



# **Key Features**

- Low Insertion Loss
- High Isolation
- PM and Non-PM are available
- Fiber can be customized
- High Reliability
- Excellent Temperature Stability

# **Applications**

- Fiber Optic Amplifiers
- Fiber Optic Laser
- Test and Measurement
- Instrumentation

### 680nm TGG Based PM Optical Circulator

The TGG Based Optical Circulator is a high-performance light-wave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. They're characterized with low insertion loss, high isolation, high power handling, high PER, high return loss, excellent environmental stability and reliability. They are ideal for fiber laser and instrumentation applications.

If you do not see a standard circulator that meets your needs, we welcome the opportunity to review your desired specification and quote a custom circulator. Requests for custom fiber pigtails, different wavelengths and handling power of operation or other specific needs will be readily addressed.



# For more Info

### Please contact us at:

Tel: +86-755-23736280

Fax: +86-755-26746512

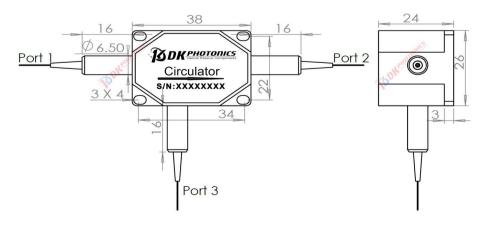
E-mail: sales@dkphotonics.com https://www.dkphotonics.com

Add.:

4F, Bldg. 18, Qinghu Industrial Park, Dahe Road, Longhua Dis.,

Shenzhen, China 518109

# **Package Dimension:**



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.





### **Performance Specifications**

| Parameters                               | Unit | Values  |  |  |
|--|------|---|--|--|
| Operation Wavelength                     | nm   | 680   |  |  |
| Operating Wavelength Range               | nm   | ±5  |  |  |
| Typ. Peak Isolation                      | dB   | 25  |  |  |
| Min. Isolation, λc, 23 °C                | dB   | 20  |  |  |
| Typ. Insertion Loss, 23 °C               | dB   | 1.2   |  |  |
| Max. Insertion Loss, 23 °C               | dB   | 1.8   |  |  |
| Min. Extinction Ratio (for PM fiber)     | dB   | 18(Type B), 20(Type F)                                  |  |  |
| Min. Cross Talk                          | dB   | 45 (Typ. 50)  |  |  |
| Min. Return Loss                         | dB   | 45  |  |  |
| Maximum Power Handling (continuous wave) | mW   | 300 mW (With Connectors or Bare Fiber),500 mW (Spliced) |  |  |
| Max. Tensile Load                        | N    | 5   |  |  |
| Fiber Type                               | -    | PM: PM630-HP  |  |  |
| Operating Temperature                    | °C   | 0 ~ +60   |  |  |
| Storage Temperature                      | °C   | -10 ~ +75   |  |  |

- 1. Above specification are for device without connector, and may change without notice.
- 2. IL is 1.0 dB higher and RL is 5 dB lower, ER is 2dB lower (PM type) for each connector added.
- 3. Type B: Both axis working, Type F: Fast axis blocked, the default is Type B if without request. (Only for PM type)

#### Order information P/N: PMOC-B/F- (1)-(2)-(3)-(4)-(5)-(6)

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250µm bare fiber pigtail. For high power applications, we recommend direct splicing without connectors.

| 1        | 2                    | 3              | 4                    | <b>⑤</b>     | 6          |
|----------|----------------------|----------------|----------------------|--------------|------------|
| Port     | Operating Wavelength | Fiber Type     | Fiber Diameter       | Fiber Length | Connector  |
| 3:3-port | 680:680nm            | P63: PM630-HP  | 25:250µm bare fiber  | 05:0.5m      | 00: None   |
|          | xx: others           | XX: fiber name | 90:900µm Loose Fiber | 10:1.0m      | FP: FC/PC  |
|          |                      |                | XX: Others           | 15:1.5m      | FA: FC/APC |
|          |                      |                |                      | XX: Others   | XX: Others |

Part Number Example: PMOC-F-3-680-P63-90-10-FA

Description: 680nm 3-port Polarization Maintaining Optical Circulator, Fast axis blocked, PM630-HP fiber, with 0.9mm OD loose tube, 1.0m length fiber pigtails, FC/APC connectors.

# **Ordering Information for Custom Parts**

If you need to customize other specifications, please provide detailed description for your requirement.