

Polarization Maintaining 3 Ports Optical Circulator



Description

A Polarization Maintaining 3-Port Optical Circulator is a non-reciprocal optical device that routes light sequentially between three ports while preserving the input polarization state, making it ideal for fiber laser and polarization-sensitive applications.

Features

- Low Insertion Loss
- High Isolation
- High Stability and Reliability
- Compact Size

Applications

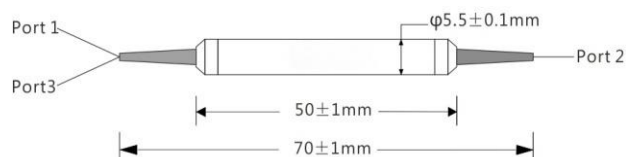
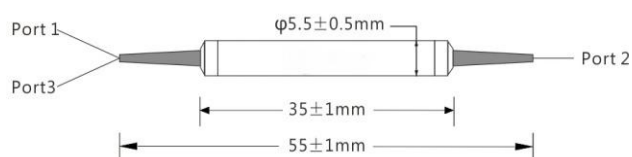
- WDM System
- Fiber Sensor/Amplifier/Bragg Grating
- Chromatic Dispersion Compensation Devices

Specifications

Parameter	Unit	Value				
Center Wavelength	nm	1064	1310	1480/1550	C+L Band	1950/2000/2050
Operating Wavelength Range	nm	±5	±30		1528-1610	±30
Single/Dual Stage	-	Single Stage	Dual Stage		Dual Stage	Single Stage
Peak Isolation	dB	≥30	≥52		≥50	≥20
Isolation	dB	≥22	≥40		≥40	≥16
Insertion Loss	dB	≤2.2	≤0.9		≤0.9	≤1.5
Return Loss	dB	≥50				
Extinction Ratio	dB	≥20				≥18
Max Optical Power (CW)	W	0.2	0.5/1/5		0.5/1/2	0.5
Max Peak Power (Pulse)	KW	<10@ns pulse				
Crosstalk	dB	≥50				≥40
Fiber Type	-	PM980	PM1300	PM1550		PM1950
Working Axis	-	Slow Axis (Default) or Fast Axis or Both Axis				
Package Dimensions	mm	Φ5.5 x L35 (Single Axis Working) or Φ5.5 x L50 (Dual Axis Working)				
Operating Temperature	°C	-5 to +70				
Storage Temperature	°C	-40 to +85				

Notes: Tested at 25 °C. Data exclude connectors. Adding connectors will increase insertion loss by approximately 0.3 dB, reduce return loss by 5 dB, and decrease extinction ratio by 2 dB. The fiber slow axis is aligned to the key by default.

Product Dimensions



Ordering Information

☐ nm	☐ W	☐	☐	☐	☐ m	☐ μm	☐
Center Wavelength	Max Optical Power (CW)	Working Axis	Single/Dual Stage	Fiber Type	Pigtail Length	Pigtail Diameter	Connector
1064nm	0.2W	Slow Axis	Single Stage	PM980	0.5m	250μm Bare Fiber	None
1310nm	0.5W	Fast Axis	Dual Stage	PM1300	1.0m	900μm Loose Tube	LC/UPC
1480nm	1W	Both Axis		PM1550	1.5m		LC/APC
1550nm	2W			PM1950	2.0m		SC/UPC
C+L Band	5W						SC/APC
1950nm							FC/UPC
2000nm							FC/APC
2050nm							ST/UPC
							ST/APC