



### Features:

- ◆ 976±1nm wavelength
- ◆ 430W output power
- ◆ 200µm fiber core diameter
- ◆ 0.22 NA
- ◆ 1020nm~1200nm feedback protection

### Applications:

- ◆ Fiber Laser Pumping
- ◆ Scientific Research

## 976nm 430W Wavelength-Stabilized Fiber Coupled Diode Laser

RPK976S-NZ-430.0W-20022-FF

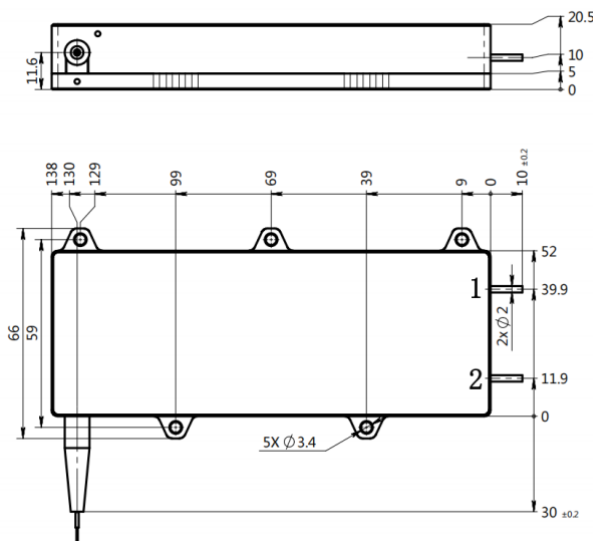
Specifications (25°C)		Symbol	Unit	RPK976S-NZ-430.0W-20022-FF		
				Minimum	Typical	Maximum
Optical Data <sup>(1)</sup>	CW Output Power	P <sub>o</sub>	W	430	-	-
	Center Wavelength	λ <sub>c</sub>	nm	976±1		
	Spectral Width(FWHM)	Δλ	nm	-	0.7	1.0
	Wavelength Shift with Temperature	Δλ/ΔT	nm/°C	-	0.02	-
	Wavelength Shift with Current	Δλ/ΔI	nm/A	-	0.03	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	48	-
	Threshold Current	I <sub>th</sub>	A	-	1.3	-
	Operating Current	I <sub>op</sub>	A	-	25.0	26.0
	Operating Voltage	V <sub>op</sub>	V	-	36.0	43.0
	Slope Efficiency	η	W/A	-	18.0	-
Fiber Data	Core Diameter	D <sub>core</sub>	µm	-	200	-
	Cladding Diameter	D <sub>clad</sub>	µm	-	220	-
	Numeric Aperture	NA	-	-	0.22	-
	Fiber Length	L <sub>f</sub>	m	-	2	-
	Fiber Loose Tubing Diameter	-	mm	0.9		
	Minimum Bending Radius	-	mm	88	-	-
	Fiber Termination	-	-	FC-Ferrule		
Feedback Isolation	Wavelength Range	-	nm	1020~1200		
	Isolation	-	dB	-	30	-
Others	ESD	V <sub>esd</sub>	V	-	-	500
	Storage Temperature <sup>(2)</sup>	T <sub>st</sub>	°C	-20	-	70
	Lead Soldering Temp	T <sub>ls</sub>	°C	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating Case Temperature <sup>(3)</sup>	T <sub>op</sub>	°C	20	25	30
	Relative Humidity	RH	%	15	-	75
	Weight	W	g	500		

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- (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.
- (4) Wavelength-Stabilized : Percentage of power in band of 974.5nm to 977.5nm ≥90%.

#### Package Dimensions (mm)



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

#### 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 20°C to 30°C .
- ◆ Storage temperature ranges from -20°C to +70°C.



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.21-1