

## 793nm 30W Fiber Coupled Diode Laser HJ793DA5RN-30W

Model #: HJ793DA5RN-30W

Description: 793nm 30W Fiber Coupled Diode Laser

Features: 793 nm wavelength, 30W output power, 105 um fiber core, 0.22 N.A., 1900 – 2100 nm feedback protection.

Application: Fiber laser pumping, solid state laser pumping

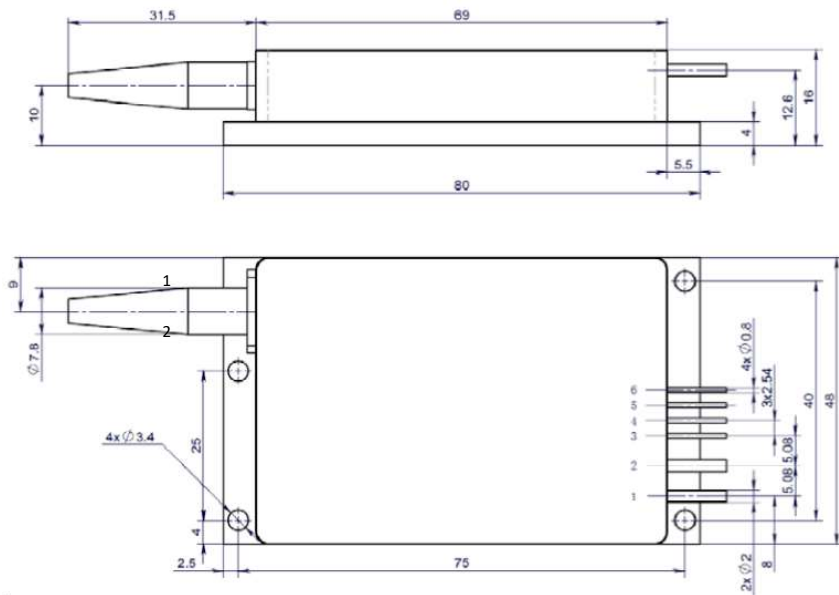
Specifications:

Specifications(25□)		Symbol	Unit	HJ793DA5RN-30.00W		
				Minimum	Typical	Maximum
Parameter <sup>(1)</sup>	CW Output Power	P <sub>O</sub>	W	30	-	-
	Threshold current	I <sub>th</sub>	A	-	1	-
	Operating current	I <sub>op</sub>	A	-	-	5.5
	Operating voltage	V <sub>op</sub>	V	-	-	16
	Reverse Voltage	V <sub>re</sub>	V	-	17.5	-
	Slope Efficiency	η	W/A	-	7	-
	Electrical-to-Optical Efficiency	PE	%	-	45	-
	Center wavelength	λ <sub>c</sub>	nm	790	-	796
	Spectral width(FWHM)	δ <sub>λ</sub>	nm	-	4	-
	Back reflection wavelength Range	λ	nm	1900	-	2100
	Back reflection isolation	-	dB	-	30	-
	Wavelength Shift with Temperature	-	nm/□	-	0.3	-
	Light within 0.15NA	-	%	-	90	-
Fiber Date	Buffer diameter	D <sub>buf</sub>	μm	-	250	-
	Cladding diameter	D <sub>clad</sub>	μm	-	125	-
	Core diameter	D <sub>core</sub>	μm	-	105	-
	Numeric aperture	NA	-	-	0.22	-
	Fiber length <sup>(2)</sup>	l <sub>f</sub>	m	-	1	-
	Fiber Bend Radius	-	mm	60	-	-
Others	ESD	V <sub>esd</sub>	V	-	-	500
	Storage temperature	T <sub>stg</sub>	□	-20	-	70
	Lead Soldering Temp	T <sub>is</sub>	□	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating case temperature <sup>(3)</sup>	T <sub>op</sub>	□	15	-	35
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation output at 30W.

(2) Other length available upon request.

(3) Operating temperature defined by the package case. Acceptable operating range is 15 - 35C, but performance may vary.

**Package Dimensions (mm)**


Pin s	Function
1	LD (+)
2	LD (-)
3	<a href="#">Thermistor*</a>
4	<a href="#">Thermistor*</a>
5	PD (N) *
6	PD (P) *

\* Optional Functions

**OPERATING NOTES**

- ◆ Avoid eye exposure to direct or scattered radiation.
- ◆ ESD precautions must be taken.
- ◆ 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℃ and time shorter than 10 second.
- ◆ Use constant current power supply. Avoid surge current.
- ◆ Laser diode must be used according to the specifications.
- ◆ Laser diode must work with good cooling.
- ◆ A minimum bend radius should be 300 times greater than the fiber cladding diameter, dynamic bend radius should be 400 times greater than the fiber cladding diameter.
- ◆ Operation temperature is 15℃~ 35℃.
- ◆ Storage: -20℃~ +70℃, all pins short-circuit.



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