This product is sold and supported in the USA by

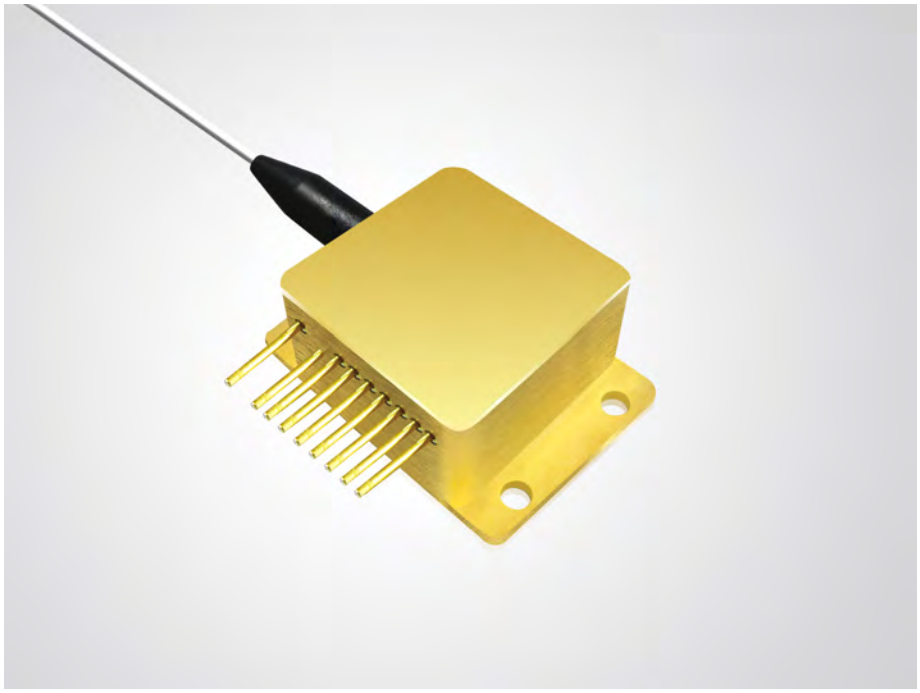
LASER LAB SOURCE
marketplace for **Scientists & Engineers**

contact@LaserLabSoure.com

800.887.5065

808nm 4W-8W HHL Packaged Diode Laser

K808D09FN-4.00W K808D09FN-8.00W



Features:

- 4W, 8W output power
- 105μm, 200μm and 400μm fiber core diameter
- 0.22N.A.
- 808nm wavelength

Applications:

- 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 always our goal.

808nm 4W-8W HHL Packaged Diode Laser

K808D09FN-4.00W K808D09FN-8.00W

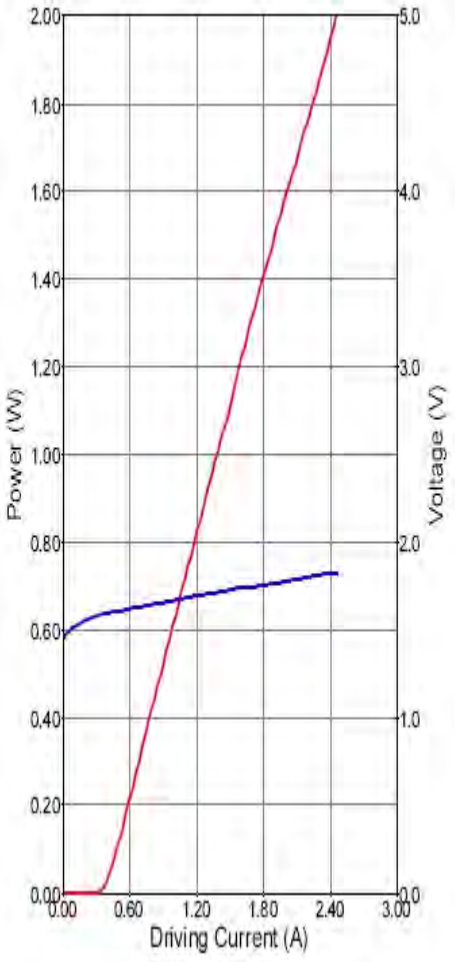
Specifications（25℃）		Symbol	Unit	K808D09FN-4.00W	K808D09FN-8.00W
Optical Data	CW-Output Power	P_o	W	4	8
	Center Wavelength	λ_c	nm	808	
	Tolerance of λ	-	nm	±3,±10	
	Spectral Width (FWHM)	△λ	nm	<3	
	Temperature Drift of λ	-	nm/℃	~0.3	
Fiber Data (1)	Fiber Core Diameter	W_c	μm	105, 200	200,400
	Numerical Aperture	N.A.	-	0.22	
	Fiber Connector	-	-	SMA-905	
Electrical Data	Operating Current	I_{op}	A	5.0	10.0
	Threshold Current	I_{th}	A	0.8	1.5
	Conversion Efficiency	η	%	35~45	
	Slope Efficiency	η_D	W/A	0.8~1.0	
	Operating Voltage	V_{op}	V	1.9	2.2
	Reverse Voltage	V_{re}	V	2	
PD Data	Current	I_{mo}	mA	0.20~1.50	
TEC Data	Max. Current	I_t	A	4.0	6.0
	Max. Voltage	V_t	V	9.8	
Thermistor Data (2)	Thermistor	R_t	(K Ω)/β(25℃)	10±5%/3477	
Others	Operating Temperature	T_{op}	℃	10~30	
	Storage Temperature	T_{st}	℃	-20~80	
	Expected Lifetime	MTTF	h	>10,000	
	Dimensions (fiber and connector not included)	-	mm	~44.5×31.8×18.0	
	Lead Soldering Temperature	T_{ls}	℃	260(10 sec.)	

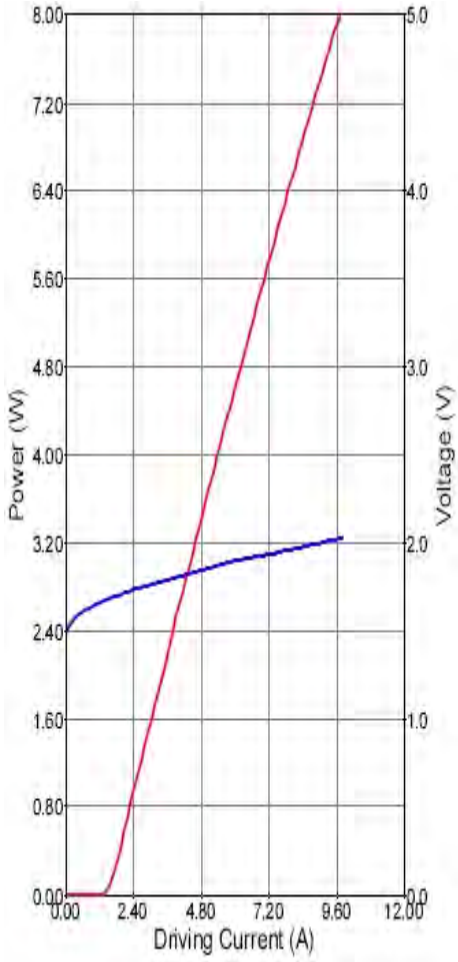
(1) Other fibers available upon request.
(2) $R_t=R_0 \cdot \exp(\beta(1/T-1/T_0))$, ($T_0$=25℃=298K).

808nm 4W-8W HHL Packaged Diode Laser

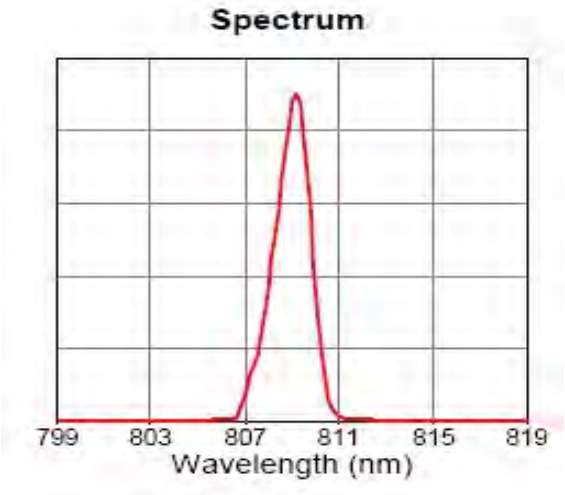
K808D09FN-4.00W K808D09FN-8.00W

Characteristics





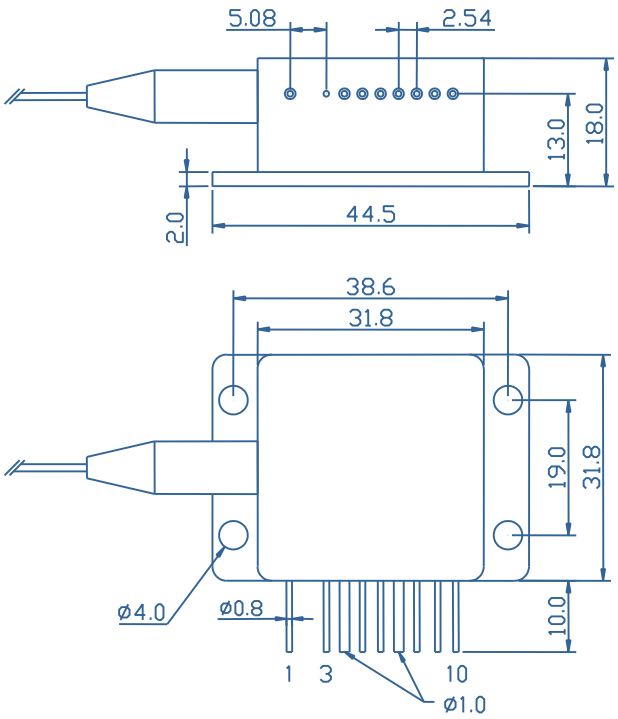
Typ. spectrum (T=25℃)



808nm 4W-8W HHL Packaged Diode Laser

K808D09FN-4.00W K808D09FN-8.00W

Package Dimensions (mm)



Pin	Function	Pin	Function
1	TEC (-)	6	Thermistor
2	-	7	LD (-)
3	Case	8	PD (P)
4	LD (+)	9	PD (N)
5	Thermistor	10	TEC (+)

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 diameter should be 300 times greater than the fiber diameter.
- Operation temperature is 10℃~ 30℃.
- Storage: -20℃~ +80℃, all pins short-circuit.