

Polarization-Insensitive Optical Circulator (3 & 4 port)



ACP's Polarization insensitive optical circulator utilizes proprietary designs and metal bonding micro optics packaging. It provides low insertion loss, broad band high isolation, low PDL, excellent temperature stability and optical path epoxy free. It can be used for wavelength add/drop, dispersion compensation and EDFA application.

FEATURES

Low Insertion Loss	Optical Amplifier
Wide Band, High Isolation	Metro Area Network
Low PDL	Wavelength Add/Drop
Compact In-line Package	Dispersion Compensation
High Stability and Reliability	Bi-directional Communication
Epoxy Free Optical Path	

PERFORMANCE SPECIFICATIONS

Parameter	Specifications				
Number of Ports	3			4	
Operating Wavelength	1310, 1550 or 1585nm	1650nm		1310 or 1550nm	
Bandwidth	± 30nm	± 30nm	± 25nm	± 30nm	± 30nm
Grade	P	A	P	P	A
Typical Peak Isolation	50dB	50dB	50dB	50dB	50dB
Minimum Isolation*	≥ 40dB@± 30nm		≥ 32dB	≥ 40dB	≥ 40dB
	≥ 32dB@± 50nm				
Configuration	P1 - P2 and P2- P3				
Insertion Loss (Typ.)	0.60dB	0.80dB	1.0dB	0.80dB	1.0dB
Insertion Loss (Max)	≤ 0.80dB	≤ 1.0dB	≤ 1.5dB	≤ 1.0dB	≤ 1.2dB
Return Loss	≥ 50dB	≥ 50dB	≥ 40dB	≥ 50dB	≥ 50dB
Polarization Dependent Loss	≤ 0.15dB	≤ 0.15dB	≤ 0.25dB*	≤ 0.15dB	≤ 0.15dB
Polarization Mode Dispersion	≤ 0.10ps	≤ 0.10ps	≤ 0.20ps	≤ 0.10ps	≤ 0.10ps
Channel Crosstalk	≥ 50dB	≥ 50dB	≥ 45dB	≥ 50dB	≥ 50dB
Optical Power	≤ 300mW				
Operating Temperature	0 to +70°C				
Storage Temperature	- 40 to +85°C				
Package Dimensions	A=Φ5.5xL63mm M=Φ5.5xL50mm				
	A=Φ5.5xL68mm(250um fiber) Φ5.5xL72mm(900um fiber)				

Note:

* Measured at 23°C

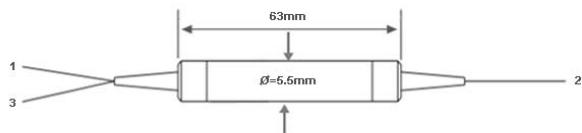
IL is 0.3 dB higher and RL is 5 dB lower for each connector added.

All values referenced are without connector.

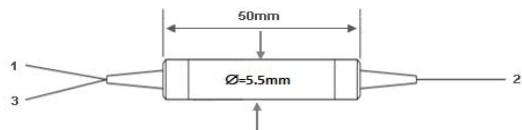
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MECHANICAL DIMENSIONS

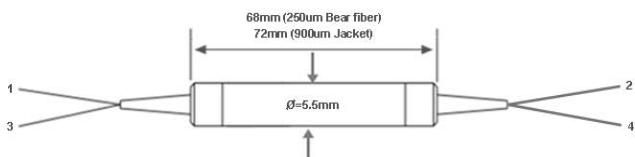
3 port A package:



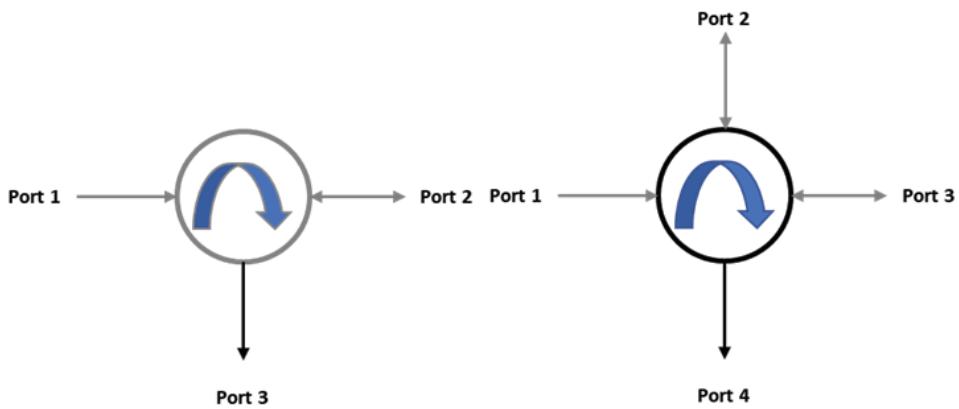
3 port M package:



4 port A package:



PORT CONFIGURATIONS



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ORDERING INFORMATION

PIOC	Port	Grade	Operating Wavelength	Package	Fiber Type*	Pigtail Style	Fiber Length	In Connector	Out Connector
3=3 Port	P=P Grade	31=1310nm	A=A package	2=SMF-28 Ultra	1=Bare fiber	05=0.5m	0=None	0=None	0=None
4=4 Port	A=A Grade	55=1550nm	M=M package	(G.657.A1)	2=900um	10=1.0m	1=FC/APC	1=FC/APC	1=FC/APC
		58=1585nm		3=ClearCurve	loose tube	.	2=FC/PC	2=FC/PC	
		65=1650nm		ZBL(G.657.B3)		.	3=SC/APC	3=SC/APC	
						20=2.0m	4=SC/PC	4=SC/PC	
							5=ST	5=ST	
							6=LC/UPC	6=LC/UPC	
							7=LC/APC	7=LC/APC	

*1=SMF-28(G.652) is available upon request.

RELATED PRODUCTS

[Compact Polarization-Insensitive Optical Circulator \(3 port\)](#)

[CL Band Polarization Insensitive Optical Circulator](#)

[U Band Polarization Insensitive Optical Circulator](#)

[High Power Polarization Insensitive Optical Circulator](#)

[800 ~ 1060nm SM Circulators](#)

[Polarization Maintaining Circulators](#)

[Multimode Optical Circulators](#)