

## 1030nm TGG Based Optical Circulator

### Key Features

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

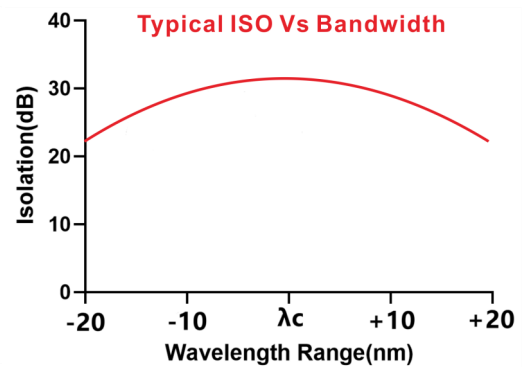
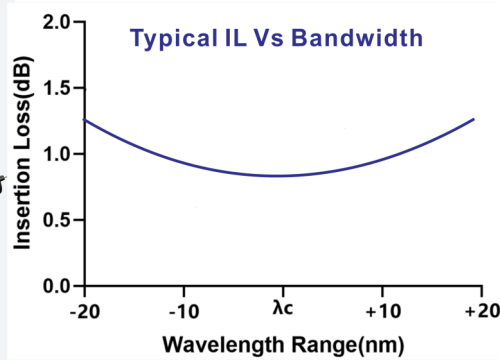
The TGG Based Optical Circulator is a high-performance light-wave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. They're characterized with low insertion loss, high isolation, high power handling, high return loss, low PDL, excellent environmental 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 pigtailed, 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:

Tel: +86-755-23736280

Fax: +86-755-26746512

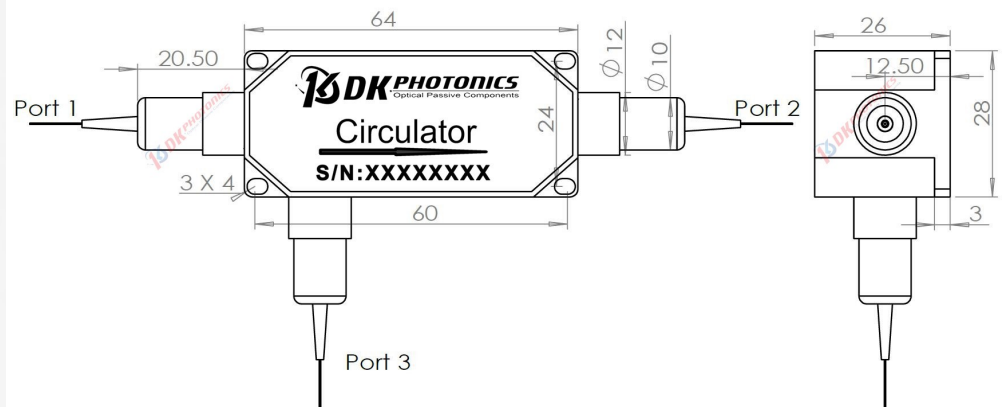
E-mail: [sales@dkphotonics.com](mailto:sales@dkphotonics.com)

<https://www.dkphotonics.com>

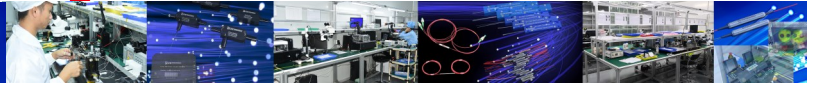
Add.:

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



## 1030nm TGG Based Optical Circulator

### Performance Specifications

Parameter	Unit	Values
Operation Wavelength	nm	1030,1040, 1050
Operating Wavelength Range	nm	±10
Typ. Peak Isolation	dB	30
Min. Isolation, λc, 23°C	dB	25
Typ. Insertion Loss, 23°C	dB	1.0
Max. Insertion Loss, 23°C	dB	1.4
Max. PDL(for SM fiber)	dB	0.15
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	-	1060-XP fiber, 10/125DC, 20/130DC, 25/250DC, or other
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 0.3 dB higher and RL is 5 dB lower for each connector added.
3. The pass optical power is 2 W only for connector added, the connector is only used for performance testing at low power, higher power requires splicing fibers.
4. If there is pulse application, please be sure to inform us of pulse energy and peak power.

### Order information P/N: PIOC-①-②-③-④-⑤-⑥-⑦

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	⑤	⑥	⑦
Port	Wavelength	Power Handling	Fiber type	Pigtails Diameter	Fiber Length	Connector
3:3-port	30:1030nm 40:1040nm 50:1050nm XX: other	L:<0.5W 1:1W 3:3W 5:5W 10:10W	06X:1060-XP XX: fiber code	25:250μm bare fiber 90:900μm 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 :** PIOC-3-30-2-06X-25-10-00

**Description:** 1030nm 3-port TGG Based Polarization Insensitive Optical Circulator, 2W power handling, 1060-XP fiber, with bare fiber, 1.0m length fiber pigtails, without connectors.

### Ordering Information for Custom Parts

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