

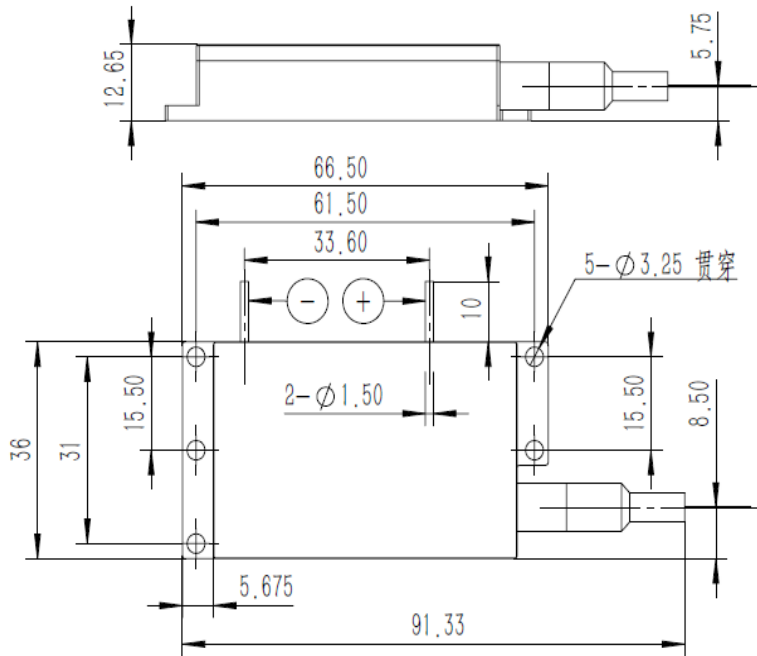


---

**25W 808nm  
105um 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 for 20W LD**

Parameter	Symbol	Minimum	Typical	Maximum	Unit
<b>Laser Data</b>					
Output Power(CW)	Po	25	28	-	W
Centre Wavelength	$\lambda_c$	803	808	813	nm
Spectral Width (FWHM)	$\Delta\lambda$	-	4.0	6.0	nm
Threshold Current	I <sub>th</sub>	-	0.5	0.9	A
Operating Current	I <sub>op</sub>	-	5.5	6.5	A
Operating Voltage	V <sub>op</sub>	-	10.8	12	V
Convention Efficiency	$\eta$	-	45	-	%
Slop Efficiency	SE	-	4.5	-	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	$\Delta\lambda / \Delta T$	-	0.3	-	nm/°C
Wavelength shift vs. output power* <sup>2</sup>	$\Delta\lambda / \Delta P$	-	0.125	-	nm/W
<b>Fiber Data</b>					
Core Diameter	D <sub>c</sub>	102	105	108	nm
Numeric Aperture	NA	0.20	0.22	0.24	-
Cladding Diameter	D <sub>cl</sub>	-	125	-	nm
Buffer Diameter	D <sub>b</sub>	-	250	-	nm
Fiber Length	L <sub>f</sub>	0.9	-	-	m
Fiber Tube Diameter	D <sub>t</sub>	0.9	-	1.5	mm
Connector		-	Bare end	-	-
<b>Others</b>					
Lead soldering temperature, 10 s max	T <sub>ls</sub>	-	-	260	°C
Fiber bend radius		37.5	-	-	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 cm<sup>2</sup> K/W.

\*2. Testing was conducted at an ambient temperature of 23±3°C and humidity ranging from 30-70%.

**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
LPFC8082510	808+/-5nm	25W	0.22NA	Yes	0.9-1.5mm*	No

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