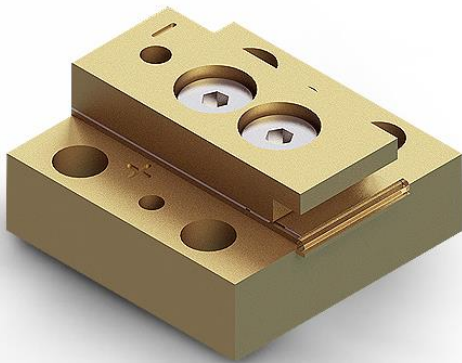


## Conduction Cooled Single Bar Product

### M10 Datasheet EN



#### Features :

- ♦ Low Smile
- ♦ Long life time
- ♦ Conduction cooled
- ♦ Optional BTS

#### Applications :

- ♦ Pumping
- ♦ Printing
- ♦ Scientific Research
- ♦ Material Processing

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.

Version number	Change content	Change date
00	First edition	2021.10.28

## Conduction Cooled Single Bar Product

### M10 Datasheet EN

Part No.		M10N-808.3-60C-1	M10N-808.3-80C-1	M10N-880.3-60C-1	M10N-980.3-80C-1
Optical Data <sup>(1)</sup>	Unit	Value			
Central Wavelength	nm	808±3	808±3	880±3	980±3
Output Power	W	60	80	60	80
Emitter Size	μm	150	200	150	100
Fill Factor	%	30	40	30	20
Spectral Width with FWHM	nm	3	4	4	4
Fast Axis Divergence (90% E)	deg	~65	~65	~51	~51
Slow Axis Divergence (90% E)	deg	~9	~9	~9	~9
Polarization Mode	-	TE	TE	TE	TE
Wavelength Temp. coefficient	nm/°C	~0.28	~0.28	~0.3	~0.34
Electrical Data <sup>(1)</sup>	Unit	Value			
Threshold Current	A	10	19	14	8
Operating Current	A	65	85	65	85
Operating Voltage	V/bar	≤2	≤2	≤2	≤2
EO Conversion Efficiency	%	≥50	≥50	≥50	≥50
Slope	W/A	≥1	≥1	≥1	≥1
Thermal Data <sup>(1)</sup>	Unit	Value			
Operating Temperature <sup>(3)</sup>	°C	20~30	20~30	20~30	20~30
Storage Temperature	°C	-20~55	-20~55	-20~55	-20~55
Recommended Heatsink Capacity	W	≥120	≥160	≥120	≥160

Part No.		M10Y-808.3-60C-1	M10Y-808.3-80C-1	M10Y-880.3-60C-1	M10Y-980.3-80C-1
Optical Data <sup>(1)</sup>	Unit	Value			
Fast Axis Divergence (90% E)	°	< 0.5	< 0.5	< 0.5	< 0.5
All other specifications same as above					

(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.

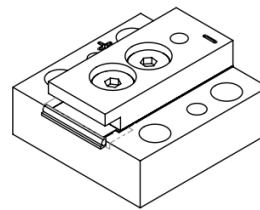
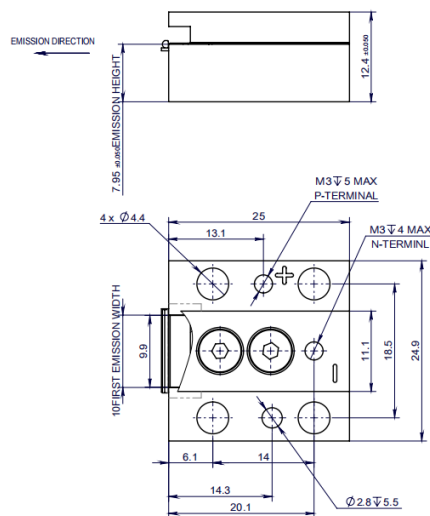
(4) The data above are for reference only. For specific data, please refer to the delivery package data.

(5) Other wavelengths and configurations on customer request.

## Conduction Cooled Single Bar Product

### M10 Datasheet EN

#### Package Dimensions (mm) V(1x1)-M10Y-O-A



未注尺寸公差按 GB/T 1804-f  
未注形位公差按 GB/T 1184-H

Unspecified dimensional tolerances shall be in accordance with GB/T 1804-f  
Unspecified form and position tolerance shall be in accordance with GB/T 1184-H

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( $\checkmark$ )

#### 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 -20°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.21-12