

Polarization Maintaining Filter Splitter (PMFS)

Description

The Polarization Maintaining filter splitter is a 3 or 4 ports micro-optic device built with PM fiber. The PMFS transmits a signal from one of the input to two outputs with various ratios while maintaining the polarization of the signal. It is characterized with low insertion loss, high return loss, high extinction ratio and excellent environmental stability and reliability. There are two type of working axis, one is both axis working and another is Fast axis blocked.

Key Features

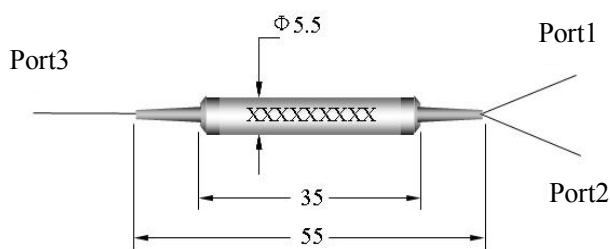
- Low insertion loss
- High extinction ratio
- Excellent stability and reliability

Applications

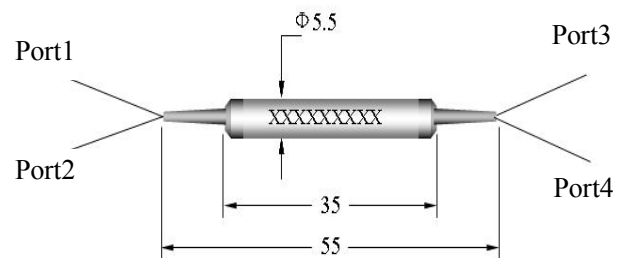
- Fiber lasers
- Fiber amplifiers
- Fiber Sensors
- Optical Communications



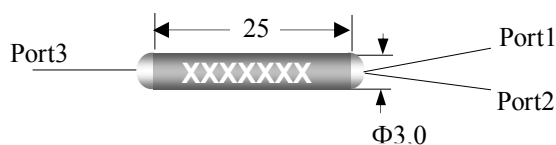
Mechanical Dimension



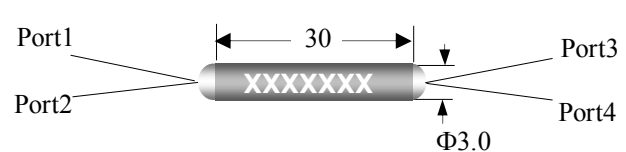
Normal Size



Normal Size



Mini Size



Mini Size

Specifications

Type Parameter		Unit	PM Filter Splitter			
			1×2	2×2	1×2	2×2
Center wavelength		nm	1064		1310,1550	
Operating bandwidth		nm	±20		±40	
Excess loss		dB	≤0.8	≤1.0	≤0.7	≤1.0
Extinction ratio	Type F	dB	≥22	≥20	≥22	≥20
	Type B	dB	≥20	≥18	≥20	≥18
Tap ratio		%	1±0.2%, 2±0.4%, 5±1.0%, 10±2.0%, 20±2.5%, 30±3.0%, 40±4.0%, and 50±5.0%			
Return loss		dB	≥50			
Handling power		mW	≤300		≤500	
Fiber type		/	PM fiber Input / Output SMF-28e/Hi1060 or PM fiber for tap			
Operating temperature		℃	-5~+70			
Storage temperature		℃	-40~+85			
Dimensions		mm	Φ5.5×L35 or Φ3.0× L25 (30)			

* Type B: Both axis working, Type F: Fast axis blocked.

* IL is 0.3dB (1310~1550nm) or 0.5dB (1064nm) higher, RL is 5dB lower and ER is 2dB lower for each connector added. The default connector key is aligned to slow axis.

Light Path Explanation

1x2	Type F	Port3 to Port1 & 2, Port2 is tap port.
	Type B	Port1 to Port2 & 3, Port2 is tap port.
2x2	Type F	Port1 to Port3 & 4, Port4 is tap port. Port3 to Port1 & 2, Port2 is tap port.
	Type B	Port1 to Port2 & 3, Port2 is tap port. Port3 to Port1 & 4, Port4 is tap port.

Type B: Both axis working, Type F: Fast axis blocked.

Ordering Information

PMFS-XXX-XXXX-XX/XX-X-X-X-XX/XXX-XX

