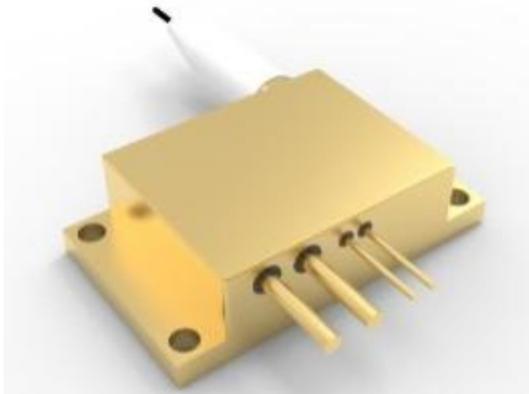


793nm 16W Fiber Coupled Laser Diode

K793DAHRN-16.00WN0N-10522F10EFF (Standard Product)



Features:

- 405nm wavelength
- 793±3nm wavelength
- 16W output power
- 105µm fiber core diameter
- 0.22 NA
- 1900nm~2100nm feedback protection

Applications:

- Fiber Laser Pumping
- Scientific Research

Specifications (25°C)		Symbol	Unit	K793DAHRN-16.00W		
				Minimum	Typical	Maximum
Optical Data ⁽¹⁾	CW Output Power	P _o	W	16.0	-	-
	Center Wavelength	λ _c	nm	793±3		
	Spectral Width (FWHM)	Δλ	nm	-	3.0	7.0
	Wavelength Shift with Temperature	Δλ/ΔT	nm/°C	-	0.3	-
	Wavelength Shift with Current	Δλ/ΔI	nm/A	-	0.6	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	42	-
	Threshold Current	I _{th}	A	-	1.3	-
	Operating Current	I _{op}	A	-	10.0	11.0
	Operating Voltage	V _{op}	V	-	3.8	4.4
	Slope Efficiency	η	W/A	-	1.6	-
Fiber Data	Core Diameter	D _{core}	µm	-	105	-
	Cladding Diameter	D _{clad}	µm	-	125	-
	Numeric Aperture	NA	-	-	0.22	-
	Fiber Length	L _f	m	-	1.0	-
	Fiber Loose Tubing Diameter	-	mm	0.9		
	Minimum Bending Radius	-	mm	50	-	-
	Fiber Termination	-	-	FC-Ferrule		
Feedback Isolation	Wavelength Range	-	nm	1900~2100		
	Isolation	-	dB	-	30	-
Others	ESD	V _{esd}	V	-	-	500
	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 _{op}	°C	20	25	30
	Relative Humidity	RH	%	15	-	75

(1) Data measured under operation at nominal output power@25°C.

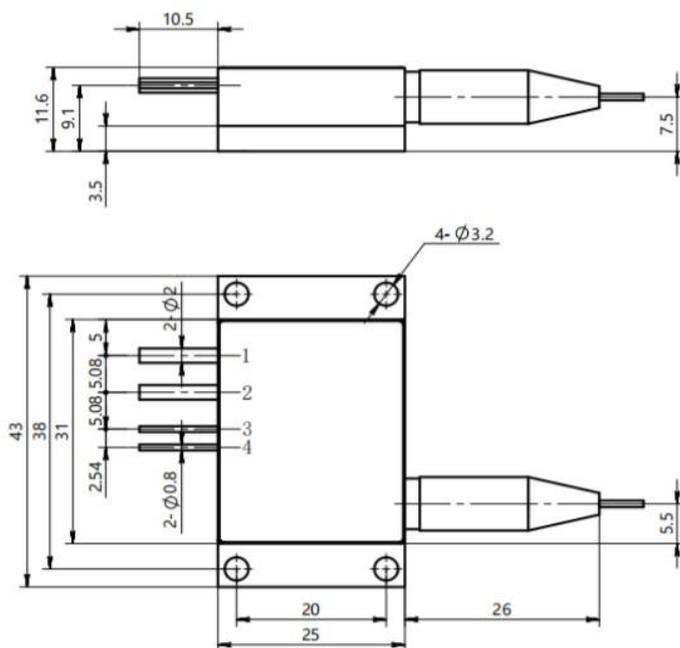
(2) A non-condensing environment is required for operation and storage.

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

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Package Dimensions (mm)



Pin	Function
1	LD (+)
2	LD (-)
3	Thermistor (optional)
4	Thermistor (optional)

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.
- 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 ranges from 15°C to 35°C.
- Storage temperature ranges from -20°C to +70°C.