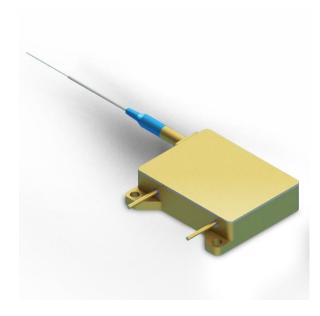


# 808nm 50W Fiber Coupled Diode Laser K808DNLRN-50.00W



#### Features:

- 808nm wavelength
- 50W output power
- 200/400µm fiber core diameter
- 0.22 NA
- 1020nm~1200nm feedback protection

### Applications:

- Solid-state laser pumping
- Medical application
- Material processing

WT, founded in 2003, is committed to the mission of "let the dream drive the light", the vision of becoming the "Global leader in laser solutions", and the value of "Outstanding innovation", providing diode laser, fiber laser, ultra-fast laser products and solutions to global customers.

The company pursues continuous innovation and insists on autonomous and controllable advanced process and technology. With Beijing headquarters as the core, BWT has successively established production and R&D centers in Jiangsu, and Shenzhen, and Invested in the construction of an automated and intelligent production base in Tianjin. To build a high level of technical strength and product quality, BWT set up a German subsidiary in 2020, and taking a solid step for the internationalization of R&D, production and technological innovation.

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## 808nm 50W Fiber Coupled Diode Laser

K808DNLRN-50.00W

Specifications ( 25℃ )		Symbol	Unit	K808DA5RN-50.00W		
				Minimum	Typical	Maximum
Optical Data <sup>(1)</sup>	CW Output Power	Po	w	50	-	-
	Center Wavelength	λς	nm	808±3		
	Spectral Width(FWHM)	Δλ	nm	-	6	-
	Wavelength Shift with Temperature	Δλ/ΔΤ	nm/℃	-	0. 3	-
	Electrical-to-Optical Efficiency	PE	%	-	40	-
	Threshold Current	I <sub>th</sub>	А	-	1.5	-
Electrical Data	Operating Current	lop	А	-	-	14
	Operating Voltage	V <sub>op</sub>	V	-	-	10
	Slope Efficiency	η	W/A	-	4.5	-
	Core Diameter	D <sub>core</sub>	μm	-	200/400	-
	Cladding Diameter	D <sub>clad</sub>	μm	-	220/440	-
	Numeric Aperture	NA	-	-	0.22	-
Fiber Data	Fiber Length	Lf	m	-	2.0	-
	Fiber Loose Tubing Diameter	-	mm	-	3.0	-
	Minimum Bending Radius - mm	88/176	-	-		
	Fiber Termination	-	-	SMA905		
Feedback	Wavelength Range	-	nm	1020~1200		
Isolation	Isolation	-	dB	-	30	-
	ESD	V <sub>esd</sub>	V	-	-	500
	Storage Temperature <sup>(2)</sup>	T <sub>st</sub>	℃	-20	-	70
Others	Lead Soldering Temp	T <sub>Is</sub>	℃	-	-	260
Otners	Lead Soldering Time	t	sec	-	-	10
	Operating Case Temperature <sup>(3)</sup>	Тор	℃	15	-	35
	Relative Humidity	RH	%	15	-	75

<sup>(1)</sup> Data measured under operation output at 50W@25°C.

 $<sup>\</sup>ensuremath{\text{(2)}}\ A\ non-condensing\ environment\ is\ required\ for\ operation\ and\ storage.$ 

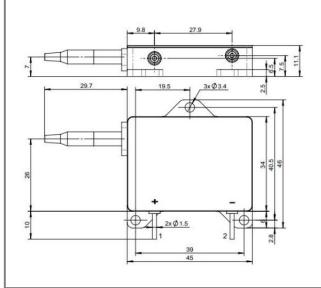
<sup>(3)</sup> Operating temperature defined by the package case. Acceptable operating range is 15°C~35°C, but performance may vary.



### 808nm 50W Fiber Coupled Diode Laser

K808DNLRN-50.00W

### Package Dimensions (mm)



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

\*: Optional function

#### **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.
- to the middle of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- cutting the fiber.
- 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.
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**Declaration**: information and specifications contained herein are deemed to be reliable and accurate. BWT Beijing reserves the right to change, alter or modify the design and specifications of these products at any time without notice.23-12