

# **Conduction Cooled QCW Vertical Stack Diode Laser**

## **GS05 Series**



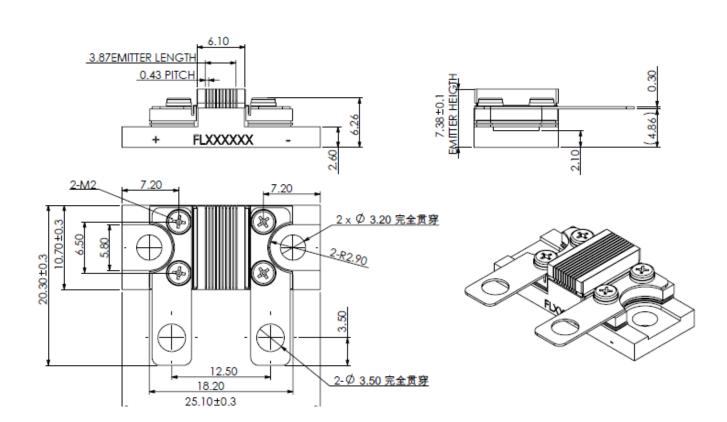
#### **Features**

- · AuSn Bonding
- High reliability
- Narrow spectrum
- · High peak power
- High temperature application
- · Compact Size

#### **Applications**

- Pumping
- Illumination
- Industry
- Research

### **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		GST000011	GST000012
Part No. <sup>1</sup>		FL-GS05-10X1-1000-808(Q)	FL-GS05-6X1-600-808(Q)
General Data	Unit	Value	
Operation Mode	-	QCW	QCW
Pulse Width	μs	300	300
Duty Cycle	%	0.6	0.6
Bar Pitch	mm	0.43	0.43
Optical Data <sup>3</sup>			
Centroid Wavelength	nm	808	808
Wavelength Tolerance	nm	± 2	± 2
Output Power per Bar	W	100	100
Number of Bars	-	10	6
Spectral Width FWHM	nm	≤ 4	≤ 4
Spectral Width 90% Energy	nm	≤ 6	≤ 6
Fast Axis Divergence (FWHM)	٥	35 (typical)	35 (typical)
Fast Axis Divergence with FAC	٥	≤5°	≤5°
Slow Axis Divergence (FWHM)	٥	8 (typical)	8 (typical)
Polarization Mode	-	TE	TE
Wavelength Temp. Coefficient	nm /°C	~ 0.28	~ 0.28
Electrical Data <sup>3</sup>			
Operation Current	А	≤ 120	≤ 120
Threshold Current	А	≤ 40	≤ 40
Operating Voltage per Bar	V	≤ 2	≤ 2
Slope Efficiency per Bar	W/A	≥ 1	≥1
Power Conversion Efficiency	%	≥ 50	≥ 50
Thermal Data			
Operating Temperature	°C	-45 ~ 60	-45 ~ 60
Storage Temperature <sup>4</sup>	°C	-55 ~ 85	-55 ~ 85

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

<sup>&</sup>lt;sup>4</sup> A non-condensing environment is required for storage and operation below ambient dew level.



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

<sup>&</sup>lt;sup>3</sup> Data at 25°C unless otherwise stated.