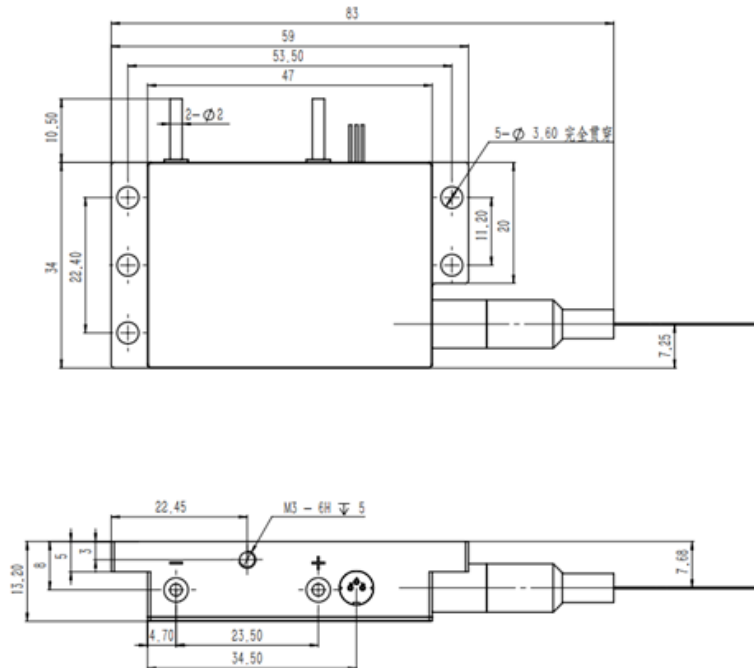


25W 808nm Multimode Fiber- Coupled Diode Laser

Dimensions Diagram

Unit: mm



Instruction for Use:

- Avoid exposure of the eyes or skin to direct or scattered radiation;
- ESD protection must be adopted during transportation, storage and operation. Short-circuit protection between pins is required during transportation and storage.
- For lasers with an operating current above 6A, please connect the leads using soldering. The soldering point should be as close as possible to the root of pin, with a temperature below 260°C, and a soldering duration less than 10 seconds ;
- Drive constant current power supply by laser and avoid surge while working;
- Operate under the rated current and rated power;
- Good heat dissipation must be ensured when the laser device is operating;
- Operating temperature: 15°C to 55°C;
- Storage temperature: -30°C to + 70°C.



Specification

| Parameter | Symbol | Minimum | Typical | Maximum | Unit |
|--------------------------------------|----------------------------|---------|----------|---------|-------|
| Laser Data | | | | | |
| Output Power(CW) | Po | 25 | - | - | W |
| Centre Wavelength | λ_c | 803 | 808 | 813 | nm |
| Spectral Width (FWHM) | $\Delta\lambda$ | - | 4.0 | 6.0 | nm |
| Threshold Current | I _{th} | - | 1.5 | 2.0 | A |
| Operating Current | I _{op} | - | 11.0 | 12.0 | A |
| Operating Voltage | V _{op} | - | 5.4 | 6.0 | V |
| Convention Efficiency | η | - | 40 | - | % |
| Slop Efficiency | SE | - | 2.5 | - | W/A |
| Operating Case Temperature | T _c | 15 | 25 | 55 | °C |
| Storage Temperature | T _s | -30 | 25 | 70 | °C |
| Wavelength shift vs. Temperature | $\Delta\lambda / \Delta T$ | - | 0.3 | - | nm/°C |
| Fiber Data | | | | | |
| Core Diameter | D _c | 197 | 200 | 203 | nm |
| Numeric Aperture | NA | 0.20 | 0.22 | 0.24 | - |
| Cladding Diameter | D _{cl} | - | 220 | - | nm |
| Buffer Diameter | D _b | - | 320 | - | nm |
| Fiber Length | L _f | 0.9 | - | - | m |
| Fiber Tube Diameter | D _t | 0.9 | - | 1.5 | mm |
| Connector | | - | Bare end | - | - |
| Others | | | | | |
| Lead soldering temperature, 10 s max | T _{ls} | - | - | 260 | °C |
| Fiber bend radius | | 50 | - | - | mm |

*1. All performance data tested at a heat sink temperature of 25°C, with the contact resistance between the case and the heat sink being less than 1 cm² K/W.

Ordering Information

For product inquiries and orders, please contact us at info@lasepro.com.

| P/N | Wavelength | Power | NA | Feedback Protection | Protection Tube | Connector |
|-------------|------------|-------|--------|---------------------|-----------------|-----------|
| LPFC8082501 | 808+/-5nm | 25W | 0.22NA | Yes | No | No |
| LPFC8082502 | 808+/-5nm | 25W | 0.22NA | Yes | 0.9-1.5mm* | No |
| LPFC8082503 | 808+/-5nm | 25W | 0.22NA | Yes | 0.9-1.5mm* | SMA |

* It is available with 2.0mm(Diameter) protection tube.