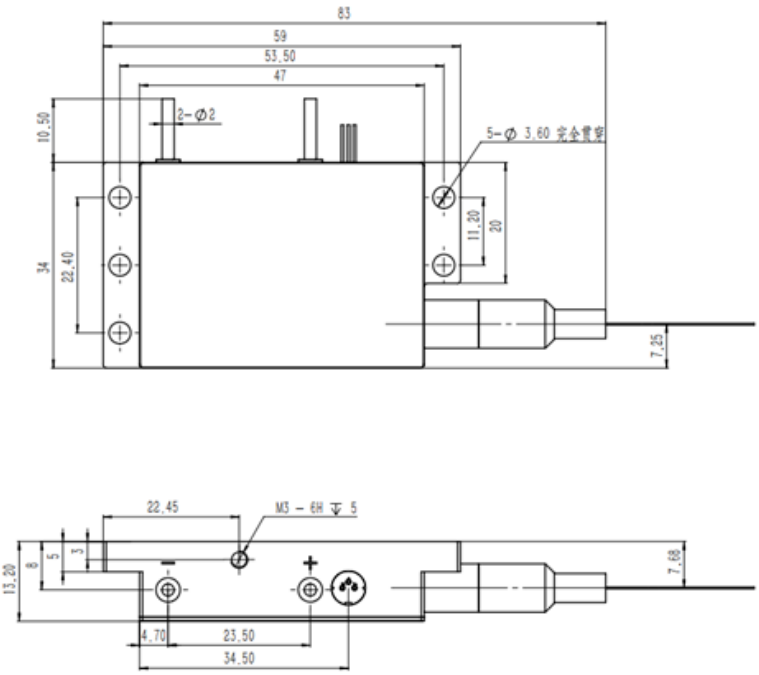
30W 915/940/975nm Multimode Fiber-Coupled Diode Laser

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℃, 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℃ to 55℃;
- Storage temperature: -30℃ to + 70℃.

Specification for 20W LD

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Laser Data					
Output Power(CW)	Po	20	-	-	W
Centre Wavelength	λc	910 930 970	915 940 975	925 950 980	nm
Spectral Width (FWHM)	Δλ	-	4.0	6.0	nm
Threshold Current	Ith	-	0.5	0.9	A
Operating Current	Iop	-	-	13.0	A
Operating Voltage	Vop	-	3.5	4.0	V
Convention Efficiency	η	-	48	-	%
Slop Efficiency	SE	-	1.6	-	W/A
Operating Case Temperature	Tc	15	25	55	°C
Storage Temperature	Ts	-30	25	70	°C
Wavelength shift vs. Temperature	Δλ / ΔT	-	0.3	-	nm/°C
Fiber Data					
Core Diameter	Dc	102	105	108	nm
Numeric Aperture	NA	0.20	0.22	0.24	-
Cladding Diameter	Dcl	-	125	-	nm
Buffer Diameter	Db	-	250	-	nm
Fiber Length	Lf	0.9	-	-	m
Fiber Tube Diameter	Dt	0.9	-	1.5	mm
Connector		-	Bare end	-	-
Others					
Lead soldering temperature, 10 s max	Tls	-	-	260	°C
Fiber bend radius		37.5	-	-	mm
Feedback Isolation 1050-1150nm 1060-1100nm		 25 30	 - -	 - -	dB

*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^2 K/W.

Specification for 30W LD

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Laser Data					
Output Power(CW)	Po	30	-	-	W
Centre Wavelength	λc	910 930 970	915 940 975	925 950 980	nm
Spectral Width (FWHM)	Δλ	-	4.0	6.0	nm
Threshold Current	Ith	-	0.5	0.9	A
Operating Current	Iop	-	12.0	13.0	A
Operating Voltage	Vop	-	5.4	6.0	V
Convention Efficiency	η	-	48	-	%
Slop Efficiency	SE	-	2.4	-	W/A
Operating Case Temperature	Tc	15	25	55	°C
Storage Temperature	Ts	-30	25	70	°C
Wavelength shift vs. Temperature	Δλ / ΔT	-	0.3	-	nm/°C
Fiber Data					
Core Diameter	Dc	102	105	108	nm
Numeric Aperture	NA	0.20	0.22	0.24	-
Cladding Diameter	Dcl	-	125	-	nm
Buffer Diameter	Db	-	250	-	nm
Fiber Length	Lf	0.9	-	-	m
Fiber Tube Diameter	Dt	0.9	-	1.5	mm
Connector		-	Bare end	-	-
Others					
Lead soldering temperature, 10 s max	Tls	-	-	260	°C
Fiber bend radius		37.5	-	-	mm
Feedback Isolation 1050-1150nm 1060-1100nm		 25 30	 - -	 - -	dB

*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^2 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
LPFC9152001	915+/-10nm	20W	0.22NA	Yes	No	No
LPFC9152002	915+/-10nm	20W	0.22NA	Yes	0.9-1.5mm*	No
LPFC9402001	940+/-10nm	20W	0.22NA	Yes	No	No
LPFC9402002	940+/-10nm	20W	0.22NA	Yes	0.9-1.5mm*	No
LPFC9752001	975+/-5nm	20W	0.22NA	Yes	No	No
LPFC9752003	975+/-5nm	20W	0.22NA	Yes	0.9-1.5mm*	No
LPFC9153001	915+/-10nm	30W	0.22NA	Yes	No	No
LPFC9153002	915+/-10nm	30W	0.22NA	Yes	0.9-1.5mm*	No
LPFC9403001	940+/-10nm	30W	0.22NA	Yes	No	No
LPFC9403002	940+/-10nm	30W	0.22NA	Yes	0.9-1.5mm*	No
LPFC9753001	975+/-5nm	30W	0.22NA	Yes	No	No
LPFC9753001	975+/-5nm	30W	0.22NA	Yes	0.9-1.5mm*	No

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