High-power single emitter diode lasers
100 µm, 808 nm, 6 W cw

Features
– High laser power
– High efficiency
– Long lifetime, high reliability
– Excellent beam characteristics

Applications
– Pumping of solid-state lasers and fiber lasers
– Industrial, scientific and medical systems
– Printing industry
– Defense and security
– Recommended fields of application: medicine
High-power single emitter diode lasers | 100 µm, 808 nm, 6 W cw
JDJ-BAE-25-100-808-TM-6-4.0

### Specifications

<table>
<thead>
<tr>
<th>Operation*</th>
<th>JDJ-BAE-25-100-808-TM-6-4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
<td>Min</td>
</tr>
<tr>
<td>Wavelength (cw)</td>
<td>λ</td>
</tr>
<tr>
<td>Optical Output Power</td>
<td>P&lt;sub&gt;opt&lt;/sub&gt;</td>
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<tr>
<td>Operation Mode</td>
<td></td>
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<tr>
<td>Power Modulation</td>
<td></td>
</tr>
<tr>
<td>Geometrical</td>
<td></td>
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<tr>
<td>Number of Emitters</td>
<td></td>
</tr>
<tr>
<td>Emitter Width</td>
<td>W</td>
</tr>
<tr>
<td>Width</td>
<td>B</td>
</tr>
<tr>
<td>Cavity Length</td>
<td>L</td>
</tr>
<tr>
<td>Thickness</td>
<td>D</td>
</tr>
<tr>
<td>Electro Optical Data*</td>
<td></td>
</tr>
<tr>
<td>Fast Axis Divergence (FWHM)</td>
<td>θ&lt;sub&gt;┴&lt;/sub&gt;</td>
</tr>
<tr>
<td>Fast Axis Divergence**</td>
<td></td>
</tr>
<tr>
<td>Slow Axis Divergence at 6 W (FWHM)</td>
<td>θ&lt;sub&gt;∥&lt;/sub&gt;</td>
</tr>
<tr>
<td>Slow Axis Divergence at 6 W**</td>
<td></td>
</tr>
<tr>
<td>Pulse Wavelength</td>
<td>λ</td>
</tr>
<tr>
<td>Spectral Bandwidth (FWHM)</td>
<td>Δλ</td>
</tr>
<tr>
<td>Slope Efficiency***</td>
<td>η</td>
</tr>
<tr>
<td>Threshold Current</td>
<td>I&lt;sub&gt;th&lt;/sub&gt;</td>
</tr>
<tr>
<td>Operating Current</td>
<td>I&lt;sub&gt;op&lt;/sub&gt;</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>V&lt;sub&gt;op&lt;/sub&gt;</td>
</tr>
<tr>
<td>Series Resistance</td>
<td>R&lt;sub&gt;s&lt;/sub&gt;</td>
</tr>
<tr>
<td>Degree of TM Polarization</td>
<td>α</td>
</tr>
<tr>
<td>EO Conversion Efficiency***</td>
<td>η&lt;sub&gt;tot&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

* Mounted on a heat sink with R<sub>th</sub> = 2.1 K/W, coolant temperature 25 °C, operating at nominal power
** Full width at 95 % power content
*** Item may change upon notice and acceptance by Jenoptik, due to future improvements of technology or processing

Note: Nominal data represents typical values.
Safety Advises: Single emitter diode lasers are the active components in high-power diode lasers in accordance to IEC standard class 4 laser products. As delivered, single emitter diode lasers cannot emit any laser beam. The laser beam can only be released if the single emitter diode lasers are connected to a source of electrical energy. In this case, IEC-Standard 60825-1 describes the safety regulations to be taken to avoid personal injury.

### Power - Current - Voltage - Characteristics*

- **Power - Current - Voltage - Characteristics**

### Spectral Characteristics*

- **Spectral Characteristics**

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JENOPTIK Optical Systems GmbH
Max-Planck-Strasse 2 | 12489 Berlin | Germany
Phone +49 3641 65-3053 | Fax +49 3641 65-4011
laser.sales@jenoptik.com | www.jenoptik.com