

# ECO SERIES 4-PORT POLARIZATION INSENSITIVE MINIATURE OPTICAL CIRCULATOR

## MIOC4 Eco Series

### Product Description

Oplink's polarization insensitive miniature circulator features excellent optical characteristics over a wide wavelength range while delivering a smallest form factor. It possesses low insertion loss, high isolation, and low PDL making it an ideal candidate for EDFA, add/drop, dynamic gain equalization, dispersion compensation and other optical network applications.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.



### Performance Specification

MIOC4 Eco Series		Min	Typical	Max	Unit
Operating Wavelength Range ( $\lambda_{op}$ )	1310	1290 ~ 1330		nm	
	C Band	1525 ~ 1565			
	L Band	1570 ~ 1610			
	C+L Band	1525 ~ 1610			
Insertion Loss (1→2, 2→3, 3→4 @ $\lambda_{op}, T_{op}, SOP$ )	1310, C or L	0.6	0.8	dB	
	C+L Band	0.7	0.9		
Polarization Mode Dispersion (PMD)	1310, C or L	0.06		ps	
	C+L Band	0.1			
Channel Isolation (2→1, 3→2, 4→3 @ $\lambda_{op}, T_{op}, SOP$ )	1310, C or L	38		dB	
	C+L Band	32			
Peak Isolation	50		dB		
Directivity (1→3, 2→4)	50		dB		
Polarization Dependent Loss (PDL)			0.15	dB	
Return Loss (RL)	50		dB		
Optical Power Handling			500	mW	
Operating Temperature Rang ( $T_{op}$ )	0 to +70		°C		
Storage Temperature	-40 to +85		°C		
Fiber Type	Corning SMF-28				
Physical Dimension	(Φ) 5.5 x (L) 40.0		mm		

Note:

<sup>1)</sup> All the parameters exclude connector contribution.

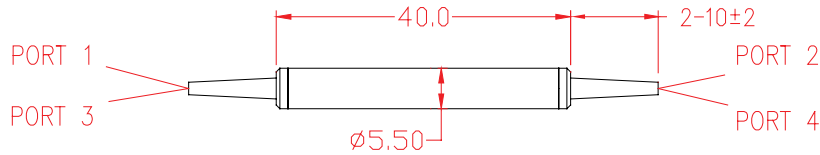
### Features

- ◆ Wide Wavelength Selection
- ◆ Smallest Package Size
- ◆ Low Insertion Loss, PDL
- ◆ High Channel Isolation
- ◆ Epoxy-free on Optical Path
- ◆ Telcordia GR1221/1209 Qualified
- ◆ RoHS6/6 Compliant

### Applications

- ◆ Dispersion Compensation
- ◆ Fiber Sensor
- ◆ Test Instruments
- ◆ Optical Amplification

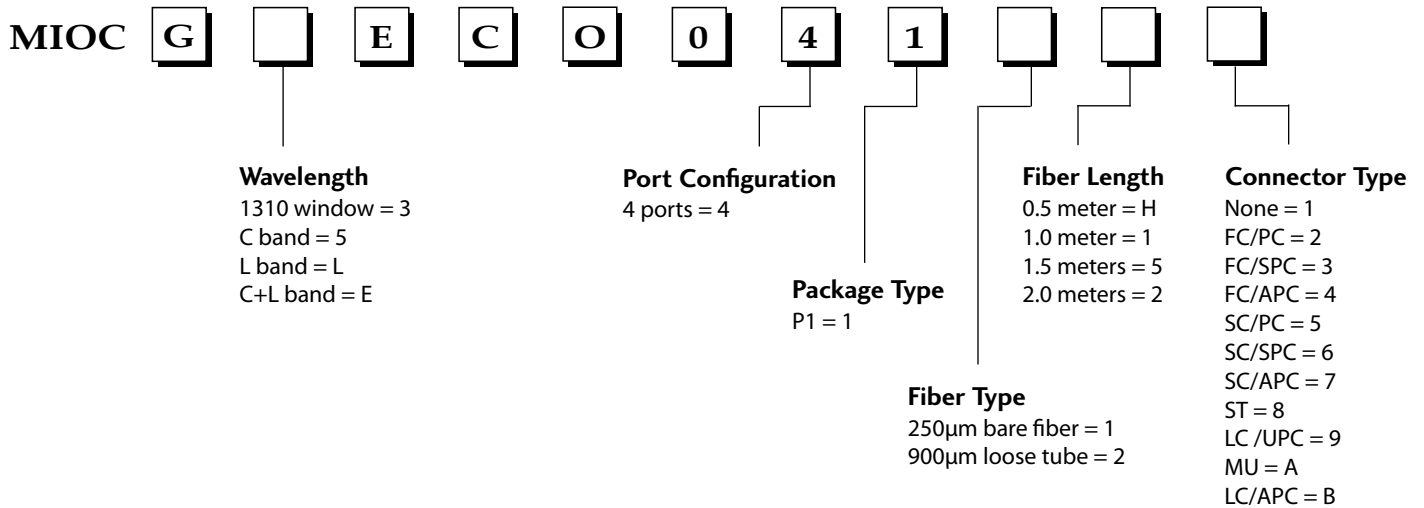
**Mechanical Drawing / Package Dimensions**



NOTES: (UNLESS OTHERWISE SPECIFIED)  
1. ALL DIMENSIONS ARE IN mm.  
2. TOL: .X=±0.5, .XX=±0.2.

**Ordering Information**

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.



\* The tolerance of fiber length is +/-0.1m.  
\* 1 meter is standard. The lead time for special fiber length will be longer.