

# 1310/1550 nm Optical Circulator

(patents pending)

## Product Description

The OC Series 1310/1550 Optical Circulators are non-reciprocal devices that redirect light at 1310/1550 nm from port-to-port in only one direction while minimizing back reflection and back scattering in the reverse directions for any state of polarization. Employing Agiltron's advanced micro optics design, it features low insertion loss, low polarization sensitivity, high isolation, compact structure, and high stability. The excellent characteristics of this product make it an ideal choice for application in fiber amplifier systems, pump laser diodes, and optical fiber sensors.



## Performance Specifications

OC Series 1310/1550 Circulator		Specifications			Unit
Operating Wavelength	1310	1295 ~ 1325			nm
	C Band	1530 ~ 1570			
	L Band	1570 ~ 1610			
	C + L	1525 ~ 1610			
Type	3- Port			4-Port	nm
		1310	C, L	C + L	
Insertion Loss <sup>1</sup>	Typical	0.6	0.7	0.7	dB
	Maximum	0.9	1.0	1.0	
Isolation (2→1, 3→2, or 4→3) <sup>2</sup>		36	30	36	dB
Directivity (1→3 or 2→4)		> 50			dB
Polarization Dependent Loss		< 0.10		0.15 <	dB
Polarization Mode Dispersion		< 0.1			ps
Return Loss <sup>1</sup>		> 50			dB
Optical Power Handling		< 500			mW
Operating Temperature Range		0 ~ 70			°C
Storage Temperature		-40 ~ 85			°C
Fiber Type		Corning SMF-28			
Fiber Length		> 1			m
Package Dimension		Φ5.5x 58.0(L)	Φ5.5x 65.0(L)		mm

1. Excluding connectors

2. @λ<sub>op</sub>, Top, SOP

## Features

- Low Insertion Loss
- Low PDL
- High Channel Isolation
- Compact Package
- High Reliability & Stability
- Cost Effective

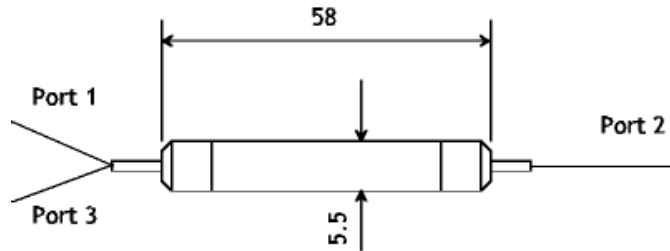
## Applications

- Optical Fiber Amplifier
- Metropolitan Area Network
- Fiber Optic Sensor
- Dispersion Compensation
- Test and Measurement
- Instrumentation

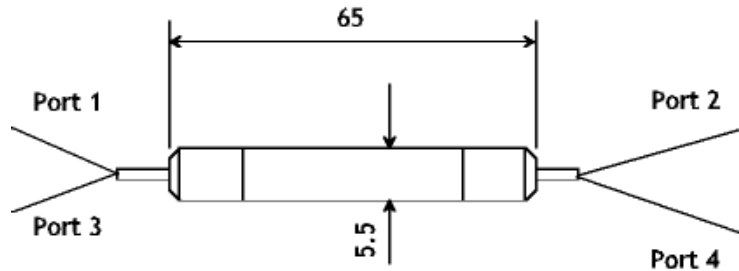
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## Mechanical Dimensions (mm)

3-Port Circulator



4-Port Circulator



## Ordering Information

OCPI-	Type	Wavelength	Grade	Package Type	Fiber Type	Fiber Length	Connector	
<input type="checkbox"/> <input type="checkbox"/>	3 Port=30 4 Port=40 Special=00	1310=3 1550=5 C band=C L band=L C+L=2 Special=0	Standard=1 Special=2	5.5 x 58=1 5.5 x 65=2 Special=0	SMF-28=1 Special=0	Bare fiber=1 900um loose tube=3 Special=0	0.25m=1 0.5 m=2 1.0 m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0