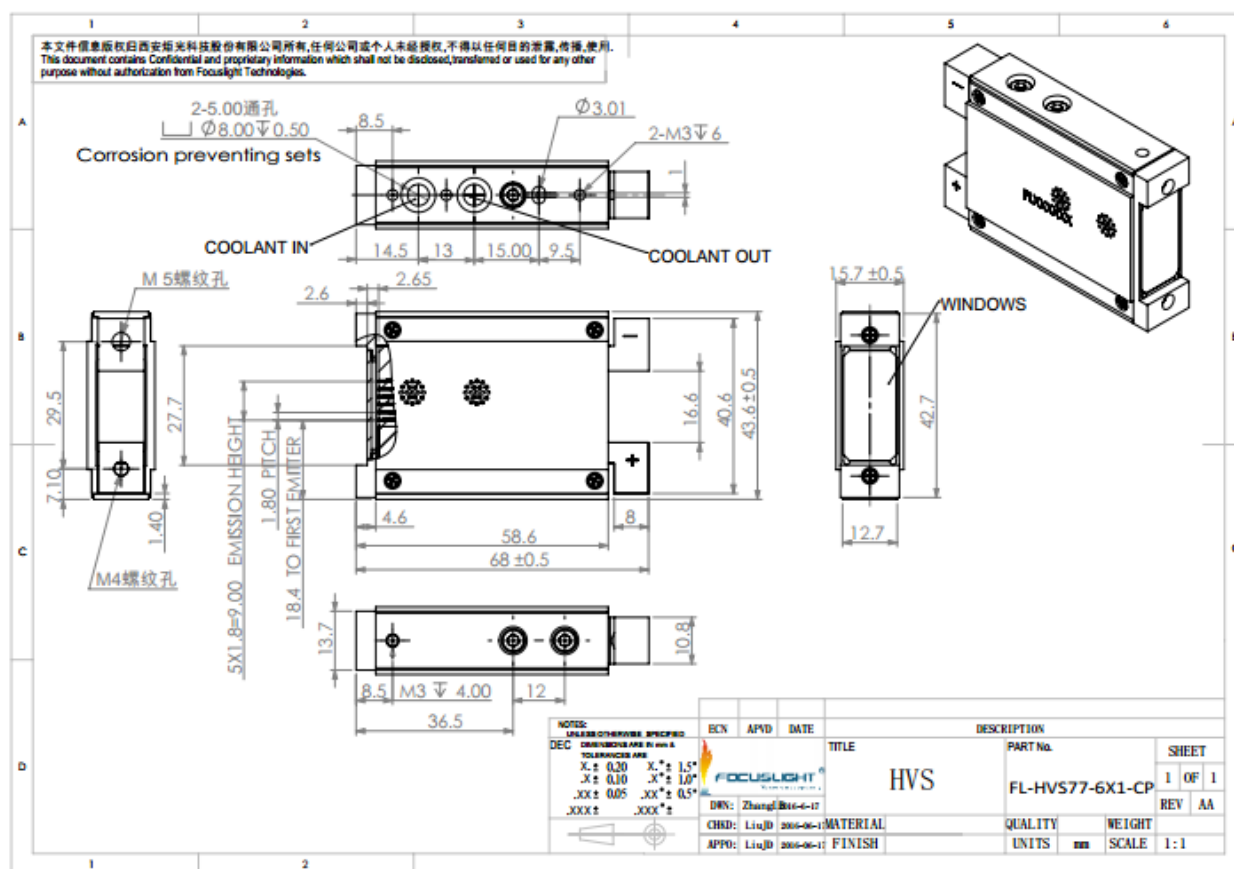
### Features

- AuSn solder
- Uniform beam profile
- High power
- Long lifetime

### Applications

- Hair Removal

## Device Dimension (mm)



1 This structure drawing is only for reference. More structure drawings can be found below the datasheet. For any other special requirement, please feel free to contact us.

2 Drawings for 1-6 bars are available. Please contact Focuslight for details.

## Specification

Module Type <sup>1</sup>	Units	FL-HVS77-6X1(5X1)-500-808
<b>Optical</b> <sup>3,6</sup>		
Center Wavelength $\lambda$	nm	808
Wavelength Tolerance	nm	$\pm 15$
Output Power per Bar <sup>2</sup>	W	100
Max. Pulse Width	ms	400
Max. Duty Cycle	%	50
Number of bars	#	5
Bar-to-Bar Spacing	mm	1.8
Spectral Width FWHM	nm	4
Spectral Width FW90%E	nm	8
Fast Axis Divergence(95%)	degree	70
Slow Axis Divergence (95%)	degree	12
Polarization Mode	-	TE
Wavelength Temp. Coefficient	nm/°C	$\sim 0.28$
<b>Electrical Parameters</b> <sup>3,5</sup>		
Operating Current $I_{op}$	A	$\leq 110$
Threshold Current $I_{th}$	A	$\leq 25$
Operating Voltage $V_{op}$ /bar	V	$\leq 2$
Slope Efficiency	W/A	$\geq 1.1$
Power Conversion Efficiency	%	$\geq 50$
<b>Thermal Parameters</b>		
Operating Temperature <sup>6</sup>	°C	25 $\pm$ 5
Storage Temperature <sup>4</sup>	°C	0~55
Coolant	-	Deionized water
Flow Rate per bar	L/min	0.2~0.4
Max Inlet Pressure	kPa	380
Conductivity	$\mu s \cdot cm^{-1}$	$< 5$

<sup>1</sup>Explanation for the name of Module Type: FL (abbreviation of Focuslight) –HVSxx (structure code) –N (number of bars) –X (output power) –# (center wavelength)

<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<sup>3</sup>Data at 25°C, unless otherwise stated.

<sup>4</sup>A non-condensing environment is required for storage and operation below ambient dew point

<sup>5</sup>It is recommended to use cooling water machine for laser cooling , Refrigerating capacity $\geq 1.5 \cdot PPK \cdot (DC) \cdot \max$

<sup>6</sup>If there are any other requirements, please contact us



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