

PM Filter-based Splitter (PMFS/C 1310/1550/980/1064 1x2 & 2x2)

1. Description

The PMFS is built based on crystal or thin film filter, it can split light at a certain coupling ratio. Either slow axis working or both axis working is available.

2. Features

High Isolation
 Low Insertion Loss
 High stability and reliability

3. Applications

Fiber Amplifiers
 Fiber Sensors



4. Specifications

Parameters	Unit	Value	
Center Wavelength (λ_c)	nm	1310 or 1550	
Operating Wavelength Range	nm	$\lambda_c \pm 40$	
Configuration	--	1x2	2x2
Max Excess Loss	dB	0.8	1.1
Typ. Insertion Loss at Tr*	dB	0.6	1.1
Insertion Loss at To*	dB	≤ 1.0	≤ 1.3
Max Uniformity	dB	0.6	0.8
Tap Ratio	dB	1 $\pm$ 0.5%, 5 $\pm$ 1.0%, 10%, and 50%	
Return Loss (Input/Output)	dB	≥ 50	
Extinction Ratio (F type)	dB	≥ 22	≥ 20
Extinction Ratio (B type)	dB	≥ 20	≥ 18
Power handling (CW)	mW	≤ 500	
Tensile Load	N	≤ 5	
Fiber Type		SMF-28 or PM Panda fiber for tap port PM Panda fiber for input & output ports	
Operating Temperature	$^{\circ}\text{C}$	-5 to +70	
Storage Temperature	$^{\circ}\text{C}$	-40 to +85	

Remark

* Tr=Room temperature, To=Operating temperature.

* Above specifications are for device without connector.

* For devices with connectors, 0.3dB higher for IL, 5dB lower for RL and 2dB lower for ER per connector.

* The PM fiber and the connector key are aligned to the slow axis.(Default if customer no special request)

5. Light path description

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

5. Ordering Information

PMFS /C	NxN		-		-		-		-		-	
1x2 or 2x2	Wavelength	B or F type	Split ratio	Pigtail type	Package	Connector	Fiber length					
	980nm	B=B type	1/99	0=Bare	5.5x35	FC/PC,	0.5m					
	1064nm	F=F type	10/90	1=0.9mm		FC/APC	0.8m					
	1310nm		50/50	loose tube		SC/PC	etc.					
	1550nm		etc.			etc.						

Example: PMFS-1x2-1550-50/50-1-5.5x35-FC/PCx3-1m