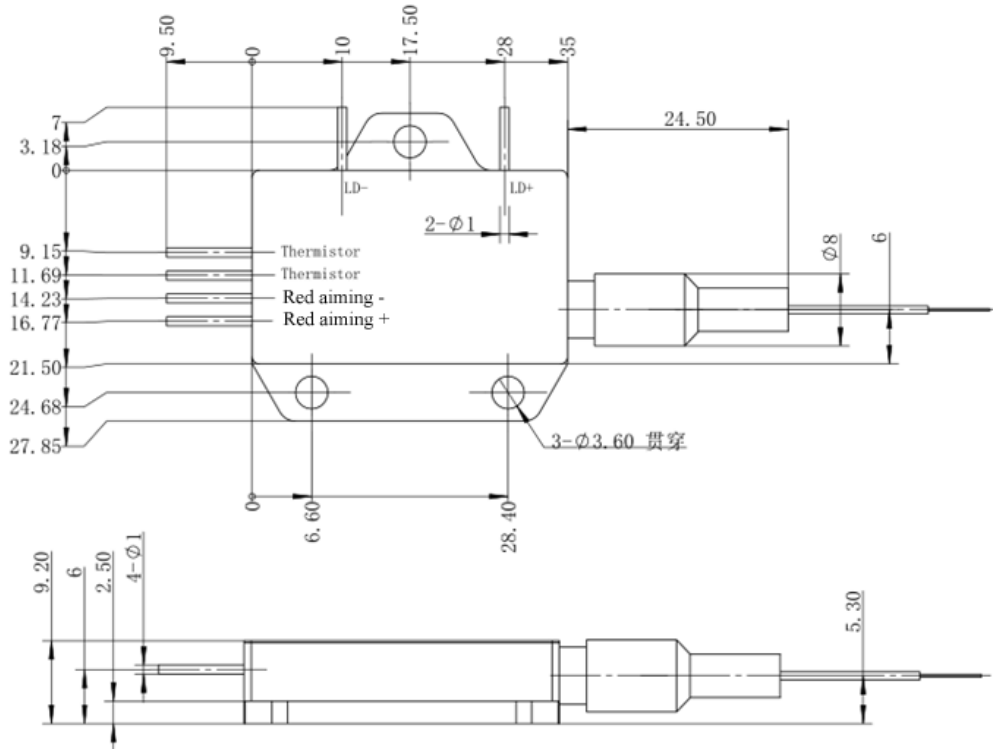


10W 915/940/975nm Multimode Diode Laser with red aiming beam

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 | 10 | - | - | W |
| Centre Wavelength | λ_c | 930 970 | 940 975 | 950 980 | nm |
| Spectral Width (FWHM) | $\Delta\lambda$ | - | 4.0 | - | nm |
| Threshold Current | I _{th} | - | 0.7 | 0.9 | A |
| Operating Current | I _{op} | - | 11.5 | 13.0 | A |
| Operating Voltage | V _{op} | - | 1.8 | 2.0 | V |
| Convention Efficiency | η | - | 50 | - | % |
| Slop Efficiency | SE | - | 0.9 | - | W/A |
| Operating Case Temperature | T _c | 15 | 25 | 55 | °C |
| Storage Temperature | T _s | -30 | 25 | 70 | °C |
| Wavelength shift vs. Temperature | $\Delta\lambda / \Delta T$ | - | 0.35 | - | nm/°C |
| Fiber Data | | | | | |
| Core Diameter | D _c | - | 105 | - | nm |
| Numeric Aperture | NA | - | 0.22 | - | - |
| Cladding Diameter | D _{cl} | - | 125 | - | nm |
| Buffer Diameter | D _b | - | 250 | - | nm |
| Fiber Length | L _f | 0.9 | - | - | m |
| Fiber Tube Diameter | D _t | - | 0.9 | - | mm |
| Connector | | - | SMA905 | - | - |
| Red Aiming beam | | | | | |
| Output Power | P _a | 2 | - | - | mW |
| Wavelength | λ_a | - | 638 | - | nm |
| Voltage | V _a | - | 2.5 | 2.8 | V |
| Current | I _a | - | 0.2 | 0.25 | A |
| Others | | | | | |
| Lead soldering temperature, 10 s max | T _{ls} | - | - | 260 | °C |
| Fiber bend radius | | 37.5 | - | - | mm |
| Thermistor | R _t | | 10K | - | Ω |

*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 |
|-------------|------------|-------|--------|---------------------|-------------------|-----------|
| LPMF9151001 | 915+/-10nm | 10W | 0.22NA | Yes | 0.9mm(Diameter)* | SMA |
| LPMF9401001 | 940+/-10nm | 10W | 0.22NA | Yes | 0.9mm(Diameter) * | SMA |
| LPMF9751001 | 975+/-5nm | 10W | 0.22NA | Yes | 0.9mm(Diameter) * | SMA |

* It is available with 2.0mm protection tube.