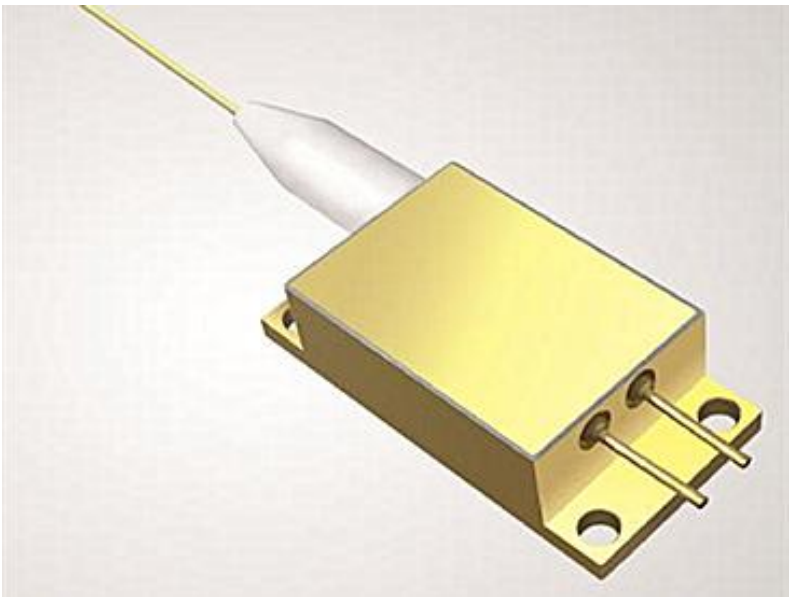
793nm 8W Multi-Mode Uncooled Pump Laser



Product Description

Idealphotonics offers the 793nm pump laser, a pumping light source developed specifically for 2μm lasers. It features high optical power, stable performance, and is currently mass-produced for R&D and use in industrial lasers.

Product features

Reduced power consumption；Multi-mode fiber output；Wide wavelength selection；High electro-optical efficiency；Industrial-grade protection

Part Number

MP-FP-793-8W-MM

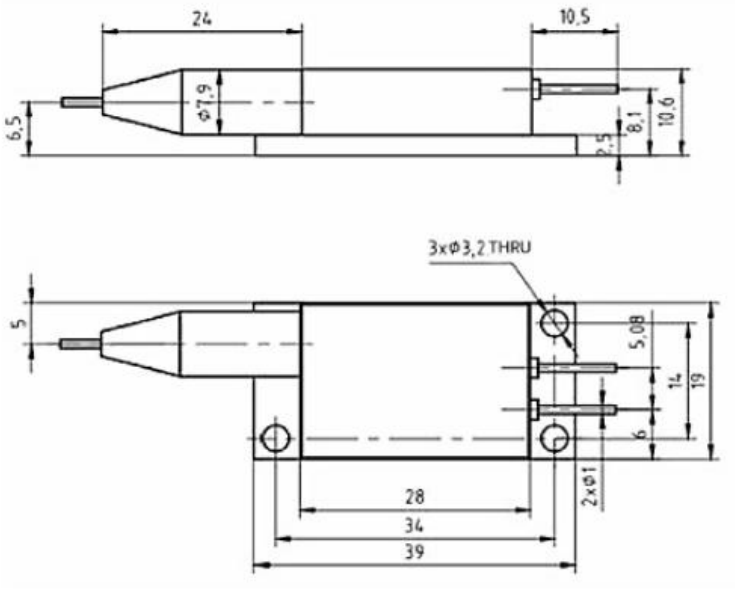
Application area

Fiber laser pumping | Industrial processing | Medical equipment | Scientific research experiments | National defense applications

Core parameters

Center Wavelength	Output Power
793nm	8W

Dimension Drawing



Pin	Function
1	LD(+)
2	LD(-)

General Parameters

Technical parameters

Typical product technical indicators (25°C).		symbol	unit	value		
				Min. value	Typical values	Max. value
Parameter (1).	Output power	Po	W	8	-	-
	Threshold current	I_{th}	A	-	1	-
	Operating current	In_{up}	A	-	-	5.5
	Operating voltage	V_{op}	V	-	-	4
	Reverse pressure resistance	In_{re}	V	-	5	-
	Slope efficiency	The	W/A	-	2	-
	Electro-optical efficiency	OR	%	-	45	-
	Center wavelength	lc	nm	790	-	796
	Spectral width (FWHM).	TL	nm	-	3	-
	Anti-reverse band	-	nm	1900	-	2100
	Anti-anti-anti-isolation degree	-	dB	-	30	-
	The proportion of spot is 0.15NA	ON	-	-	90	-
	Temperature drift coefficient	-	nm/℃	-	0.3	-

Fiber Parameters:	Coating diameter	D_{buf}	μm	-	250	-
	Cladding diameter	D_{clad}	μm	-	125	-
	Fiber core diameter	D_{core}	μm	-	105	-
	Numerical aperture	ON	-	-	0.22	-
	Fiber length (2).	L	m	-	1	-
	Bending radius	-	mm	60	-	-
Other parameters	ESD	In theECJ	V	-	-	500
	Storage temperature (non-operating state)	T_{stg}	℃	-20	-	70
	Welding temperature	T_{ls}	℃	-	-	260
	Welding time	t	sec	-	-	10
	Operating temperature (shell temperature) (3).	T_{on}	℃	15	-	35
	Relative humidity	RH	%	15	-	75

Remarks:

(1) All test data are tested at 8W output power.

(2) Can be customized according to customer needs.

(3) The operating temperature refers to the temperature of the laser baseplate, and the acceptable temperature range is 15°C~35°C, but the performance may be slightly different at different temperatures.

Instructions for use:

When the laser is working, avoid irradiating the eyes and skin with the laser.

Anti-static measures must be taken during transportation, storage and use, and short route protection should be connected between the pins during transportation and storage.

For lasers with a working current of more than 6A, please use soldering to connect the leads, and the solder point should be as close to the root of the pin as possible, and the temperature should be below 260°C

Welding time is less than 10 seconds.

The fiber face needs to be cleaned before use.

Use a constant current power supply to avoid surges when working.

It should be used under rated current and rated power.

The laser needs to ensure good heat dissipation when working.

Operating temperature 15°C~35°C.

Storage temperature -20°C~+70°C.