# **Fiber Optical Circulator**



1310nm, 1550 nm

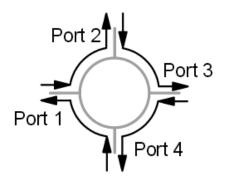


#### DATASHEET





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.



### **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

# **Specifications**

OC Series 1310/1550 Ci	Specifications				Unit	
Operating Wavelength	1310	1295 ~ 1325				nm
	C Band	1530 ~ 1570				nm
	L Band	1570 ~ 1610				nm
	C + L	1525 ~ 1610				nm
Turpe		3- Port			4- Port	
Туре		1310	C, L	C +L	1310, C, L	nm
Insertion Loss [1]	Typical	0.6		0.7	0.7	dB
	Maximum	0.9		1.0	1.0	dB
Isolation ( $2\rightarrow 1$ , $3\rightarrow 2$ , or $4\rightarrow 3$ ) <sup>[2]</sup>		36		30	36	dB
Directivity (1 $\rightarrow$ 3 or 2 $\rightarrow$ 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] @λop, Top, SOP

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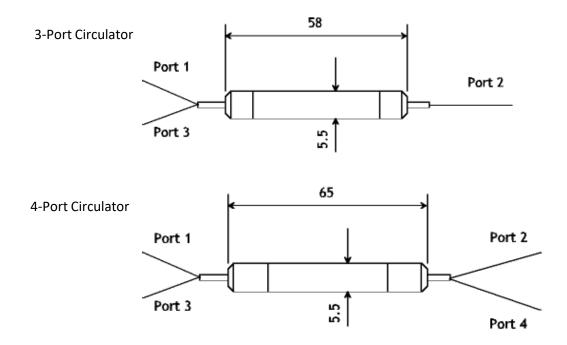
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## **Mechanical Dimensions (mm)**



\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

### Loose Tube Color Key

Port 1= red 900  $\mu$ m loose tube Port 2 = blue 900  $\mu$ m loose tube Port 3 = white 900  $\mu$ m loose tube

### **Ordering Information**

Prefix	Туре	Wavelength	Grade	Package Type	Fiber Type	Fiber Cover	Fiber Length	Connector
OCPI-	3 Port = 30 4 Port = 40 Special = 00	1525~1610 nm = 2 1295~1325 nm = 3 1530~1570 nm = 5 1570~1610 nm = L	Standard = 1 Special = 2	5.5 x 58 = 1 5.5 x 65 = 2 5.5 x 38 = 3 Special = 0	SMF-28 = 1 Special = 0	Bare fiber = 1 900um loose tube = 3 Special = 0	0.25m = 1 0.5m = 2 1.0m = 3 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0

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