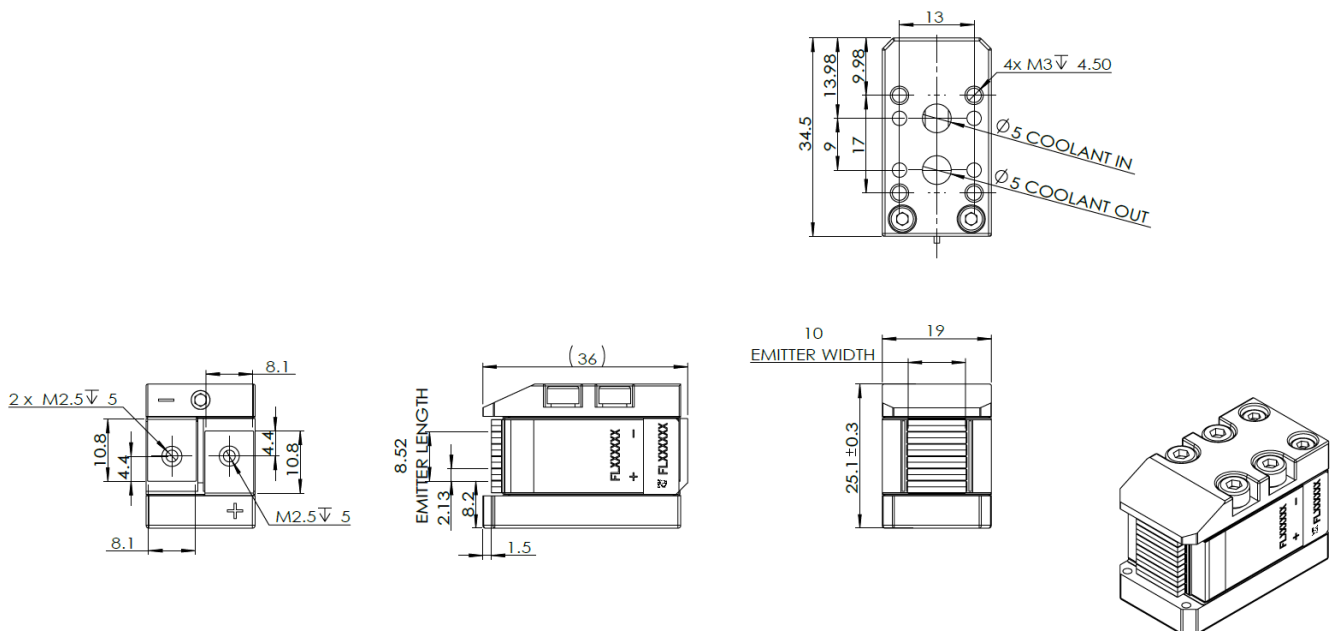# Conduction Cooled QCW Vertical Stack Diode Laser

GS20 Series

Features

- AuSn Bonding
- High reliability
- Narrow spectrum
- High peak power
- Compact Size

Applications

- Pumping
- Illumination
- Industry
- Research

Product Dimensions (mm)

Remark: The structure drawing is for reference only (5bar module). Please feel free to contact us for any special require-ments.

1

Product Specifications

Product Code   **(Typical Customization)**

Part No. [1]

		FL-GS20-5X1- 2000-808(Q)	FL-GS20-10X1- 4000-808(Q)	FL-GS20-15X1- 6000-808(Q)
General Data	Unit	Value	Value	Value
Operation Mode	-	QCW	QCW	QCW
Pulse Width	μs	400	400	400
Duty Cycle	%	8	8	8
Bar Pitch	mm	2.13	2.13	2.13
Optical Data[3]				
Centroid Wavelength	nm	808	808	808
Wavelength Tolerance	nm	± 2	± 2	± 2
Output Power per Bar	W	400	400	400
Number of Bars	-	5	10	15
Spectral Width FWHM	nm	≤ 4	≤ 4	≤ 4
Spectral Width 90% Energy	nm	/	/	/
Fast Axis Divergence (FWHM)	°	35 (typical)	35 (typical)	35 (typical)
Fast Axis Divergence with FAC	°	≤0. 5°	≤0. 5°	≤0. 5°
Slow Axis Divergence (FWHM)	°	8 (typical)	8 (typical)	8 (typical)
Polarization Mode	-	TE	TE	TE
Wavelength Temp. Coefficient	nm / °C	~ 0.28	~ 0.28	~ 0.28
Electrical Data [3]				
Operation Current	A	≤ 400	≤ 400	≤ 400
Threshold Current	A	≤ 40	≤ 40	≤ 40
Operating Voltage per Bar	V	≤ 2	≤ 2	≤ 2
Slope Efficiency per Bar	W / A	≥ 1	≥ 1	≥ 1
Power Conversion Efficiency	%	≥ 50	≥ 50	≥ 50
Thermal Data				
Operating Environment Temperature	°C	20 ~ 30	20 ~ 30	20 ~ 30
Storage Temperature [4]	°C	-55 ~ 85	-55 ~ 85	-55 ~ 85
Coolant	-	Distilled water	Distilled water	Distilled water
Flow Rate	L/min	2.5	2.5	2.5

[1] Part No. = Brand Code - Series - Power - Centroid Wavelength - Variant Code.

[2] Reduced lifetime if used above nominal operating conditions.

[3] Data at 25°C unless otherwise stated.

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

! DANGER !

VISIBLE AND INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION !

CLASS IV LASER PRODUCT

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