## **Polarization Maintaining Components**





## **Key Features**

- Compact size
- High Isolation
- High Extinction Ratio
- Low Cost
- High Stability & Reliability

# **Applications**

- Fiber Amplifiers
- Fiber Sensor
- Test and Measurement
- Coherent Detecting

#### 1310m Polarization Maintaining Optical Circulator (Fast axis blocked)

The polarization maintaining optical circulator is a compact, high performance light wave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. So, fiber optic circulators act as signal routers, transmitting light from an input fiber to an output fiber, but directing light that returns along that output fiber to a third port. They perform a similar function as an isolator, protecting the input fiber from return power, but also allowing the rejected light to be employed.

If you do not see a standard Optical 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

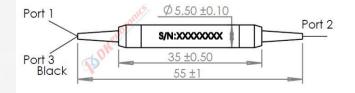
Fax: +86-755-26746512

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

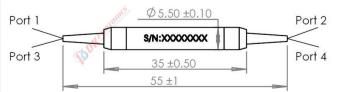
Add.:

4F, Bldg. 18, Qinghu Industrial Park, Dahe Road, Longhua Dis., Shenzhen, China 518109

## **Package Dimension:**



The transmission optical path: 1 -> 2, 2 -> 3



Email: sales@dkphotonics.com

The transmission optical path: Type A: 1 -> 2, 2 -> 3, 3 -> 4;

Type B: 1 -> 2, 2 -> 3, 3 -> 4;4->1

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



#### 1310nm Polarization Maintaining Optical Circulator (Fast axis blocked)

## **Performance Specifications**

Parameter	Unit		Values			
Axis	-	Fast axis blocked				
Center Wavelength	nm		1310			
Port	-	3		4		
Isolation level	-	Type A	Type B	Type A		
Operating Wavelength Range	nm	± 30	± 20	± 30		
Min. Isolation at 23°C	dB	40	20	40		
Typ. Isolation at 23°C	dB	46	30	50		
Peak Isolation at 23°C	dB	52	40	55		
Typ. Insertion Loss at 23°C	dB	0.7	0.6	0.8		
Max. Insertion Loss at 23°C	dB	0.9	0.8	1.1		
Min. Extinction Ratio at 23°C	dB	20	20	20		
Min. Return Loss	dB		50			
Min. Cross Talk	dB		50			
Max. Power Handling (total input, continuous wave)	W		0.5, 1, 3,			
Max. Tensile Load	N		5			
Fiber Type	-	PM <sup>2</sup>	PM1300-XP Panda Fiber			
Operating Temperature	°C	-5 to +70				
Storage Temperature	°C	-40 to +85				
Package Dimensions	mm		Ø5.5 x L35			

- 1. Above specifications are for device without connector.
- 2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower and ER will be 2dB lower. The default connector key is aligned to slow axis. Power transmits through the connector less than 2W.
- 3. If there is pulse application, please be sure to inform us of pulse energy and peak power.
- 4. For high power applications, we will use heat sink package, contact DK Photonics for details.
- 5. For high-power applications, IL and ISO will be slightly worse due to the heat absorbed by the Faraday plate and the temperature rise. But they are all within a reasonable range. For more information, please contact DKP.

#### **Order information** P/N: PMOC-①-②-③-④-⑤-⑥-⑦-⑧-⑨

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.

1	2	3	4	5	6	7	8	9
Port	Operating Wavelength	Axis	Isolation level	Power Handling	Fiber type	Pigtails Diam- eter	Fiber Length	Connector
3:3-port 4:4-port	13:1310nm XX: Others	F: Fast axis blocked	A: Type A B: Type B	L:<0.5W 1:1W 3:3W XX: Others	P13X: PM1300-XP XX: fiber name	25:250μm bare fiber 90:900μm Loose tube 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-3-13-F-B-1-P13X-25-10-00

**Description:** 1310nm 3-port Polarization Maintaining Optical Circulator, 1W, Fast axis blocked, Type B, with PM1300-XP bare fiber, 1.0m length fiber and no connector at all ports.

## **Ordering Information for Custom Parts**

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