
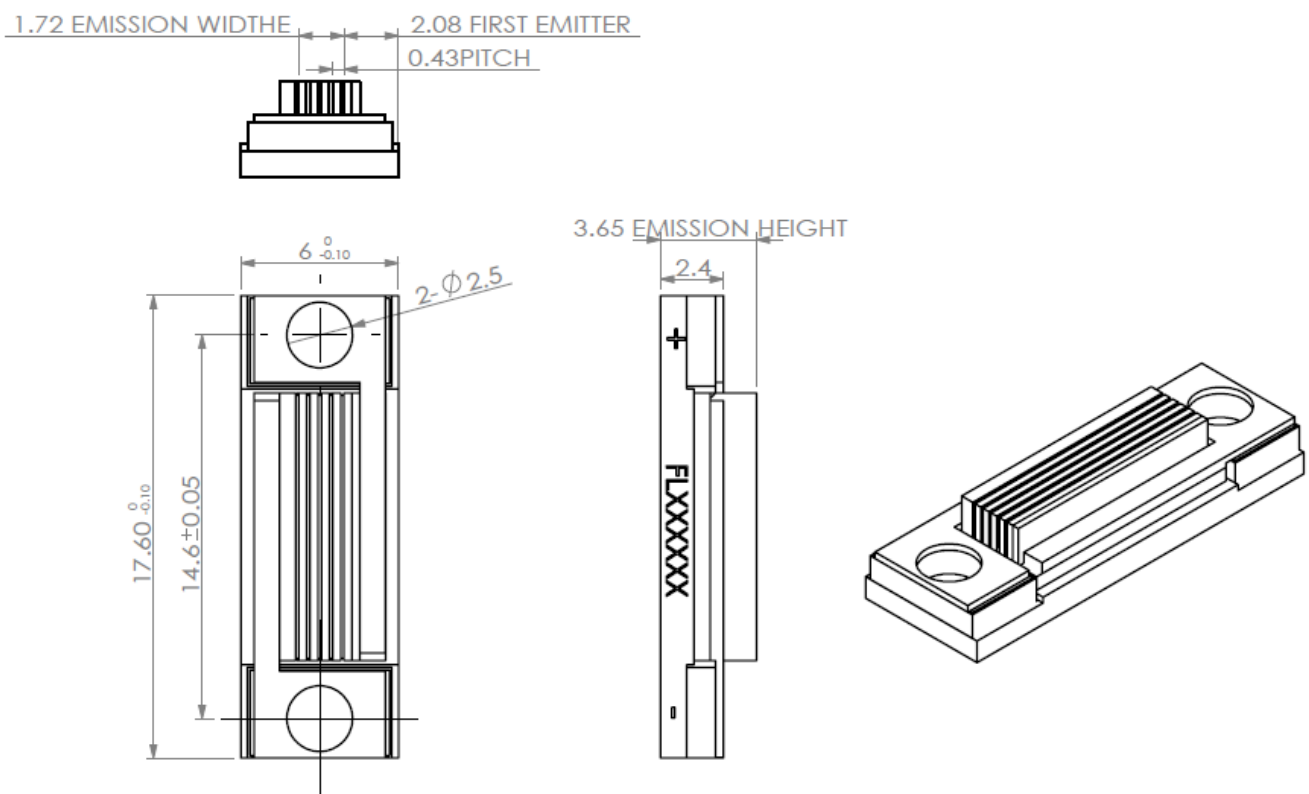


# Conduction Cooled QCW Vertical Stack Diode Laser GS04 Series

|   |   |  |
|---|---|--|
|  | <p><b>Features</b></p> <ul style="list-style-type: none"> <li>• AuSn Bonding</li> <li>• High reliability</li> <li>• Narrow spectrum</li> <li>• High peak power</li> <li>• High temperature application</li> <li>• Compact Size</li> </ul> | <p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Pumping</li> <li>• Illumination</li> <li>• Industry</li> <li>• Research</li> </ul> |
|---|---|--|

## Product Dimensions (mm)



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

## Product Specifications

|                       |                         |
|-----------------------|-------------------------|
| <b>Product Code</b>   | <b>GST000010</b>        |
| Part No. <sup>1</sup> | FL-GS04-5X1-750-808-(Q) |

| General Data   | Unit | Value |
|----------------|------|-------|
| Operation Mode | -    | QCW   |
| Pulse Width    | μs   | 250   |
| Duty Cycle     | %    | 0.5   |
| Bar Pitch      | mm   | 0.43  |

| Optical Data <sup>3</sup>    |         |              |
|------------------------------|---------|--------------|
| Centroid Wavelength          | nm      | 808          |
| Wavelength Tolerance         | nm      | ± 3          |
| Output Power per Bar         | W       | 170          |
| Number of Bars               | -       | 5            |
| Spectral Width FWHM          | nm      | ≤ 4          |
| Spectral Width 90% Energy    | nm      | ≤ 6          |
| Fast Axis Divergence (FWHM)  | °       | 35 (typical) |
| Slow Axis Divergence (FWHM)  | °       | 8 (typical)  |
| Polarization Mode            | -       | TE           |
| Wavelength Temp. Coefficient | nm / °C | ~ 0.28       |

| Electrical Data <sup>3</sup> |       |       |
|------------------------------|-------|-------|
| Operation Current            | A     | ≤ 200 |
| Threshold Current            | A     | ≤ 40  |
| Operating Voltage per Bar    | V     | ≤ 2   |
| Slope Efficiency per Bar     | W / A | ≥ 1   |
| Power Conversion Efficiency  | %     | ≥ 45  |

| Thermal Data                     |    |          |
|----------------------------------|----|----------|
| Operating Temperature            | °C | -45 ~ 75 |
| Storage Temperature <sup>4</sup> | °C | -55 ~ 85 |

<sup>1</sup> Part No. = Brand Code - Series - Power - Centroid Wavelength - Variant Code.

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

<sup>3</sup> Data at 66°C unless otherwise stated.

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

