

## Conduction Cooled Single Bar Fiber Coupled Module

**MF2-1470H-15C-40022**



### Features :

- ◆ 1470nm wavelength
- ◆ 15W output power
- ◆ 400 $\mu$ m 0.22NA detachable fiber

### Applications :

- ◆ Medical Use
- ◆ Scientific Research

### Main Characters :

- ◆ High output power
- ◆ High brightness
- ◆ Tightly sealed
- ◆ Electrically isolated housing

### Options :

Red aiming beam; Monitor photo diode; Temperature sensor fiber plug; Temperature sensor diode; Fiber detection sensor.

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, Shanghai and Shenzhen, and invested in the construction of intelligent and digital production base in Tianjin. In order to build the world's highest level of technical strength and product quality, BWT set up a German subsidiary in 2020, introducing European quality standards, and taking a solid step for the internationalization of R&D, production and technological innovation.

Up to now, BWT has traded more than 10 million lasers worldwide. BWT's products are available in more than 70 countries and regions, applications involving industry, medical, commercial, scientific research, information and many other fields.

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### MF2-1470H-15C-40022

Specifications ( 25°C )		Unit	MF2-1470H-15C-40022
Optical Data <sup>(1)</sup>	CW Output Power	W	15
	Center Wavelength	nm	1470±20
	Spectral Width (FWHM)	nm	< 15
	Wavelength Shift with Temperature	nm/°C	~0.58
	Wavelength Shift with Current	nm/A	~0.45
Electrical Data	Electrical-to-Optical Efficiency	%	> 18
	Operating Current	A	< 55
	Threshold Current	A	< 11
	Operating Voltage	V	< 1.4
	Slope Efficiency	W/A	> 0.3
Fiber Data	Core Diameter	μm	≥400
	Numerical Aperture	-	0.22
	Fiber Termination	-	HP-SMA905 with Free Standing Fiber Tips
Others	ESD	V	500
	Storage Temperature <sup>(2)</sup>	°C	0~55
	Operating Case Temperature <sup>(3)</sup>	°C	20~30
	Relative Humidity	%	15~75

(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.

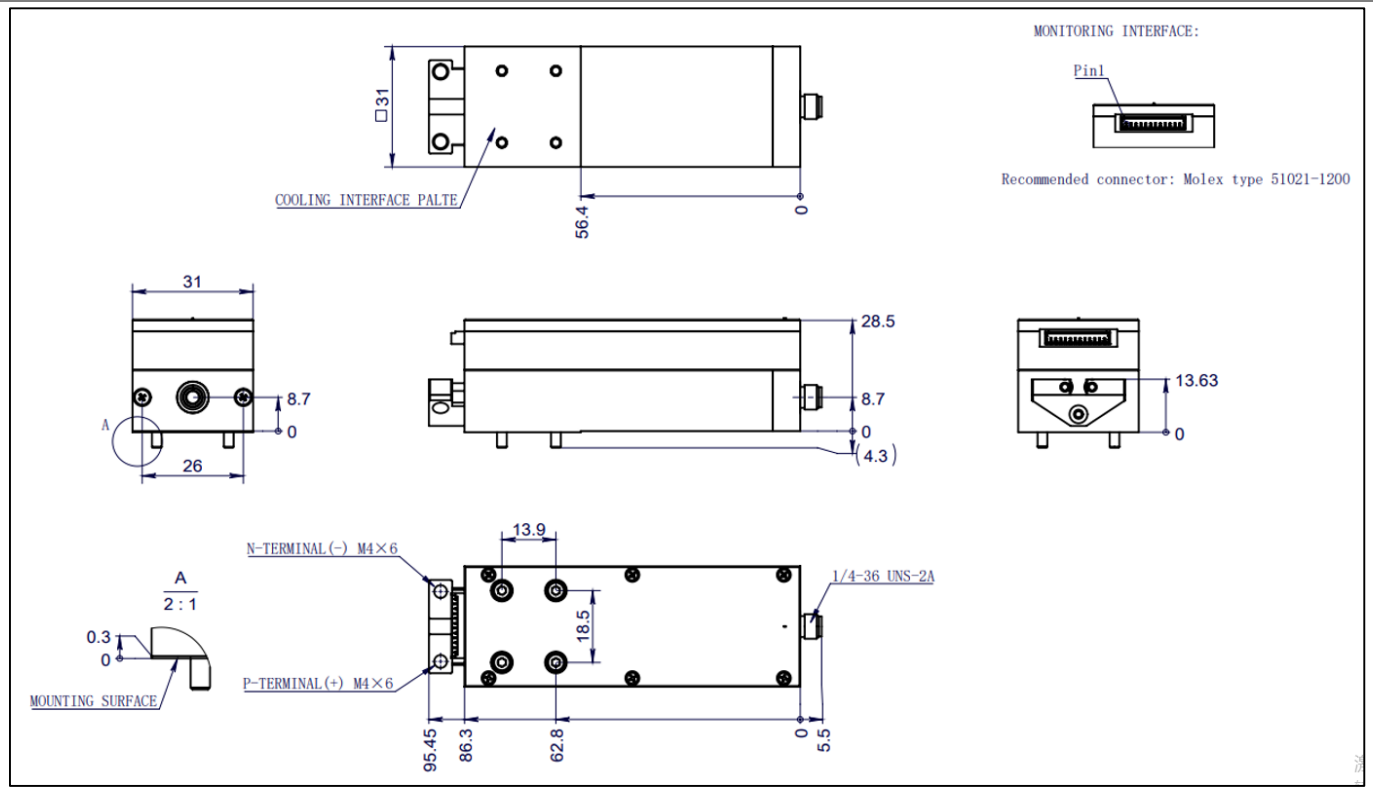
(4) The data above are for reference only. For specific data, please refer to the delivery package data.

(5) Other wavelengths and configurations on customer request.

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### Package Dimensions (mm)



Pins	Functions	Explanation
1	/	Not in use
2	NTC Laser Diode	10kΩ, Epcos B57861S0103F040
3	NTC Laser Diode	
4	Photo Diode Anode	Laser diode 630nm to 1060nm: Lightsensing LSSPD-1.2
5	Photo Diode Cathode	Laser diode 1200nm to 1600nm: Lightsensing LSIPD-L0.3
6	NTC Fiber	10kΩ, Epcos B57861S0103F040
7	NTC Fiber	
8	Fiber Sensor	2x micro switch: 10 μA 2 V DC to 50 mA 12 V DC (Resistive load)
9	Fiber Sensor	
10	Pilot intensity control	available upon request
11	Pilot laser supply +5V	650nm (635nm and other wavelengths upon request)
12	Pilot laser GND	Inom <50mA, Unom 3V to 5V

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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.
- ◆ 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 20°C to 30°C .
- ◆ Storage temperature ranges from 0°C to 55°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