This product is sold and supported in the USA by LASER LAB SOURCE marketplace for Scientists & Engineers

contact@LaserLabSource.com

800.887.5065
635nm 5W Fiber Coupled Diode Laser
K635E08FN-5.000W

Features:
- 635nm wavelength
- 5W output power
- Standard fiber coupling for 105μm core diameter
- 0.22N.A.

Applications:
- Display
- Biochemical analysis
- Scientific research
- Medical use

BWT Beijing’s High Power Diode Laser Modules are manufactured by adopting specialized fiber-coupling techniques, resulting in volume products with a high efficiency, stability and superior beam quality. The products are achieved by transforming the asymmetric radiation from the laser diode chip into an output fiber with small core diameter by using special micro optics. Inspecting and burn-in procedures in every aspect come to a result to guarantee each product with the reliability, stability and long lifetime.

Our research staffs are constantly improving and innovating the processing technology in the producing process, based on the professional knowledge and experience accumulated in long-terms. We are also continuously developing new products to meet customers’ specific needs.

At BWT Beijing, to provide high quality products with reasonable price is our always goal.
### Specifications (25℃)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Unit</th>
<th>K635E08FN-5.000W</th>
</tr>
</thead>
<tbody>
<tr>
<td>( P_o )</td>
<td>W</td>
<td>5</td>
</tr>
<tr>
<td>( \lambda_c )</td>
<td>nm</td>
<td>635</td>
</tr>
<tr>
<td>Tolerance of ( \lambda )</td>
<td>nm</td>
<td>±5</td>
</tr>
<tr>
<td>Spectral Width (FWHM)</td>
<td>nm</td>
<td>&lt;3</td>
</tr>
</tbody>
</table>

### Optical Data

- CW-Output Power: \( P_o \)
- Center Wavelength: \( \lambda_c \)
- Tolerance of \( \lambda \)
- Spectral Width (FWHM)

### Fiber Data\(^{(1)}\)

- Fiber Core Diameter: \( W_c \)
- Fiber Numerical Aperture: N.A.
- Fiber Connector: SMA-905/FC/ST

### Electrical Data

- Operating Current: \( I_{op} \)
- Threshold Current: \( I_{th} \)
- Operating Voltage: \( V_{op} \)

### PD Data

- Current: \( I_{mo} \)

### Thermistor Data\(^{(2)}\)

- Thermistor: \( R_t \)

### Others

- Operating Temperature: \( T_{op} \)
- Storage Temperature: \( T_{st} \)
- Expected Lifetime: MTTF
- Dimensions (fiber and connector not included): 74×43×42.9 mm
- Lead Soldering Temperature: \( T_{wa} \)

---

\(^{(1)}\) Other fiber is available.

\(^{(2)}\) \( R_t = R_0 \exp \left( \beta \left( \frac{1}{T} - \frac{1}{T_0} \right) \right), \ (T_0 = 25°C = 298K). \)
635nm 5W Fiber Coupled Diode Laser
K635E08FN-5.000W

Characteristics

Typ. spectrum (T=25°C)
635nm 5W Fiber Coupled Diode Laser
K635E08FN-5.000W

Package Dimensions (mm)

<table>
<thead>
<tr>
<th>Pins</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LD (+)</td>
</tr>
<tr>
<td>2</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>PD (N)</td>
</tr>
<tr>
<td>4</td>
<td>PD (P)</td>
</tr>
<tr>
<td>5</td>
<td>Thermistor</td>
</tr>
<tr>
<td>6</td>
<td>Thermistor</td>
</tr>
<tr>
<td>7</td>
<td>None</td>
</tr>
<tr>
<td>8</td>
<td>LD (-)</td>
</tr>
</tbody>
</table>

OPERATING NOTES

- Avoid eye exposure to direct or scattered radiation.
- ESD precautions must be taken.
- Please connect pins to wires by solder instead of using socket when operation current is higher than 6A.
- Soldering point should be close to the root of the pins. Soldering temperature should be lower than 260℃ and time shorter than 10 second.
- Use constant current power supply. Avoid surge current.
- Laser diode must be used according to the specifications.
- Laser diode must work with good cooling.
- A minimum bend radius should be 300 times greater than the fiber cladding diameter.
- Operation temperature is 10℃ ~ 30℃.
- Storage: -20℃ ~ +70℃, all pins short-circuit.