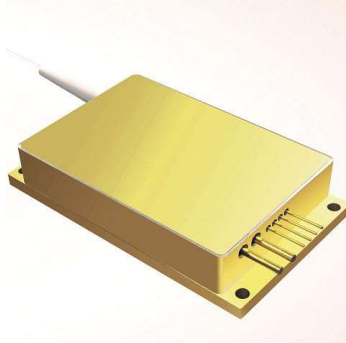


793nm 50W Fiber Coupled Diode Laser HJ793DG5RN-50W



Model #: HJ793DG5RN-50W

Description: 793nm 50W Fiber Coupled Diode Laser

Features: 793 nm wavelength, 50W output power, 105 um fiber core, 0.22 N.A., 1900 – 2100 nm feedback protection.

Application: Fiber laser pumping, scientific research

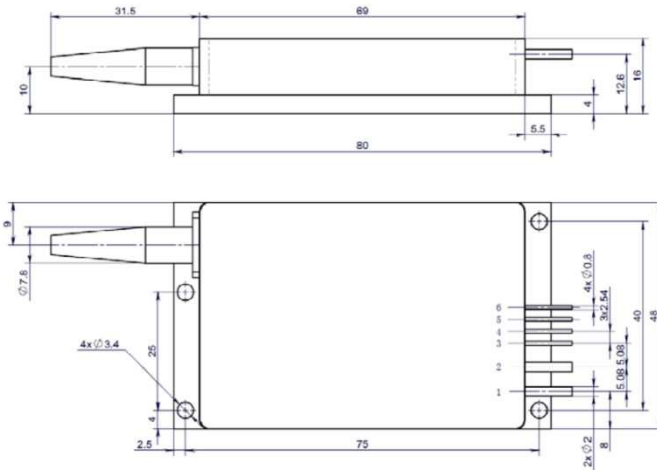
Specifications:

Specifications(25°C)		Symbol	Unit	HJ793DG5RN-50.00W		
				Minimum	Typical	Maximum
Optical Data⁽¹⁾	CW Output Power	P _O	W	50	-	-
	Center wavelength	λ _c	nm	790	-	796
	Spectral width(FWHM)	δλ	nm	-	3	5
	Wavelength Shift with Temperature	Δλ/ΔT	nm/°C	--	0.3	-
	Light within 0.15/0.22NA	-	%	85	90	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	38	-
	Threshold current	I _{th}	A	-	11	12.5
	Operating current	I _{op}	A	-	1.6	-
	Operating voltage	V _{op}	V	-	10.8	11.5
	Slope Efficiency	η	W/A	-	5.3	-
Feedback	Back reflection wavelength range	λ	nm	1900	-	2100
	Back reflection isolation		dB	-	30	-
Fiber Data	Fiber loose tube diameter	D _{buf}	μm	-	900	-
	Cladding diameter	D _{clad}	μm	-	125	-
	Core diameter	D _{core}	μm	-	105	-
	Numeric aperture	NA	-	-	0.22	-
	Fiber length	l _f	m	-	2	-
	Fiber Bend Radius	-	mm	50	-	-
	Fiber Termination	-	-	FC female		
Others	ESD	V _{esd}	V	-	-	500
	Storage temperature ⁽²⁾	T _{stg}	°C	-20	-	70
	Lead Soldering Temp	T _{ls}	°C	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating case temperature	T _{op}	°C	20	-	30
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation output at 50W at 25°C.

(2) A non-condensing environment is required for operating and storage.

(3) Operating temperature defined by the package case. Acceptable operating range is 20 - 30C, but performance may vary.

Package Dimensions (mm)


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

*: Optional function

OPERATING NOTES

- ◆ Avoid eye exposure to direct or scattered radiation.
- ◆ ESD precautions must be taken r 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 point should be close to the middle of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- ◆ Make sure the fiber output end is properly 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 is 20°C~ 30°C.
- ◆ Storage temperature: -20°C~ +70°C.



Declaration: information and specifications contained herein are deemed to be reliable and accurate. We reserve the right to change, alter or modify the design and specifications of these products at any time without notice. 18-1