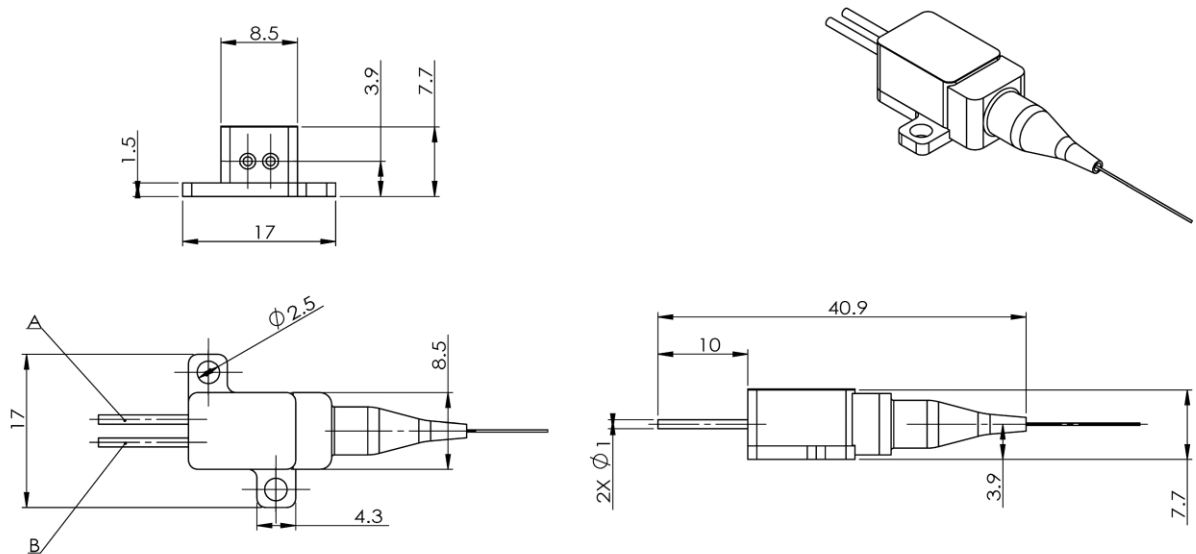


**10W 915/940/975nm
Single Emitter
Multimode Fiber
Coupled Diode Laser**

Dimensions Diagram

Unit: mm



PIN OUT:

PIN	Description
A	Laser Cathode+
B	Laser Anode-

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 LD with 0.22NA*1

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Optical & Electrical Data					
Output Power(CW)	Po	10	-	-	W
Centre Wavelength	λ_c	905 930 970	915 940 975	925 950 980	nm
Spectral Width (FWHM)	$\Delta\lambda$	-	3.5	7	nm
Threshold Current	Ith	-	0.55	0.9	A
Operating Current	Iop	-	11.7	12.5	A
Operating Voltage	Vop	-	1.75	2.2	V
Convention Efficiency	η	-	48	-	%
Slop Efficiency	SE	-	0.9	-	W/A
Operating Case Temperature	Tc	15	-	55	°C
Storage Temperature	Ts	-30	-	70	°C
Wavelength shift vs. Temperature	$\Delta\lambda / \Delta T$	-	0.3	-	nm/°C
Wavelength shift vs. output power*2	$\Delta\lambda / \Delta P$	-	0.86	-	nm/W
Fiber Data					
Core Diameter	Dc	-	105	-	nm
Numeric Aperture	NA	-	0.22	-	-
Cladding Diameter	Dcl	-	125	-	nm
Buffer Diameter	Db	-	250	-	nm
Fiber Length	Lf	0.9	-	-	m
Others					
Lead soldering temperature, 10 s max	Tls	-	-	260	°C
Fiber bend radius		37.5	-	-	mm
Feedback Isolation					
1050-1150nm		25	-	-	dB
1060-1100nm		30	-	-	

*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.

*2. Data tested at room temperature.

Specification for LD with 0.15NA*1

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Optical & Electrical Data					
Output Power(CW)	P _o	10	-	-	W
Centre Wavelength	λ_c	905 930 970	915 940 975	925 950 980	nm
Spectral Width (FWHM)	$\Delta\lambda$	-	3.5	7	nm
Threshold Current	I _{th}	-	0.55	0.9	A
Operating Current	I _{op}	-	11.0	12.5	A
Operating Voltage	V _{op}	-	1.75	2.2	V
Convention Efficiency	η_{915nm} η_{940nm} η_{975nm}	- - -	48 48 45	- - -	%
Slop Efficiency	SE	-	0.9	-	W/A
Operating Case Temperature	T _c	15	-	55	°C
Storage Temperature	T _s	-30	-	70	°C
Wavelength shift vs. Temperature	$\Delta\lambda / \Delta T$	-	0.3	-	nm/°C
Wavelength shift vs. output power*2	$\Delta\lambda / \Delta P$	-	0.86	-	nm/W
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
Others					
Lead soldering temperature, 10 s max	T _{ls}	-	-	260	°C
Fiber bend radius		37.5	-	-	mm
Feedback Isolation					
1050-1150nm		25	-	-	dB
1060-1100nm		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 cm² K/W.

*2. Data tested at room temperature.

Ordering Information

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

P/N	Wavelength	Power	NA	Feedback Protection	Connector
LPFC9151001	915+/-10nm	10W	0.22NA	No	No
LPFC9151002	915+/-10nm	10W	0.22NA	No	SMA
LPFC9151003	915+/-10nm	10W	0.22NA	Yes	No
LPFC9151004	915+/-10nm	10W	0.15NA	Yes	No
LPFC9401001	940+/-10nm	10W	0.22NA	No	No
LPFC9401002	940+/-10nm	10W	0.22NA	No	SMA
LPFC9401003	940+/-10nm	10W	0.22NA	Yes	No
LPFC9401004	940+/-10nm	10W	0.15NA	Yes	No
LPFC9751001	975+/-5nm	10W	0.22NA	Yes	No
LPFC9751002	975+/-5nm	10W	0.15NA	Yes	No