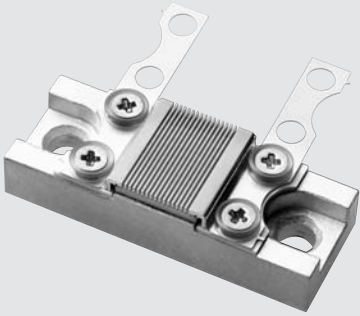


PulseLife G-stack

2 to 16 Bar Semiconductor Laser Stacks for Quasi-CW Operation

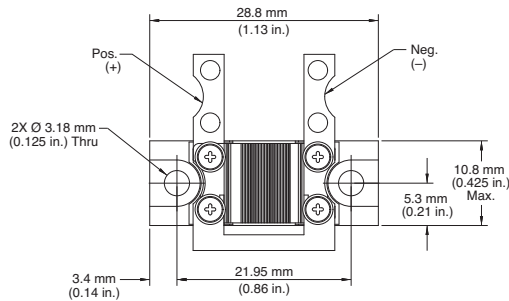
Features

- Conduction-cooled 2-bar through 16-bar vertical stacks with up to 3200W QCW output power
- Unique AAA™ design for highest reliability and lifetime
- PulseLife™ hard-solder technology
- Custom power, wavelength, temperature and form factor options available

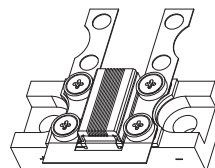
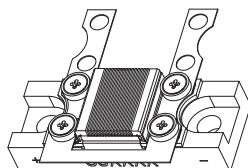
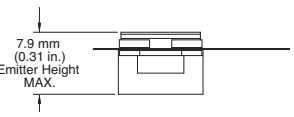
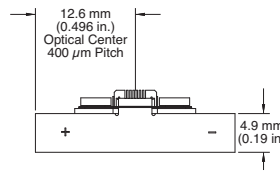
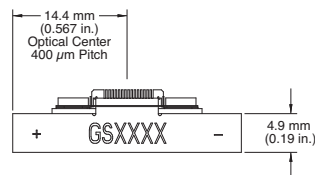
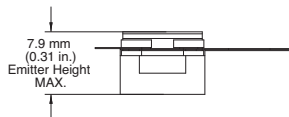
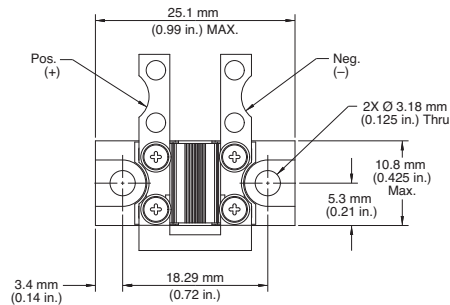


Mechanical Specifications

GH8-16



GH2-7



Superior Reliability & Performance

PulseLife™ G-stack

2 to 16 Bar Semiconductor Laser Stacks for Quasi-CW Operation

Device Specifications

| | 200W/bar G-stack |
|---|-------------------|
| Form Factors | |
| GH2-7 | 2 to 7 bar stack |
| GH8-16 | 8 to 16 bar stack |
| QCW Output Power, Total (W) | Up to 3200 |
| QCW Output Power per Bar (W) | 200 |
| Pulse width (usec) | <500 |
| Duty Cycle (%) | ≤4 |
| Bar-to-bar spacing (um) | 400 |
| Center Wavelength ¹ (nm) | 808 ±3 |
| Wavelength Temperature Coefficient (nm/C) | 0.28 |
| Spectral Width ² (FWHM) | <3 |
| Fast Axis Divergence (FWHM) | <35 |
| Slow Axis Divergence (FWHM) | <12 |
| Polarization | TM |
| Threshold Current (A) | 30 |
| Operating Current (A) | <220 |
| Operating Voltage ³ (V) | <2 per bar |
| Recommended Operating Temperature (°C) | 25 |
| Recommended Operating Temperature Range ⁴ (°C) | 15 to 35 |
| Storage Temperature Range ⁵ | -40 to +60 |
| Intended Operation Mode | QCW only |

Absolute Maximum Ratings

| | |
|----------------------|-----|
| Forward Current (A) | 240 |
| Reverse Current (μA) | 25 |
| Reverse Voltage (V) | 2 |

¹ At rated power and operating temperature.

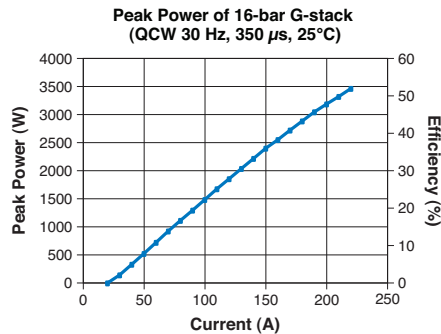
² At rated power and operating temperature.

³ Total operating voltage varies with bar count.

⁴ Contact Coherent for extended operating temperature range requirements (e.g.: 50°C or 80°C operation).

⁵ In clean dry air, non-condensing environment.

Electrical Characteristics



Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all PulseLife G-stacks. For full details of this warranty coverage, please refer to the Service section at www.Coherent.com or contact your local Sales or Service Representative.



www.Coherent.com

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