



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
- Wide Band, High Isolation
- Low PDL
- Compact In-line Package
- High Stability and Reliability
- Epoxy Free Optical Path

APPLICATION

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

PERFORMANCE SPECIFICATIONS

Parameter	Specifications					
	3			4		
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			P1 - P2, P2 - P3 and P3 - P4		
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:

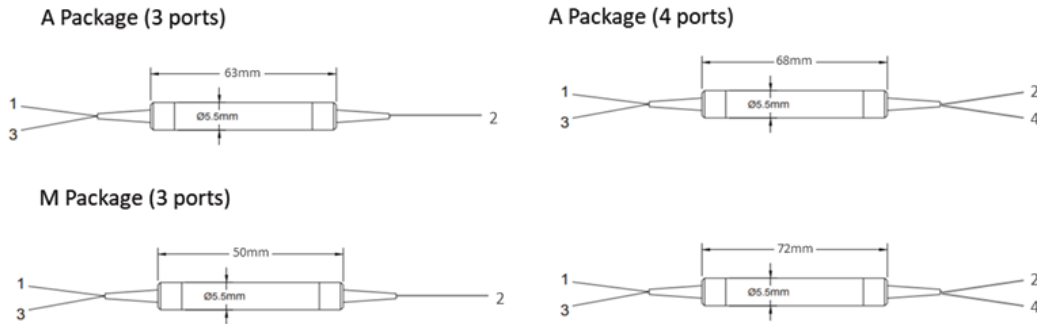
* Measured at 23°C

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

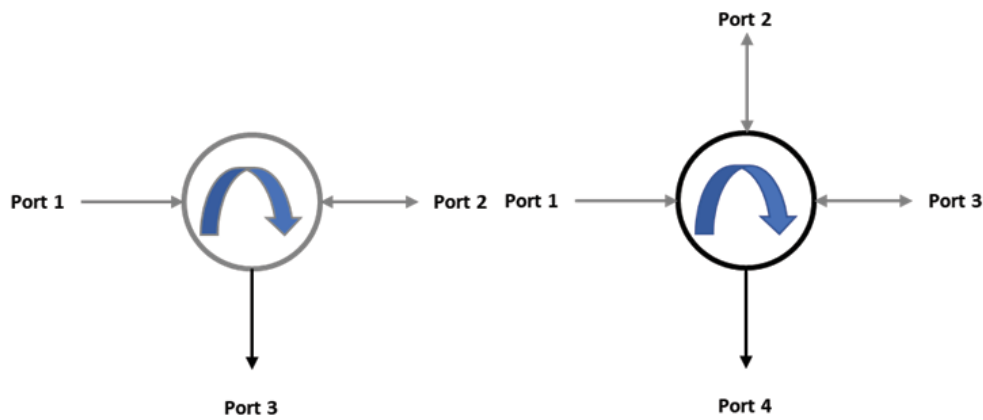
All values referenced are without connector.

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MECHANICAL DIMENSIONS



PORT CONFIGURATIONS



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	
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	
		58=1585nm		3=ClearCurve	loose tube	·	2=FC/PC	2=FC/PC	
		65=1650nm		ZBL(G.657.B3)		·	3=SC/APC	3=SC/APC	
						·	4=SC/PC	4=SC/PC	
						20=2.0m	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.