# Circulator & Isolator



# **Key Features**

- Low Insertion Loss
- Wide Band High Isolation
- Low PDL
- Compact In-Line Package
- High Stability and Reliability
- Epoxy Free Optical Path

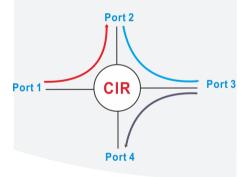
# 1550nm 4 port Polarization Insensitive Optical Circulator

The C+L Band 4 Port Polarization Insensitive Optical Circulator is a compact, high-performance light-wave component that routes incoming signals from Port 1 to Port 2, incoming Port 2 signals to Port 3, and incoming Port 3 signals to Port 4. This component provides high isolation, low insertion loss, and excellent environment stability. It can be used for wavelength add/drop, dispersion compensation and EDFA applications.

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.

# **Applications**

- Optical Amplifier
- Metro Area Network
- Wavelength Add / Drop
- Dispersion Compensation
- Bi-Direction Communication



# For more Info

#### Please contact us at:

Tel: +86-755-23736280

Fax: +86-755-26746512

E-mail: sales@dkphotonics.com

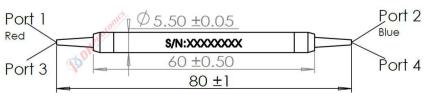
https://www.dkphotonics.com

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.





# 1550nm 4 Port Polarization Insensitive Optical Circulator

## **Performance Specifications**

Parameter	Unit	Values		
Grade	-	P Grade	A Grade	
Configuration	-	Port 1 to Port 2 to Port 3 to Port 4		
Operation Wavelength	nm	1550± 30		
Channel Peak Isolation	dB	50		
Channel Minimum Isolation	dB	38		
Typical Insertion Loss,23℃	dB	0.7	1.0	
Minimum Insertion Loss,23℃	dB	0.9	1.2	
Min. Return Loss	dB	50		
Min. Channel Cross Talk	dB	50		
Max. Polarization Dependent Loss	dB	0.15		
Max. Polarization Mode Dispersion	ps	0.1		
Maximum Power Handling(Total input, continuous wave)	W	0.5		
Max. Tensile Load	N	5		
Fiber Type	-	SMF-28e fiber		
Operating Temperature	°C	0 ~+70		
Storage Temperature	°C	-40 ~+85		
Package Dimension	mm	Ø5.5xL60		

<sup>1.</sup> Above specification are for device without connector and may change without notice.

### 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.

1	2	3	4	<b>⑤</b>	6	0
Port	Operating Wavelength	Grade	Power Handling	Fiber Diameter	Fiber Length	Connector
4:4port	13:1310nm 15:1550nm CL:C+L Band	P: P grade A: A grade	L: <0.5W 1:1W 3:3W	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 SA: SC/APC LP: LC/PC LA: LC/APC XX: Others

Part Number Example: PIOC-4-15-P-L-90-10-FA

**Description:** 1550nm 4-port Polarization Insensitive Optical Circulator, P grade, 500mW power handling, with 0.9mm OD loose tube, 1.0m length fiber pigtails, FC/APC connectors at all ports.

# **Ordering Information for Custom Parts**

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

<sup>2.</sup> IL is 0.3 dB higher and RL is 5 dB lower for each connector added.