

Polarization Maintaining Filter Coupler



Description

A polarization maintaining filter coupler is a passive fiber optic component that uses thin-film filter technology to split or combine optical power at a specified coupling ratio while preserving the linear polarization state of the input light.

Features

- Low Insertion Loss
- High Extinction Ratio
- High Stability and Reliability
- Compact Size

Applications

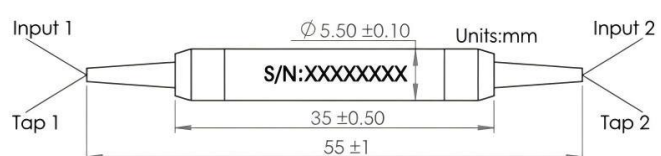
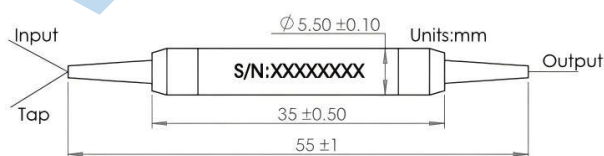
- Optical Gyro
- Optical Amplifier
- Optical Sensors
- Optical Networks

Specifications

Parameter	Unit	Value					
Ports (In x Out)	-	1x2 or 2x2					
Center Wavelength	nm	780	850	980/1030/1064	1310	1480/1550	1950/2000/2050
Operating Wavelength Range	nm	±10	±20	±20	±40		±20
Tap Coupling Ratio	%	1±0.5%, 5±1.0%, 10±2.0%, and 50%					
Insertion Loss	dB	IL related to CR					
Excess Loss	dB	≤0.8@1x2, ≤1.2@2x2					
Return Loss	dB	≥50					
Extinction Ratio	dB	≥20@1X2, ≥18@2X2					
Max Optical Power (CW)	W	0.5/1/5/10					
Fiber Type	-	PM780	PM980	PM1300	PM1550	PM1950	
Working Axis	-	Both Axis					
Tensile Load	N	5					
Package Dimensions	mm	Φ5.5 x L35					
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	 mm	 W			 m	 μm	
Ports (In x Out)	Center Wavelength	Split/Coupling Ratios	Max Optical Power (CW)	Working Axis	Fiber Type	Pigtail Length	Pigtail Diameter	Connector
1x2	780nm	50/50	0.5W	Both Axis	PM780	0.5m	250μm Bare Fiber	None
2x2	850nm	40/60	1W		PM980	1.0m	900μm Loose Tube	LC/UPC
	980nm	30/70	5W		PM1300	1.5m		LC/APC
	1030nm	20/80	10W		PM1550	2.0m		SC/UPC
	1064nm	10/90			PM1950			SC/APC
	1310nm	5/95						FC/UPC
	1480nm	Custom						FC/APC
	1550nm							ST/UPC
	1950nm							ST/APC
	2000nm							
	2050nm							