

# 3-PORT POLARIZATION INSENSITIVE MINIATURE OPTICAL CIRCULATORS

## MIOC3 Series

### Product Description

Oplink's polarization insensitive miniature circulator features excellent optical characteristics over a wide wavelength range while delivering a very small 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

MIOC3 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 or 2→3 @ $\lambda_{op}$ , $T_{op}$ , SOP, exclude connectors)	1310, C or L	0.5	0.7	dB	
	C+L Band	0.7	0.9		
Polarization Dependent Loss (PDL)	1310, C or L		0.1	dB	
	C+L Band		0.2		
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			
Directivity (1→3)		50			dB
Return Loss (RL)		50			dB
Chromatic Dispersion (CD)				3	ps/nm
Optical Power Handling				500	mW
Operating Temperature Rang (Top)			0 to +70		°C
Storage Temperature			-40 to +85		°C
Fiber Type		Corning SMF-28			
Color Code		Port 1: black; Port 2 & 3: clear			
Physical Dimensions		(Φ) 5.5 x (L) 38.0			mm

Note:

<sup>1)</sup> The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified..

<sup>2)</sup> All the parameters are excluding connectors.

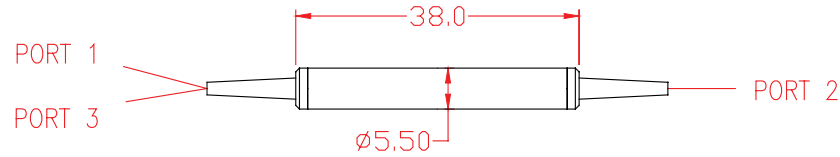
### Features

- ◆ Smallest Package Size
- ◆ Low Insertion Loss
- ◆ Low PDL
- ◆ High Channel Isolation
- ◆ Highly Stable & Reliable
- ◆ Epoxy-free Optical Path
- ◆ Low Dispersion

### Applications

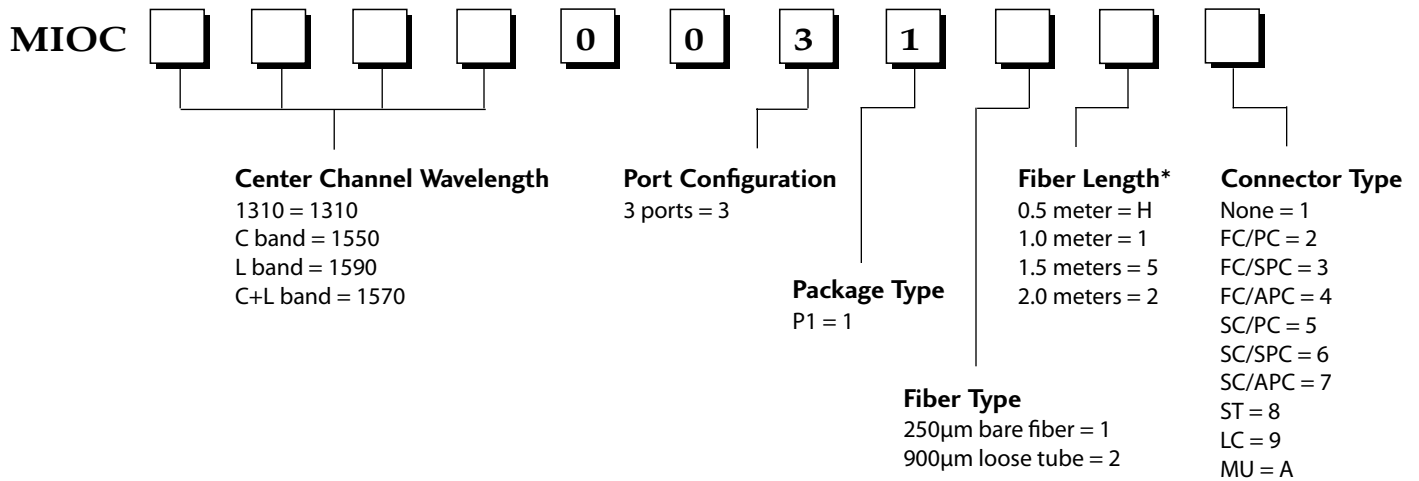
- ◆ Optical Amplification
- ◆ Metropolitan Area Network
- ◆ Dynamic Gain Equalization
- ◆ Dispersion Compensation
- ◆ Laboratory R&D

## Mechanical Drawing / Package Dimensions (dimension in mm)



## 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.



### RoHS:

1. Add "G" to the end of the above PN for RoHS 6 Requirement.

\* The tolerance of fiber length is +/-0.1m. 1 meter is standard.

\* The lead-time for special fiber length will be longer.