

# Miniature Polarization Maintaining Optical Circulator

(patent pending)

## Product Description

The OC Series 1310/1550 PM Optical Circulator is a non-reciprocal device that maintains polarization while redirecting light at 1310/1550 nm from port-to-port in only one direction while minimizing back reflection and back scattering in the reverse direction. Employing Agiltron's advanced micro optics design, it features low insertion loss, high extinction ratio, high isolation, compact package, and high stability. The excellent characteristics of this product make it an ideal choice for application in fiber amplifier systems, pump lasers, and optical fiber sensors.



## Features

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

## Performance Specifications

OC Series PM 1550 Circulator	Min	Typical	Max	Unit
Operation Wavelength	1310±15, C-Band or L-Band			nm
Insertion Loss <sup>1</sup> (1→2, 2→3)		0.7	1.0	dB
Channel Isolation <sup>2</sup> (2→1, 3→2)	40	45		dB
Wavelength Dependent Loss		0.15		dB
Extinction Ratio	18	22		dB
Directivity (1→3)	> 50			dB
Return Loss <sup>1</sup>	> 50			dB
Polarization Alignment	Slow Axis			
Optical Power Handling	Maximum: 500			mW
Tensile Load	Maximum: 5			N
Operating Temperature Range	0 ~ 75			°C
Storage Temperature	-40 ~ 85			°C
Fiber Type	Panda PM 1550			
Fiber Length	> 1			m
Package Dimension	Φ3.8x 34(L)			mm

<sup>1</sup>@λ<sub>op</sub>, Top, SOP , Excluding connectors

<sup>2</sup>@λ<sub>op</sub>, Top

<sup>3</sup>Fast axis alignment available

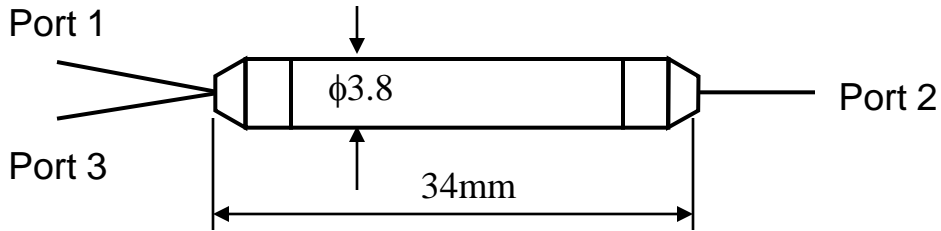
## Applications

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



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## Mechanical Dimensions (mm)



## Ordering Information

OCPM-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	Grade	Package	Fiber	Fiber Length	Connector		
3 Port=30 Special=00	1310=3 1550=5 C band=C L Band=L C+L=2 Special=0	Standard=1 Special=0	$\phi 3.8 \times 34=2$ Special=0	Panda 400um=A Panda 250um=B Panda RC80=C Special=0	Bare fiber=1 900um loose tube=3 Special=0	0.25m=1 0.5m=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	