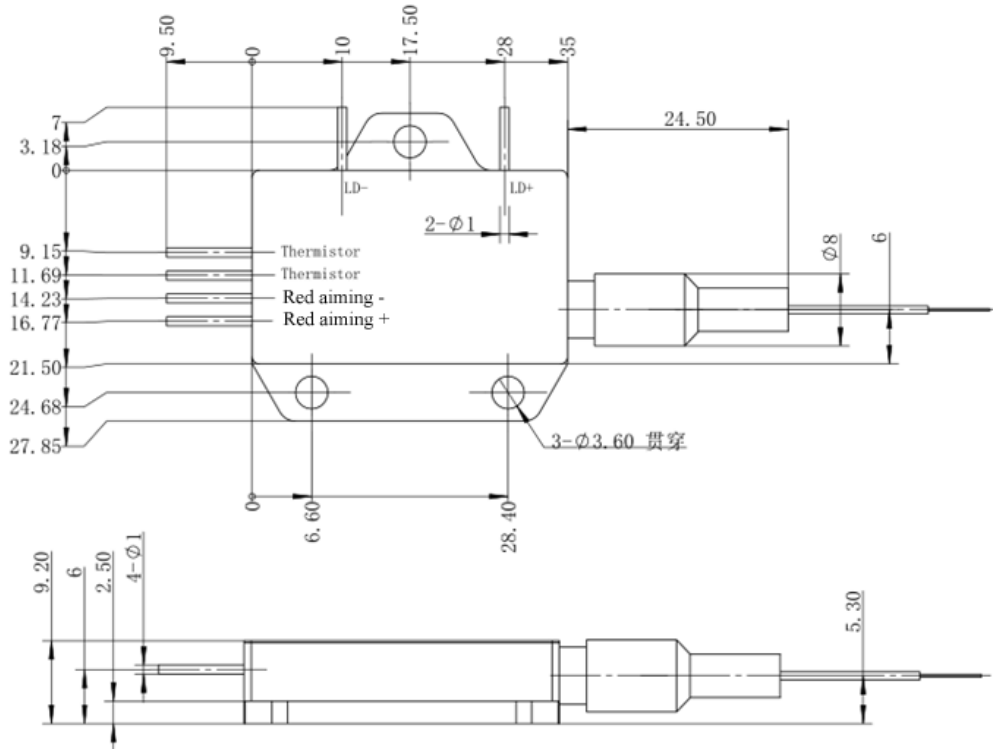


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# **10W 808nm Multimode Diode Laser with red aiming beam**

## 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
<b>Laser Data</b>					
Output Power(CW)	Po	-	10	-	W
Centre Wavelength	$\lambda_c$	800	808	818	nm
Spectral Width (FWHM)	$\Delta\lambda$	-	4.0	-	nm
Threshold Current	I <sub>th</sub>	-	0.7	0.9	A
Operating Current	I <sub>op</sub>	-	10.5	12.0	A
Operating Voltage	V <sub>op</sub>	-	1.8	2.0	V
Convention Efficiency	$\eta$	-	45	-	%
Slop Efficiency	SE	-	0.9	-	W/A
Operating Case Temperature	T <sub>c</sub>	15	25	55	°C
Storage Temperature	T <sub>s</sub>	-30	25	70	°C
Wavelength shift vs. Temperature	$\Delta\lambda / \Delta T$	-	0.35	-	nm/°C
<b>Fiber Data</b>					
Core Diameter	D <sub>c</sub>	-	200	-	nm
Numeric Aperture	NA	-	0.22	-	-
Cladding Diameter	D <sub>cl</sub>	-	220	-	nm
Buffer Diameter	D <sub>b</sub>	-	320	-	nm
Fiber Length	L <sub>f</sub>	0.9	-	-	m
Fiber Tube Diameter	D <sub>t</sub>	-	0.9	-	mm
Connector		-	SMA905	-	-
<b>Red Aiming beam</b>					
Output Power	P <sub>a</sub>	2	-	-	mW
Wavelength	$\lambda_a$	-	638	-	nm
Voltage	V <sub>a</sub>	-	2.5	2.8	V
Current	I <sub>a</sub>	-	0.2	0.25	A
<b>Others</b>					
Lead soldering temperature, 10 s max	T <sub>ls</sub>	-	-	260	°C
Fiber bend radius		50	-	-	mm
Thermistor	R <sub>t</sub>		10K	-	$\Omega$

\*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 cm<sup>2</sup> K/W.

### Ordering Information

For product inquiries and orders, please contact us at [info@lasepro.com](mailto: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.
- The function of thermistor is optional.