

MF2-675E-15C-40022



Features:

- High output power
- High brightness
- Electrically isolated housing

Applications:

- Industrial Application
- Scientific Research
- Medical Use

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 pr ocess and technology. With Beijing headquarters as the core, BWT has successively established productio n 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 sol id step for the internationalization of R&D, production and technological innovation.



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| Specifications | | Unit | MF2-675E-15C-40022 | | |
|-----------------------------------|--------------------------------------|--------------|---|---------|------|
| | | | Min | Typical | Мах |
| Optical Data ⁽¹⁾⁽²⁾⁽⁴⁾ | CW Output Power | W | - | 15 | - |
| | Center Wavelength | nm | 670 | 675 | 680 |
| | Spectral Width (FWHM) | nm | - | - | 3 |
| | Wavelength Shift with Temperature | nm/°C | - | 0.16 | - |
| Electrical Data ⁽²⁾⁽⁴⁾ | Electrical-to-Optical Efficiency | % | - | 27.5 | 30 |
| | Operating Current | A | - | 25 | 27 |
| | Threshold Current | A | - | 5.5 | 8 |
| | Operating Voltage | V | - | - | 2.2 |
| | Slope Efficiency | W/A | | 0.77 | 0.88 |
| Fiber Data | Core Diameter | μm | - | 400 | - |
| | Numerical Aperture | - | - | 0.22 | - |
| | Fiber Termination | - | HP-SMA905 with Free Standing Fiber Tips | | |
| PD Data | Current | μΑ | 100 to 1000 | | |
| Thermistor | - | (KΩ)/β(25°C) | 10±3%/3477 | | |
| Others | ESD | V | - | 500 | - |
| | Storage Temperature | °C | 0~55 | | |
| | Operating Temperature | °C | - | 20 | - |

(1) Data measured under operation at nominal output power @20°C.

(2) Reduced lifetime if used above nominal operating conditions.

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

(4) Operating temperature defined by the package case. Acceptable operating range is 20°C~30°C, but performance may vary.

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

(6) Other wavelengths and configurations on customer request.



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| Pins | Functions | Explanation | |
|------|-------------------------|--|--|
| 1 | 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 | 520nm, output power < 1mW | |
| 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.



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