

POLARIZATION MAINTAINING BEAM SPLITTER/OPTICAL CIRCULATOR HYBRID

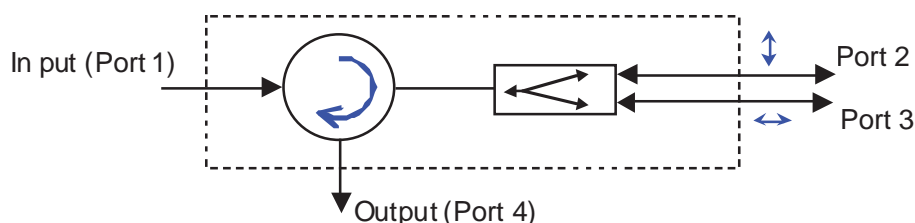
PBOC Series

Product Description

Oplink's Polarization Maintaining Beam Splitter/Optical Circulator (PBOC) hybrid module combines the functionalities of a beam splitter and a circulator while providing polarization control. It is specially designed for optical module or subsystem integration, such as dynamic gain equalizers (DGEs), planar lightwave circuit (PLC) devices, optical waveguide modules and MEMS based modules. The PBOC features low insertion loss, low dispersion and compact packages.

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.

Function Diagram



Performance Specification

PBOC Series		Min	Typical	Max	Unit
Operating Wavelength Range (λ_{op})	C Band	1520 ~ 1570			nm
	L Band	1570 ~ 1610			
Insertion Loss ⁽¹⁾ @ $\lambda_{op}, T_{op}, SOP$	1→2, 1→3, 2→4 or 3→4	0.8			dB
	Total IL _i ⇒ 4 (with Ports 2 and 3 Connected)	1.45			
Isolation @ $\lambda_{op}, T_{op}, SOP$	2→1, 3→1, 4→2 or 4→3	40			dB
Extinction Ratio	1→2, 1→3,	20			dB
Return Loss ⁽¹⁾		50	55		dB
Crosstalk	1→4 (Port 2 and 3 Open)	50			dB
PMD	1→4 (Port 2 and 3 Connected)			0.05	ps
Polarization Alignment of Output Fiber			Slow Axis		dB
Optical Power Handling				500	mW
Operating Temperature Rang (Top)			-5 to +70		°C
Storage Temperature			-40 to +85		°C
Fiber Type	Port 1 and Port 4	SMF-28, 250μm Bare Fiber			
	Port 2 and Port 3	Fujikura Panda, 400μm UV Buffer			
Color Coding		Port 1 : Black, Port 2 : Red Port 3 : Clear, Port 4 : Clear			
Physical Dimensions		(Ø) 5.5 x (L) 62.0			mm

Features

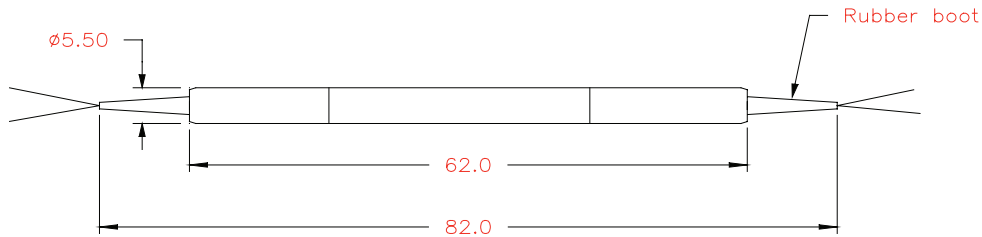
- ◆ Compact Package
- ◆ Low Insertion Loss
- ◆ Low Dispersion
- ◆ High Isolation
- ◆ Epoxy-free Optical Path

Applications

- ◆ DGE
- ◆ PLC and MEMS Modules
- ◆ Optical Waveguide Modules
- ◆ Optical Network Applications

Note: ¹⁾ excluding connectors.

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.