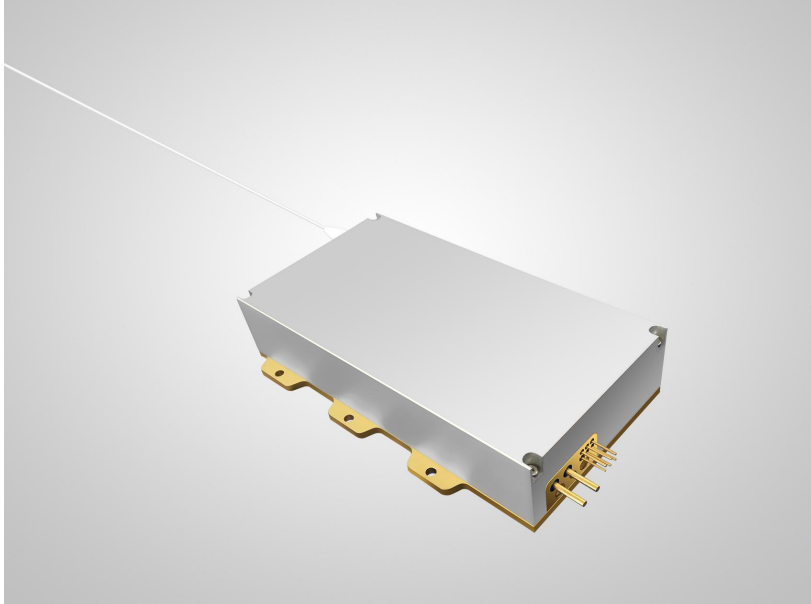# 808nm 150W High Power Fiber Coupled Diode Laser

K808DN2RN-150.0W

Features：

- ◆ 808nm wavelength
- ◆ 150W output power
- ◆ 400μm fiber core diameter
- ◆ 0.22 N.A.

Applications：

- ◆ Solid-state laser pumping
- ◆ Medical use
- ◆ Material processing

BWT Beijing's high power diode laser modules are manufactured by adopting specialized fiber-coupling techniques, resulting in volume products with a high efficiency, stability and superior beam quality. The products are achieved by transforming the asymmetric radiation from the laser diode chip into an output fiber with small core diameter by using special micro optics. Inspecting and burn-in procedures in every aspect come to a result to guarantee each product with the reliability, stability and long lifetime.

Our research staffs are constantly improving and innovating the processing technology in the producing process, based on the professional knowledge and experience accumulated in long-terms. We are also continuously developing new products to meet customers' specific needs.

At BWT Beijing, to provide high quality products with reasonable price is our always goal.

808nm 150W High Power Fiber Coupled Diode Laser

K808DN2RN-150.0W

Specifications(25℃)	Symbol	Unit	K808DN2RN-150.0W		
			Minimum	Typical	Maximum
Parameter[1] CW Output Power	P_O	W	150	-	-
Threshold current	I_{th}	A	-	1.8	-
Operating current	I_{op}	A	-	-	11
Operating voltage	V_{op}	V	-	-	40
Reverse Voltage	V_{re}	V	-	50	-
Slope Efficiency	η	W/A	-	20	-
Electrical-to-Optical Efficiency	PE	%	-	42	-
Center wavelength	I_c	nm	805	-	811
Spectral width(FWHM)	△l	nm	-	5	-
Back reflection wavelength Range	λ	nm	1040	-	1200
Back reflection isolation	-	dB	-	30	-
Wavelength Shift with Temperature	-	nm/℃	-	0.3	-
Wavelength Shift with Current	-	nm/A	-	1	-
Fiber Data Buffer diameter	D_{buf}	µm	-	730	-
Cladding diameter	D_{clad}	µm	-	440	-
Core diameter	D_{core}	µm	-	400	-
Numeric aperture	NA	NA	-	0.22	-
Fiber length[2]	lc	m	1.9	2	2.1
Connector [3]	-	-	-	-	-
Fiber jacket[4]	-	-	-	1.5mmPVC	-
Fiber Bend Radius	-	mm	-	140	-
Thermistor -	Rt	(K Ω)/β(25℃)	-	10±3%/3477	-
Others ESD	-	V	-	-	500
Storage temperature	-	℃	-20	-	70
Lead Soldering Temp	Tis	℃	-	-	260
Lead Soldering Time	Tis	sec	-	-	10
Operating case temperature [5]	T_{op}	℃	15	-	35
Relative Humidity [6]	-	%	15	-	75

(1) Data measured under operation output at 150W@25℃。
(2) Other length available upon request.
(3) Other connector available upon request.
(4) Other fiber jacket available upon request.
(5) Operating temperature defined by the package case. Acceptable operating range is 15 - 35C, but performance may vary.
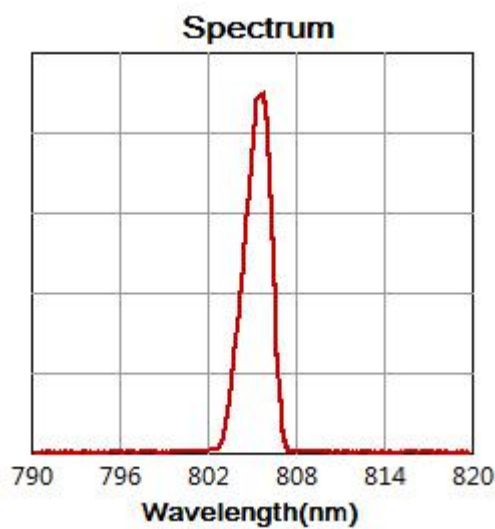(6) A non-condensing environment is required for operation and storage conditions are from -20 to +70 ℃ with relative humidity between 15 to 75 %.

808nm 150W High Power Fiber Coupled Diode Laser

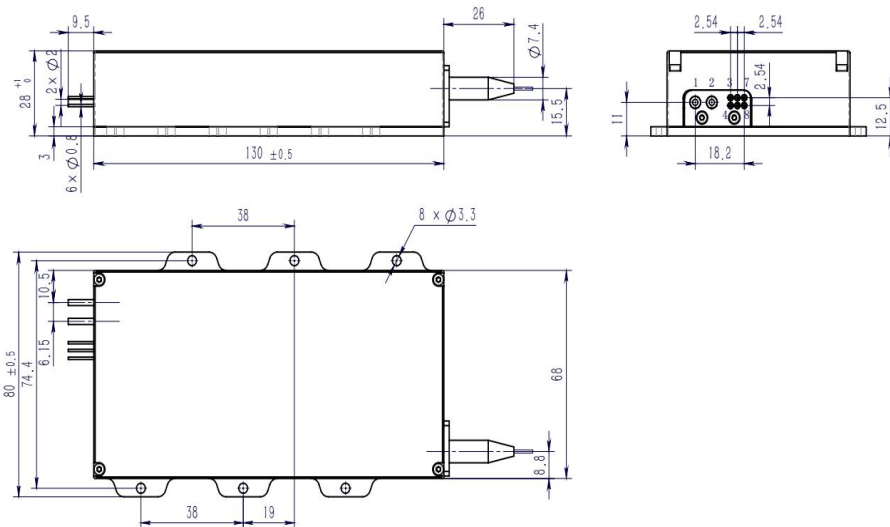## K808DN2RN-150.0W

Characteristics
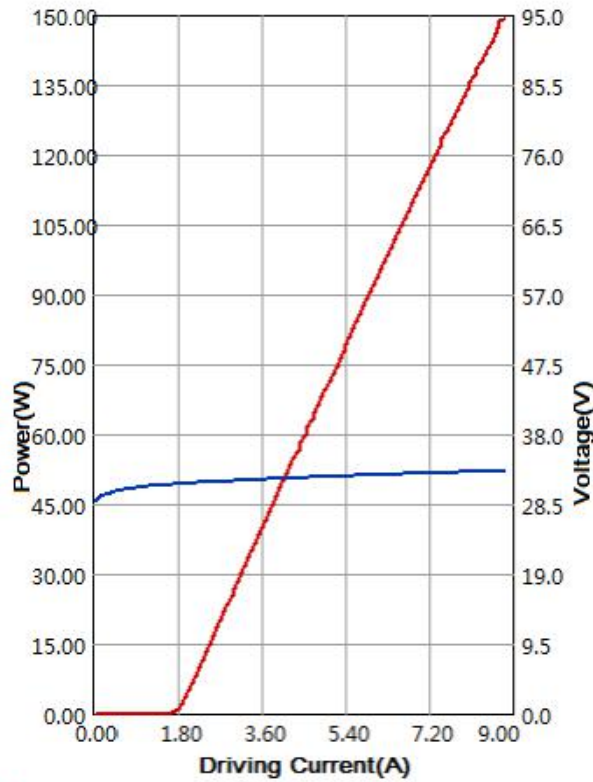
Typ. spectrum (T=25℃)

808nm 150W High Power Fiber Coupled Diode Laser

K808DN2RN-150.0W

Package Dimensions (mm)

Pins	Function
1	LD（+）
2	LD（-）
3	-
4	-
5	-
6	-
7	-
8	-

*:Typical function, can be customizable

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.

◆ 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. BWT Beijing reserves the right to change, alter or modify the design and specifications of these products at any time without notice.