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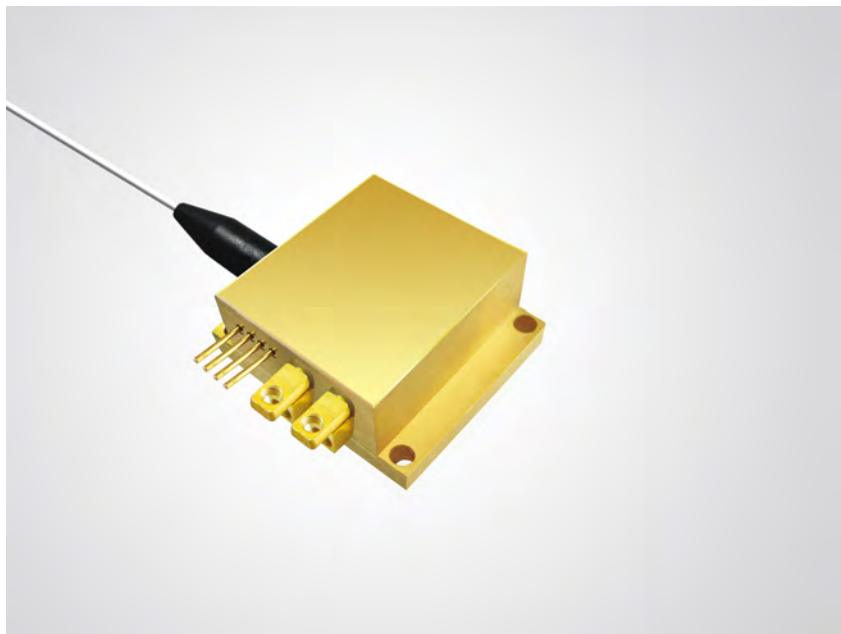


**LASER LAB SOURCE**  
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## 976nm 25W High Brightness Wavelength-Stabilized Diode Laser K976AABRN-25.00W



### Features:

- ◆ 25W output power
- ◆ 976nm wavelength
- ◆ Narrow Bandwidth  $\Delta\lambda < 0.7\text{nm}$
- ◆ 105 $\mu\text{m}$  fiber core diameter
- ◆ 0.22N.A.
- ◆ 1030nm-1200nm feedback protection

### Application:

- ◆ Laser pumping

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.

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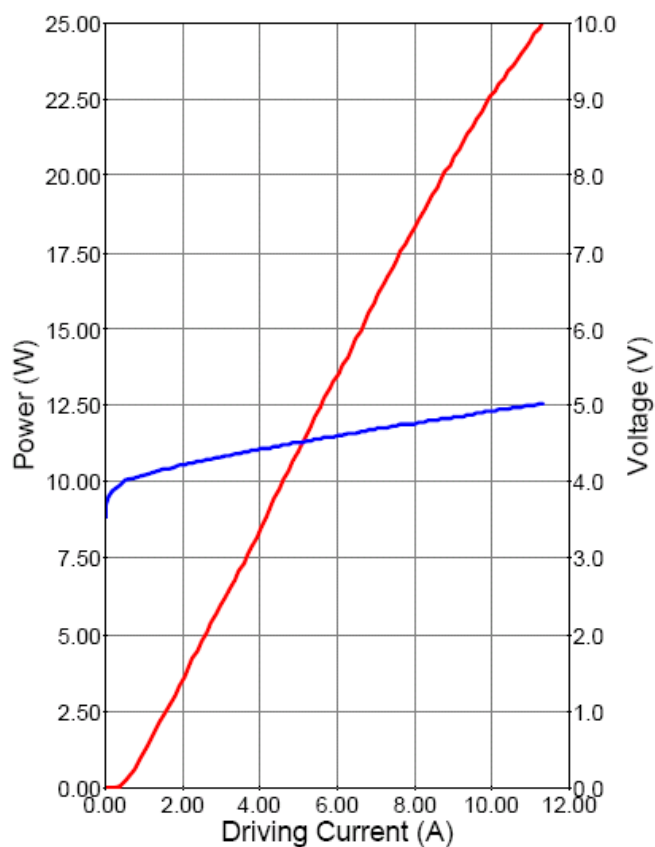
Specifications (25°C)		Symbol	Unit	K976AABRN-25.00W	
<b>Optical Data</b>	CW-Output Power	$P_o$	W	25	
	Center Wavelength	$\lambda_c$	nm	976	
	Tolerance of $\lambda$	-	nm	$\pm 0.5$	
	Spectral Width (FWHM)	$\Delta\lambda$	nm	<0.7	
	Spectral Shift over Temperature <sup>(1)</sup>	$\Delta\lambda/\Delta T$	nm/°C	~0.02	
	Spectral Shift over Power	$\Delta\lambda/\Delta I_{op}$	nm/A	~0.05	
<b>Fiber Data <sup>(2)</sup></b>	Fiber Core Diameter	$W_c$	$\mu m$	105	
	Numerical Aperture	N.A.	-	0.22	
	Fiber Connector	-	-	SMA-905	
<b>Electrical Data</b>	Operating Current	$I_{op}$	A	3~12	12
	Threshold Current	$I_{th}$	A	0.6	
	Conversion Efficiency	$\eta$	%	46	
	Slope Efficiency	$\eta_D$	W/A	2.6	
	Operating Voltage	$V_{op}$	V	5.4	
	Reverse Voltage	$V_{re}$	V	7.5	
<b>Feedback Isolation</b>	Wavelength Range	$\lambda$	nm	1030-1200	
	Isolation	-	dB	>30	
<b>Others</b>	Operating Temperature	$T_{op}$	°C	30±5	
	Storage Temperature	$T_{st}$	°C	-20~+80	
	Expected Lifetime	MTTF	h	>100,000	
	Dimensions (fiber and connector not included)	-	mm	47.0 x 40.0 x 20.0	
	Lead Soldering Temperature	$T_{is}$	°C	260(10 sec.)	

(1) Data measured under operation output at 25W.

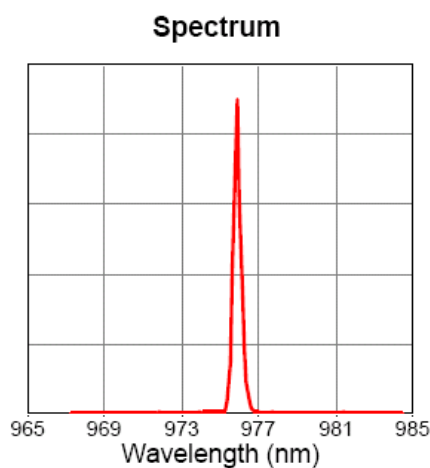
(2) Other fibers available upon request.

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### Characteristics

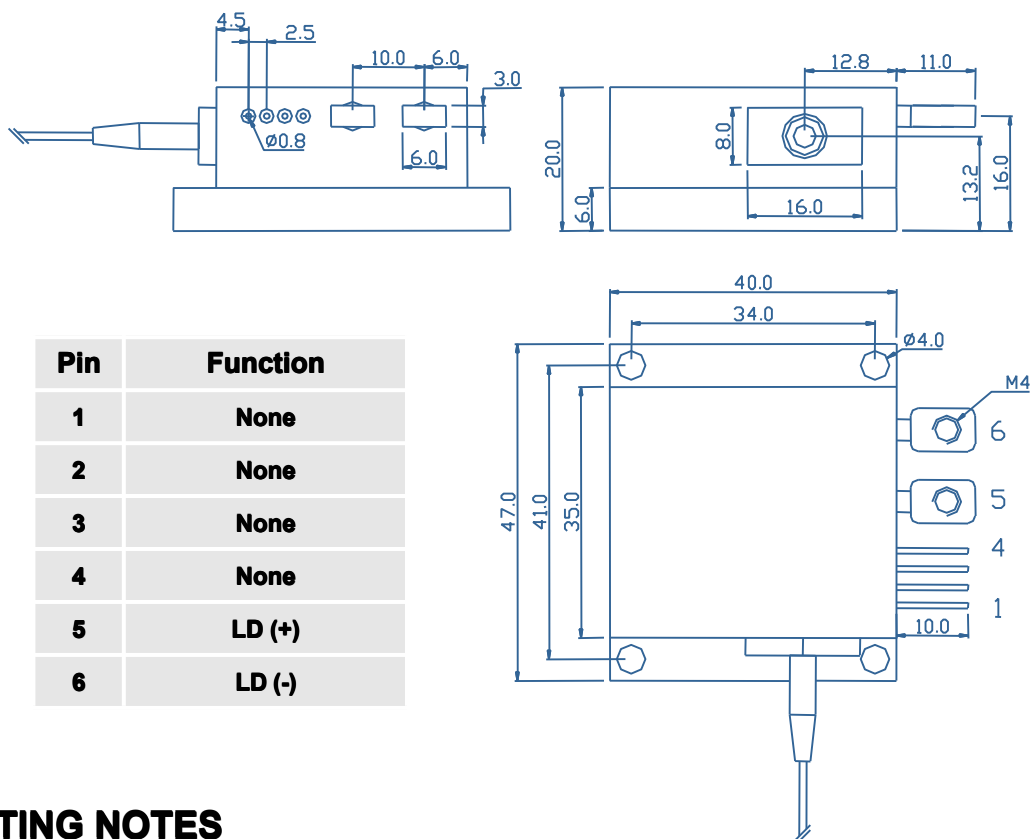


### Typ. spectrum (T=25°C)



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### Package Dimensions (mm)



### 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°C 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°C~ 30°C.
- Storage: -20°C~ +80°C, all pins short-circuit.



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.