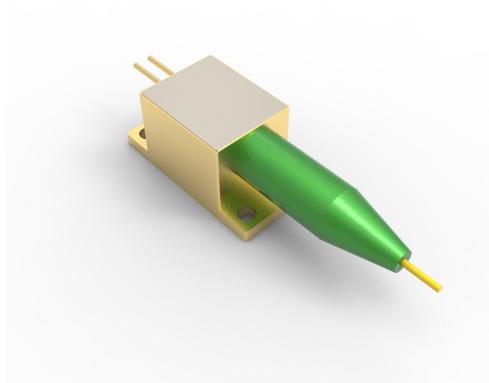




830nm 1W Fiber Coupled Diode Laser

K830F02FN-1.000WN0N-05014F05EST (Standard Product)



Features:

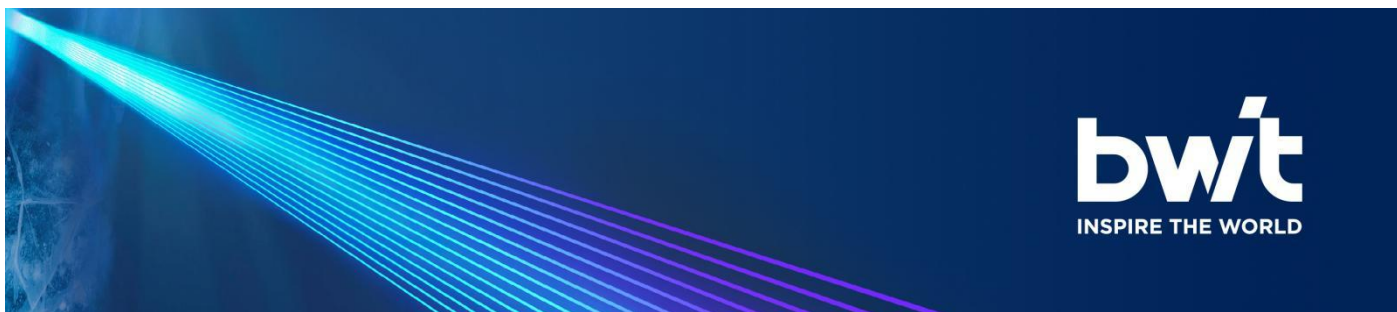
- ♦ 830nm wavelength
- ♦ 1W output power
- ♦ 50µm fiber core diameter
- ♦ 0.14 NA

Applications:

- ♦ Cosmetology
- ♦ CTP / CTS
- ♦ Scientific Research

BWT, founded in 2003, is committed to the mission of "let the dream drive the light", the vision of becoming the "Global leader in laser solutions", and the value of "Outstanding innovation", providing diode laser, fiber laser, ultra-fast laser products and solutions to global customers.

BWT pursues continuous innovation and insists on autonomous and controllable advanced process and technology. With Beijing headquarters as the core, BWT has successively established production and R&D centers in Jiangsu, and Shenzhen, and Invested in the construction of an automated and intelligent production base in Tianjin. To build a high level of technical strength and product quality, BWT set up a German subsidiary in 2020, and taking a solid step for the internationalization of R&D, production and technological innovation.



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Specifications (25°C)		Symbol	Unit	K830F02FN-1.000W		
				Minimum	Typical	Maximum
Optical Data ⁽¹⁾	CW Output Power	P_o	W	1.0	-	-
	Center Wavelength	λ_c	nm	830±10		
	Spectral Width(FWHM)	$\Delta\lambda$	nm	-	6	-
	Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	nm/°C	-	0.3	-
Electrical Data	Electrical-to-Optical Efficiency	PE	%	-	40	-
	Threshold Current	I_{th}	A	-	0.2	-
	Operating Current	I_{op}	A	-	-	1.5
	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 1W@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.



830nm 1W Fiber Coupled Diode Laser

K830F02FN-1.000WN0N-05014F05EST (Standard Product)

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℃ and time shorter than 10 second.

cutting the fiber.

 - ◆ Laser diode must work with good cooling.
 - ◆ Operation temperature ranges from 15℃ to 35℃ .
 - ◆ Storage temperature ranges from -20℃ to +70℃.



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.