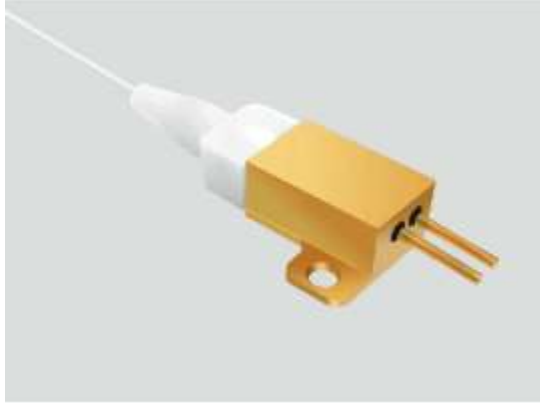


793nm 4W Fiber Coupled Diode Laser HJ793DB2RN-4W



Model #: HJ793DB2RN-4W

Description: 793nm 4W Fiber Coupled Diode Laser

Features: 793 nm wavelength, 4W output power, 105 um fiber core, 0.22 NA, 1900 – 2100 nm feedback protection.

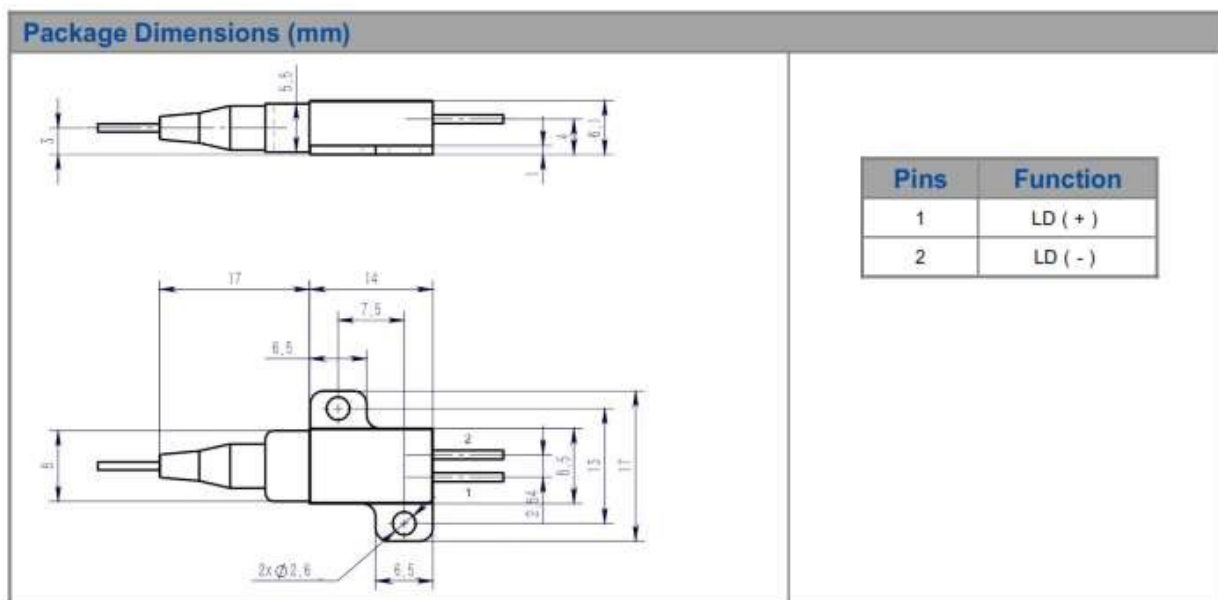
Application: Fiber laser pumping, solid state laser pumping

Specifications:

Specifications 25°C		Symbol	Unit	HJ793DB2RN-4W		
				Minimum	Typical	Maximum
Optical Data (1)	CW Output Power	PO	W	4	-	-
	Center Wavelength	λ_c	nm	793±3		
	Spectral Width(FWHM)	$\Delta\lambda$	nm	-	3	5
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	nm/°C	-	0.3	-
	0.15/0.22NA	-	%	85	90	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	46	-
	Threshold Current	I _{th}	A	-	4.8	5.5
	Operating Current	I _{op}	A	-	0.9	-
	Operating Voltage	V _{op}	V	-	1.8	2
	Slope Efficiency	η	W/A	-	1.0	-
Fiber Data	Core Diameter	D _{core}	μm	-	105	-
	Cladding Diameter	D _{clad}	μm	-	125	-
	Numeric Aperture	NA	-	-	0.22	-
	Fiber Length	L _f	m	-	1	-
	Fiber Loose Tubing Diameter	-	mm	0.9mm PVC		
	Minimum Bending Radius	-	mm	50	-	-
	Fiber Termination	-	-	Ferrule		
Feedback Isolation	Wavelength Range	-	nm	1900~2100		
	Isolation	-	dB	-	30	-
	ESD	V _{esd}	V	-	-	500

Others	Storage Temperature (2)	T _{st}	°C	-20	-	70
	Lead Soldering Temp	T _{ls}	°C	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating Case Temperature (3)	T _o	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

- (1) Data measured under operation output at 4W and 25°C.
 (2) Non-condensing environment is required for operation and storage.
 (3) Operating temperature defined by the package case. Acceptable operating range is 15 - 35°C, but performance may vary.



OPERATING NOTES:

- Avoid eye and skin exposure to direct radiation during operation.
- ESD precautions must be taken during storage, transportation, and operation.
- Short-circuit is required between pins during storage and transportation.
- Please connect pins to wires by solder instead of using socket when operation current is higher than 6A. Soldering point should be close to the root of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- Make sure the fiber output end is thoroughly cleaned before operation of laser. Follow safety protocols to avoid injury when handling and cutting the fiber.
- Use constant current power supply to avoid surge current during operation.
- Laser diode must be used according to the specifications.
- Laser diode must work with good cooling.
- Operation temperature ranges from 15°C to 35°C.
- Storage temperature ranges from -40°C to +70°C.