# Circulator & Isolator





# **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
- Pump Laser Source
- Fiber optic Sensor
- Test and Measurement
- Instrumentation

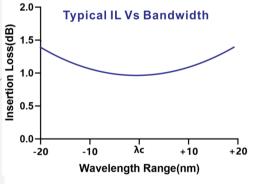
### 930nm TGG Based Optical Circulator

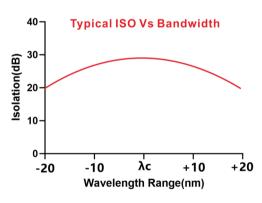
The TGG Based Optical Circulator is a high-performance light-wave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. They're characterized with low insertion loss, high isolation, high power handling, high return loss, low PDL, excellent environmental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

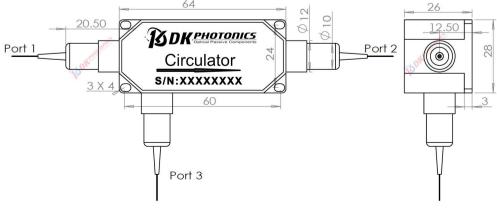
https://www.dkphotonics.com

#### 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

Email: sales@dkphotonics.com







### 930nm TGG Based Optical Circulator

### **Performance Specifications**

Parameter	Unit	Values	
Operation Wavelength	nm	930	
Operating Wavelength Range	nm	±10	
Typ. Peak Isolation	dB	25	
Min. Isolation, λc, 23°C	dB	20	
Typ. Insertion Loss, 23°C	dB	1.0	
Max. Insertion Loss, 23°C	dB	1.5	
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	-	780-HP, 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	6	6	<b>⑦</b>
Port	Wavelength	Power Handling	Fiber type	Pigtails Diameter	Fiber Length	Connector
3:3-port	93:930nm	L:<0.5W	S78:780-HP	25:250µm bare fiber	05:0.5m	00: None
	XX: other	1:1W	XX: fiber code	90:900µm Loose Fiber	10:1.0m	FP: FC/PC
		3:3W		XX: Others	15:1.5m	FA: FC/APC
		5:5W			XX: Others	XX: Others

Part Number Example : PIOC-3-93-1-S78-25-10-00

**Description:** 930nm 3-port TGG Based Polarization Insensitive Optical Circulator, 1W power handling, 780-HP 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.