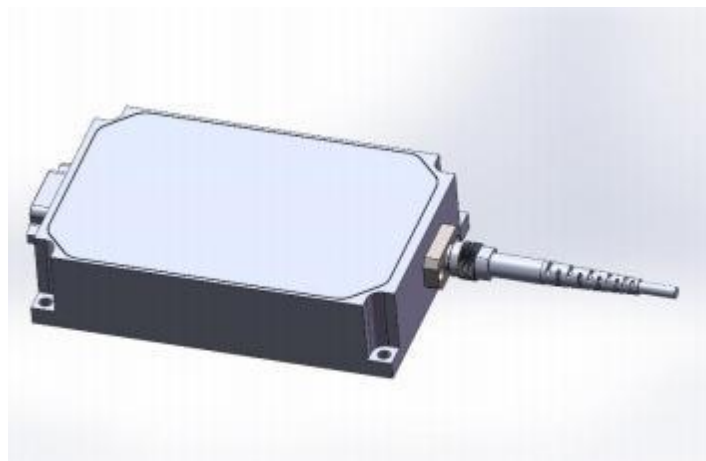




RGB Fiber Coupled High Power Diode Laser

KR004G004B002WHFN-N1N-40022



Features:

- ◆ Red laser (R) 638+/-10nm 4W
- ◆ Green laser (G) 525+/-10nm 4W
- ◆ Blue laser (B) 455+/-10nm 2W
- ◆ 400 μ m core diameter fiber coupled
- ◆ 0.22 NA

Applications:

- ◆ Laser Illumination
- ◆ Smart Vision Lighting
- ◆ LaserDisplay

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.

The company 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	KR004G004B004WHFN		
					Minimum	Typical	Maximum
Optical Data ⁽¹⁾	Red	CW Output Power(R)	PO_R	W	4	-	-
		Center Wavelength(R)	λ_{c_R}	nm	638±10		
	Green	CW Output Power(R)	PO_G	W	4	-	-
		Center Wavelength(R)	λ_{c_G}	nm	525±10		
	Blue	CW Output Power(R)	PO_B	W	2	-	-
		Center Wavelength(R)	λ_{c_B}	nm	455±10		
Electrical Data	Red	Threshold Current	I _{th_R}	A	-	0.34	0.44
		Operating Current	I _{op_R}	A	-	1.3	1.6
		Operating Voltage	V _{op_R}	V	-	11.5	13.5
	Green	Threshold Current	I _{th_G}	A	-	0.3	0.5
		Operating Current	I _{op_G}	A	-	1.8	2.0
		Operating Voltage	V _{op_G}	V	-	19	21
	Blue	Threshold Current	I _{th_B}	A	-	0.4	-
		Operating Current	I _{op_B}	A	-	2.1	2.5
		Operating Voltage	V _{op_B}	V	-	4.5	5
Fiber Data	Core Diameter		D _{core}	μm	400		
	Numeric Aperture		NA	-	-	0.22	-
	Fiber Length		L _f	m	-	1.5	-
	Fiber Loose Tubing Diameter		-	mm	3mm		
	Minimum Bending Radius		-	mm	100	-	-
	Fiber Termination		-	-	FC(APC)/SC(APC)/SMA905/ST		
Thermistor	Resistance(25°C)		-	kΩ	10+/-3%		
	B constant		-	K	3380		
Others	ESD		Vesd	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 operation power @25°C.

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

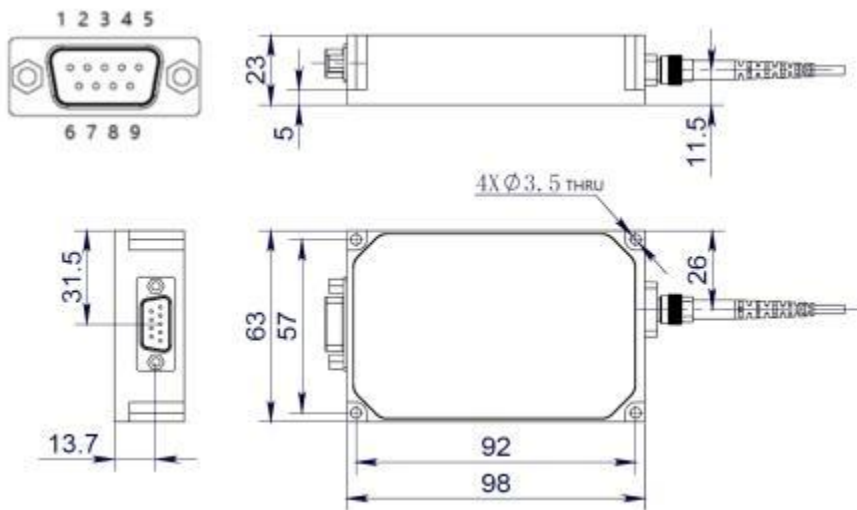
(3) Operating temperature defined by the package case. Acceptable operating range is 15°C~35°C, but performance may vary.



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Package Dimensions (mm)



Pin	Function
1	NC
2	Red (+)
3	Red (-)
4	Green (+)
5	Green (-)
6	Blue (+)
7	Blue (-)
8	NTC Thermistor
9	NTC Thermistor

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.
- ◆ 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 middle of the pins. Soldering temperature should be lower than 260°C and time shorter than 10 second.
- ◆ Make sure the fiber output end is properly cleaned before operation of laser. Follow safety protocols to avoid injury when handling and cutting the fiber.
- ◆ Use constant current power supply to avoid surge current during operation.
- ◆ Laser diode must be used according to the specifications.
- ◆ 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.