Macro-channel Water Cooled Horizontal Array (CW)
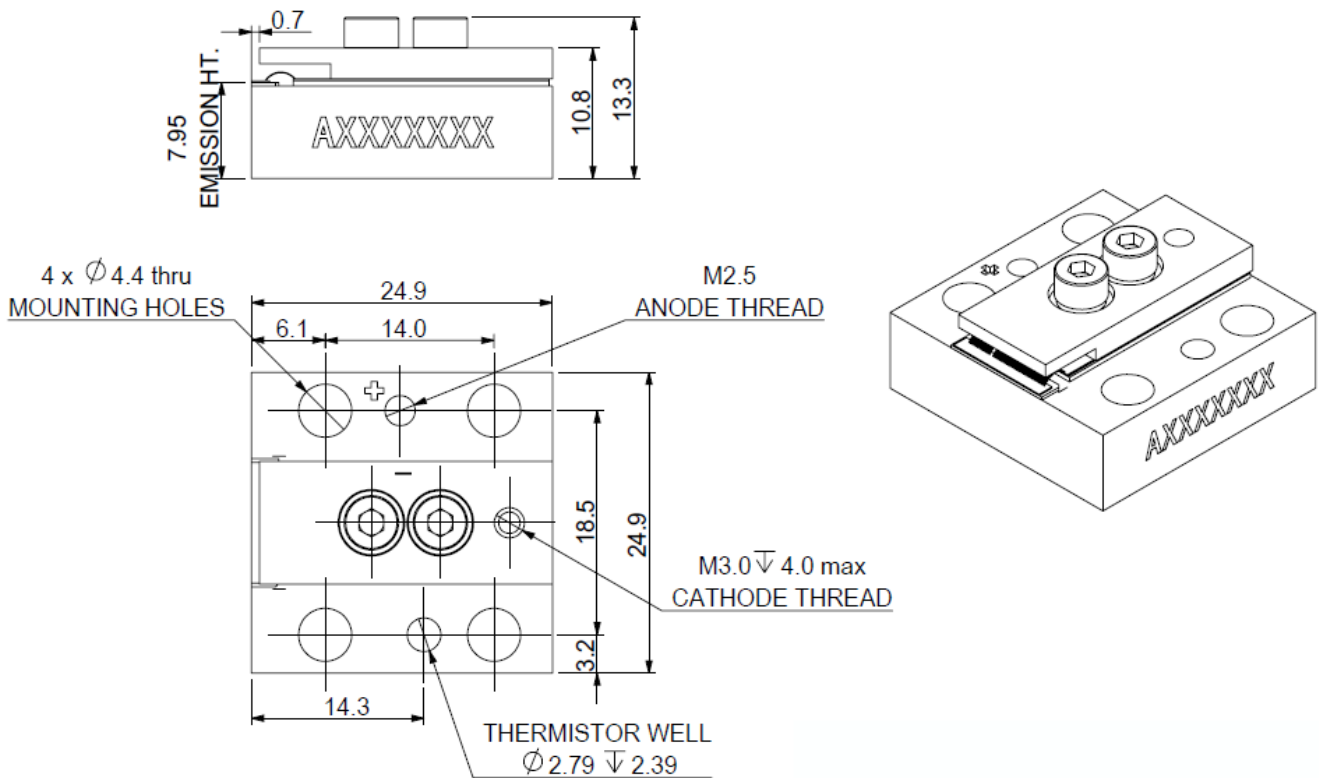
HCS02

Features

- AuSn bonding
- Low smile
- Harsh environment use

Applications

- Pumping
- Industry
- Printing
- Medical
- Scientific research

Product Dimensions (mm)

4 x ⌀ 4.4 thru
MOUNTING HOLES

24.9
6.1 14.0

M2.5
ANODE THREAD

18.5 24.9

M3.0 ⍌ 4.0 max
CATHODE THREAD

3.2

14.3

THERMISTOR WELL
⌀ 2.79 ⍌ 2.39

0.7
EMISSION HT.
7.95
10.8 13.3

AXXXXXXX

Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

1

Product Specifications

Product Code		OPD000059	OPD000062	OPD000064	OPD000056
Part No. [1]		FL-HCS02-60-808	FL-HCS02-80-940	FL-HCS02-80-976	FL-HCS02-60-1060

Optical Data[2]	Unit	Value			
Centroid Wavelength	nm	808	940	976	1060
Wavelength Tolerance	nm	± 3	± 5	± 5	± 15
Output Power[3]	W	60	80	80	60
Emitter Size	µm	100	100	100	200
Fill Factor	%	20	20	20	50
Spectral Width FWHM	nm	≤ 4	≤ 4.5	≤ 4.5	/
Spectral Width 90% Energy	nm	≤ 6	≤ 8	≤ 8	/
Fast Axis Divergence (FWHM)	°	~ 35	~ 40	~ 40	~ 40
Slow Axis Divergence (FWHM)	°	~8	~8	~8	~8
Polarization Mode	-	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm / °C	~ 0.28	~ 0.33	~ 0.34	~ 0.4

Electrical Data[2]	Unit				
Operation Current	A	≤ 70	≤ 90	≤ 90	≤ 75
Threshold Current	A	≤ 10	≤ 12	≤ 12	≤ 12
Operating Voltage/Bar	V	≤ 2	≤ 2	≤ 2	≤ 2
Slope Efficiency/Bar	W / A	≥ 1	≥ 1.1	≥ 1.1	≥ 0.9
Power Conversion Efficiency	%	≥ 50	≥ 50	≥ 50	≥ 50

Thermal Data	Unit				
Operating Temperature	°C	15 ~ 35	15 ~ 35	15 ~ 35	15 ~ 35
Storage Temperature [4]	°C	-40~ 55	-40~ 55	-40~ 55	-40~ 55
Recommended Heatsink Capacity	W	≥ 120	≥ 160	≥ 160	≥ 120

Product Code		OPD000060	OPD000063	OPD000066	OPD000057
Part No. [1]		FL-HCS02-60-808-Y	FL-HCS02-80-940-Y	FL-HCS02-80-976-Y	FL-HCS02-60-1060-Y

Optical Data[2]	Unit	Value			
Fast Axis Divergence (FWHM)	°	‹ 0.5	‹ 0.5	‹ 0.5	‹ 0.5

All other specifications same as above.

[1] Part No. = Brand Code - Series - Power - Centroid Wavelength (- Collimation).
[2] Data at 25°C temperature, unless otherwise stated.
[3] Lifetime reduced if overused under nominal operating condition.
[4] A non-condensing environment is required for storage and operation below ambient dew point.

! DANGER !
VISIBLE AND INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION !
CLASS IV LASER PRODUCT

Focuslight Technologies Inc.

Address: 56 Zhangba 6th Road, High-Tech Zone, 710077 Xi'an, Shaanxi, P. R. China
Tel: +86 29 8188 9945 I **Email:** sales@focuslight.com I **Website:** https://www.focuslight.com