

## 850nm TGG Based PM Optical Circulator

### Key Features

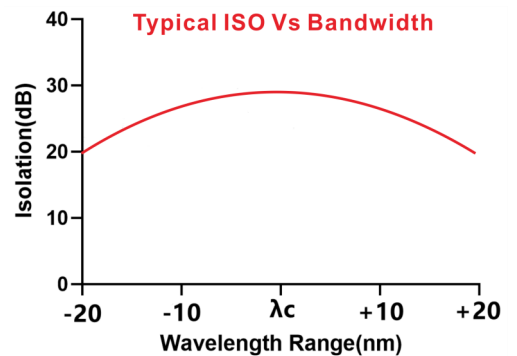
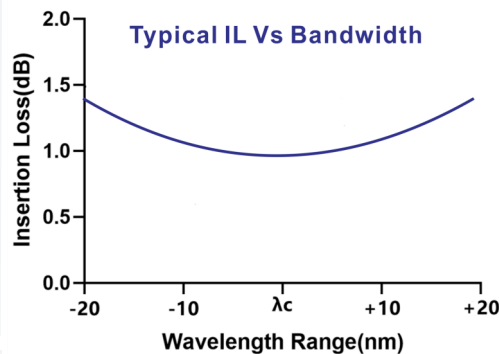
- Low Insertion Loss
- High Power Handling
- High Isolation
- PM and Non-PM are available
- Fiber can be customized
- High Reliability
- Excellent Temperature

The TGG Based PM 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 PER, high power handling, 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.

### Applications

- Fiber optic Amplifiers
- Pump Laser Source
- Fiber optic Sensor
- Test and Measurement
- Instrumentation



## For more Info

### Please contact us at:

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Fax: +86-755-26746512

E-mail: [sales@dkphotonics.com](mailto:sales@dkphotonics.com)

<https://www.dkphotonics.com>

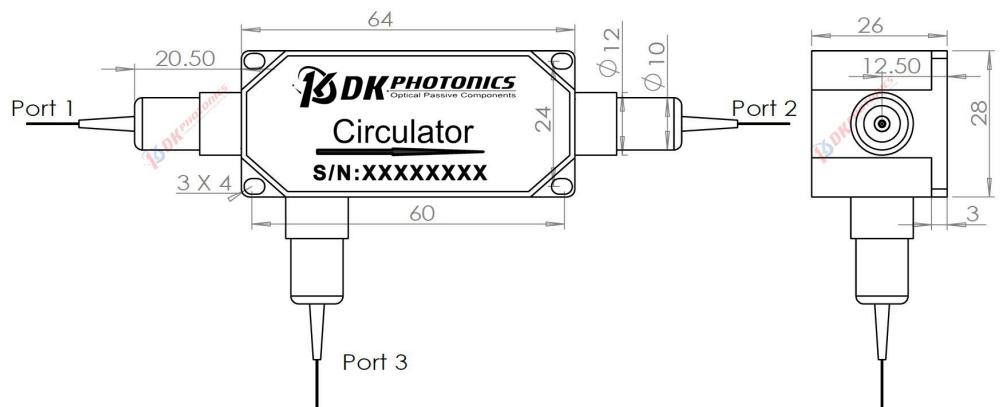
Add.:

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

### 850nm TGG Based PM Optical Circulator

Parameters	Unit	Values
Operation Wavelength	nm	850
Operating Wavelength Range	nm	±10
Typ. Peak Isolation	dB	26
Min. Isolation, $\lambda_c$ , 23 °C	dB	22
Typ. Insertion Loss, 23 °C	dB	1.0
Max. Insertion Loss, 23 °C	dB	1.5
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
Power Handling (total pass)	W	0.5,3,5,10
Max. Peak Power for ns Pulse	kW	10, 20 (for typical pulse application)
Max. Tensile Load	N	5
Fiber Type	-	PM780-HP, or other
Operating Temperature	°C	0 ~ +60
Storage Temperature	°C	-10 ~ +75

- Above specification are for device without connector, and may change without notice.
- IL is 0.3 dB higher and RL is 5 dB lower, ER is 2dB lower (PM type) for each connector added.
- The pass optical power is 2 W only for connector added, higher power requires splicing fibers.
- 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-①-②-③-④-⑤-⑥-⑦(B: Both axis working, F:Fast axis blocked)

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 250 $\mu$ m bare fiber pigtail. For high power applications, we recommend direct splicing without connectors.

①	②	③	④	⑤	⑥	⑦
Port	Operating Wavelength	Power Handling	Fiber Type	Fiber Diameter	Fiber Length	Connector
3:3-port	85:850nm XX: Others	L:<0.5W 1:1W 3:3W 5:5W 10:10W	P78: PM780-HP XX: fiber name	25:250 $\mu$ m bare fiber 90:900 $\mu$ m Loose Fiber XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC XX: Others

**Part Number Example:** PMOC-F-3-85-L-P78-90-10-FA

**Description:** 850nm 3-port Polarization Maintaining Optical Circulator, fast axis blocked, 0.5W power handling, PM780-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.