

Features:

- 830nm wavelength
- 1W output power
- 50µm fiber core diameter
- 0.14 NA

Applications:

- Cosmetology
- CTP/CTS
- Scientific Research

830nm 2W Fiber Coupled Diode Laser

RPK830-02-2.000W-05014-ST

Specifications (25°C)		Symbol	Unit	RPK830-02-2.000W-05014-ST		
				Minimum	Typical	Maximum
Optical Data ⁽¹⁾	CW Output Power	Po	W	2.0	-	-
	Center Wavelength	λc	nm	830±10		
	Spectral Width(FWHM)	Δλ	nm	-	6	-
	Wavelength Shift with Temperature	Δλ/ΔΤ	nm/°C	-	0.3	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	40	-
	Threshold Current	I _{th}	А	-	0.2	-
	Operating Current	I _{op}	А	-	-	2.3
	Operating Voltage	V _{op}	V	-	-	2.0
	Slope Efficiency	η	W/A	-	0.9	-
Fiber Data	Core Diameter	D_core	μm	-	50	-
	Cladding Diameter	D _{clad}	μm	-	125	-
	Numeric Aperture	NA	-	-	0.14	-
	Fiber Length	L _f	m	-	0.5	-
	Fiber Loose Tubing Diameter	-	mm		0.9	
	Minimum Bending Radius	-	mm	50	-	-
	Fiber Termination	-	-	ST		
Others	ESD	V _{esd}	V	-	-	500
	Storage Temperature ⁽²⁾	T _{st}	°C	-20	-	70
	Lead Soldering Temp	T _{ls}	°C	-	-	260
	Lead Soldering Time	t	sec	-	-	10
	Operating Case Temperature ⁽³⁾	T _{op}	°C	15	-	35
	Relative Humidity	RH	%	15	-	75

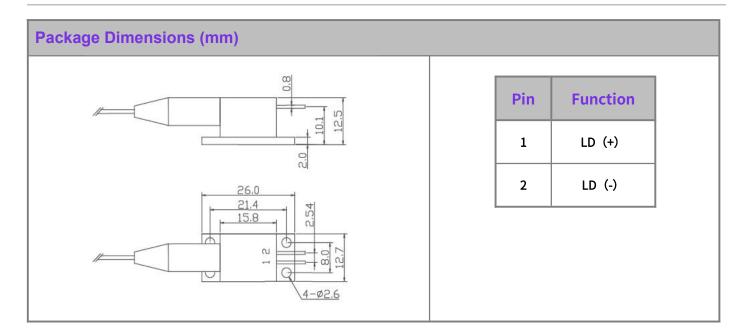
⁽¹⁾ Data measured under operation output at 2W@25°C.

⁽²⁾ A non-condensing environment is required for operation and storage.

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

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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.





Declaration: information and specifications contained herein are deemed to be reliable and accurate. BWT Beijing Ltd.reserves the right to change, alter or modify the design and specifications of these products at any time without notice.