PulseLife QCW Horizontal Array

Conduction-Cooled Horizontal Array

Features

- Conduction-cooled 5-bar array with up to 1000W QCW output power
- Unique AAA™ (Aluminum-free Active Area) design for highest reliability and lifetime (>1e10 shots MTTF)
- PulseLife™ hard-solder technology
- Low divergence option available

Mechanical Specifications

Top View

76.2 mm (3.0 in.)
69.85 mm (2.75 in.)
24.77 mm (0.975 in.)
20.32 mm (0.80 in.)
14.99 mm (0.59 in.)
32.39 mm (1.275 in.)
11.43 mm (0.45 in.)

5X 6-32 Thread

Front View

10.8 mm (0.425 in.) Pitch 6X
11.51 mm (0.45 in.) Emission Area

6X M2.5

Side View

6.35 mm (0.25 in.)
7.77 mm (0.30 in.)
3.77 mm (0.15 in.)
15.75 mm (0.62 in.)
6X M2.5

7.14 ±0.137 mm (0.28 ±0.005 in.) Emitter Height

Superior Reliability & Performance
### PulseLife™ QCW Horizontal Array
Conduction-Cooled Horizontal Array

<table>
<thead>
<tr>
<th>Device Specifications</th>
<th>5-bar Arrays</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCW Output Power, Total (W)</td>
<td>500</td>
</tr>
<tr>
<td>QCW Output Power per Bar (W)</td>
<td>100</td>
</tr>
<tr>
<td>Center Wavelength(^1) (nm)</td>
<td>808 ±3</td>
</tr>
<tr>
<td>Wavelength Temperature Coefficient (nm/C)</td>
<td>0.28</td>
</tr>
<tr>
<td>Spectral Width(^1) (FWHM)</td>
<td>&lt;3</td>
</tr>
<tr>
<td>Fast Axis Divergence (FWHM)</td>
<td>&lt;35</td>
</tr>
<tr>
<td>Slow Axis Divergence (FWHM)</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Operating Current (A)</td>
<td>&lt;120 (109 typical)</td>
</tr>
<tr>
<td>Operating Voltage (V)</td>
<td>&lt;11</td>
</tr>
<tr>
<td>Recommended Operating Temperature (°C)</td>
<td>25</td>
</tr>
<tr>
<td>Recommended Operating Temperature Range(^2) (°C)</td>
<td>15 to 35</td>
</tr>
<tr>
<td>Storage Temperature Range(^2) (°C)</td>
<td>-30 to +60</td>
</tr>
<tr>
<td>Intended Operation Mode</td>
<td>QCW only</td>
</tr>
</tbody>
</table>

\(^1\) At rated power and operating temperature.

\(^2\) In clean dry air; non-condensing environment.

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 arrays. 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.