CW532-5-831

- Green DPSS Laser Module
- 532 nm, <5 mW
- Fix Focus Acryl Lens
- Automatic Power Control
- 3 VDC Input Voltage
- IR Filter

Description

CW532-5-831 is a small size fix collimated diode pumped solid state (DPSS) Nd:YVO4+KTP laser module with a typical emission wavelength of 532 nm, and an optical output power of <5 mW. It features automatic power control (APC) driving electronics for stable operation, an IR filter to block residue IR radiation, and is designed for 3 VDC supply voltage. CW532-5-831 comes equipped with a coaxial power connector. A matching power supply is optionally available for quick setup and convenient operation (see page 3 for details).

Maximum Ratings ($T_{\text{CASE}} = 25^\circ\text{C}$)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating temperature</td>
<td>+15</td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20</td>
<td>°C</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>2.2</td>
<td>VDC</td>
</tr>
</tbody>
</table>

Electro-Optical Characteristics ($T_{\text{CASE}} = 25^\circ\text{C}$)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Wavelength</td>
<td>531</td>
<td>nm</td>
</tr>
<tr>
<td>Radiated Power</td>
<td>5</td>
<td>mW</td>
</tr>
<tr>
<td>Beam diameter at aperture</td>
<td>1.5</td>
<td>mm</td>
</tr>
<tr>
<td>Transverse mode</td>
<td>TEM$_{00}$</td>
<td></td>
</tr>
<tr>
<td>Warm up time</td>
<td>&lt;3</td>
<td>s</td>
</tr>
<tr>
<td>Beam divergence</td>
<td>0.6</td>
<td>mrad</td>
</tr>
<tr>
<td>Operating Current</td>
<td>200</td>
<td>mA</td>
</tr>
<tr>
<td>MTTTF</td>
<td>3000</td>
<td>h</td>
</tr>
</tbody>
</table>
Outline Dimensions

![Diagram showing dimensions](image)

All dimensions in mm

Electrical Connection

(IEC 60130-10, Type A, 5.5/2.1 mm)

Precautions

Static Electricity:
Precautions against electrostatic discharge (ESD) must be taken when handling or operating the module. Surge voltage or electrostatic discharge can result in complete failure of the laser diode.

Heat Sinking:
In order to maintain lifetime and stability of the laser diode it is essential to provide efficient heat management. For long time stable operation proper contact between laser module and heat sink is mandatory.

Safety:
This laser module emits highly concentrated visible light which can be hazardous to the human eye and skin. It is classified as CLASS 3R laser product according to IEC 60825-1 and 21 CFR Part 1040.10 Safety Standards. Actual laser light emitted and precautions necessary strongly depend on mode of operation.

⚠️ LASER RADIATION
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
Accessories

Laser Power Supply LPS31

- 110-230 VAC universal input voltage
- Small ripple (<80 mV)
- AC Europlug (CEE7/16)
- ON/OFF switch
- IEC 60130-10 Type A connector
- Output 3 VDC, max. 1 A

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