DK PHOTONICS Optical Passive Components

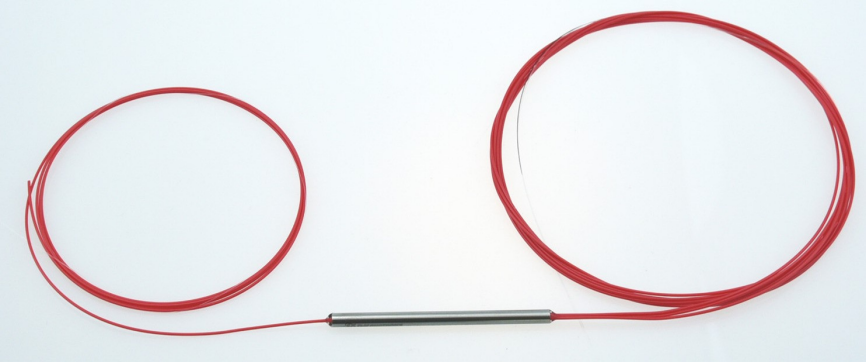
1310nm 1x3 Fused PM Fiber Splitter

Key Features

- Low Insertion Loss
- High Extinction Ratio
- Compact In-Line Package
- Available for Slow or Fast Axis Operation
- High Stability and Reliability

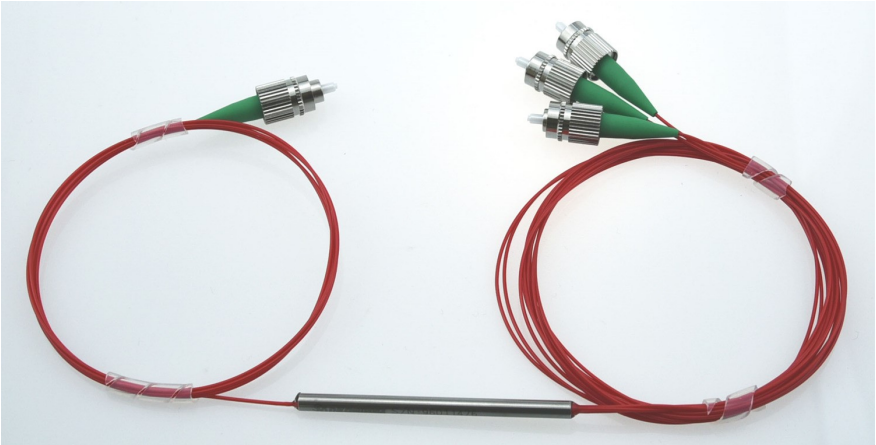
DK Photonics uses unique fusing technique and polarization maintaining fiber to build the 1x3 monolithic fused PM fiber standard splitter. The coupling ratio could be selected according to customer's request. It features low excess loss, small size and high polarization extinction ratio. 1x3 monolithic fused PM fiber standard splitter is widely used for optical sensors and optical gyro.

If you do not see a standard PM Fused Coupler that meets your needs, we welcome the opportunity to review your desired specification and quote a custom PM fused Coupler. Requests for custom fiber pigtails, different wavelengths, tap Ratio and handling power of operation or other specific needs will be readily addressed.



Applications

- Fiber Optic Instruments
- Fiber Amplifiers
- Fiber Sensors
- Coherent Detecting
- Research



Splitting Ratio Tolerance

Coupling Ratio	Maximum Splitting Ratio Tolerance (%)			
	Premium		A Grade	
	Through Port	Coupling Port	Through Port	Coupling Port
40/20/40	±5.0	±6.0	±6.0	±7.0
35/30/35	±4.0	±5.0	±5.0	±6.0
33/33/33	±6.0	±6.0	±8.0	±8.0
30/40/30	±4.0	±3.0	±5.0	±4.0
25/50/25	±3.5	±2.4	±4.0	±3.0
20/60/20	±3.3	±2.0	±3.7	±2.5
15/70/15	±3.0	±1.8	±3.5	±2.4
10/80/10	±2.8	±1.6	±3.2	±2.0
5/90/5	±2.5	±1.5	±3.0	±1.8

For more Info

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1310nm 1x3 Fused PM Fiber Splitter

Performance Specifications

Parameter		Unit	Values	
Port Configuration		-	1x3	
Grade		-	P grade	A grade
Central Wavelength		nm	1310	
Bandwidth		nm	±10	
Excess Loss	Typ.	dB	0.3	0.5
	Max.	dB	0.6	0.8
PER for Through Port		dB	≥18	≥16
Directivity		dB	55	
Max. Power Handling		W	0.5, 2, 3, 5	
Max. Tensile Load		N	5	
Fiber Type		-	PM1300 Panda fiber or other	
Operating Temperature		℃	-5 ~ +70	
Storage Temperature		℃	-40 ~ +85	
Dimensions (Φ×L)		mm	Φ4.0×60(0.9mm tube),Φ3.0×60 (bare fiber)	

1. Above specifications are for device without connector, and the PM fused coupler is both axis working, no axis can be blocked; default test extinction ratio is on the slow axis. All parameters are tested at room temperature.
2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower and ER will be 2dB lower. Power transmits through the connector less than 2W. The default connector key is aligned to slow axis.
3. For >10W high power applications, we will use heat sink package, contact DK Photonics for details.
4. If there is pulse application, please be sure to inform us of pulse energy and peak power.

Order information

P/N: PMFBTC-①-②-③-④-⑤-⑥-⑦-⑧-⑨

When you inquire, please provide the correct P/N number according to our ordering information and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250μm bare fiber pigtail.

①	②	③	④	⑤		⑥	⑦	⑧	⑨
Grade	Port	Operating Wavelength	Power Handling	Coupling Ratio		Fiber Type for Tap Port (>5%)	Fiber Diameter	Fiber Length	Connector
P: P grade A: A grade	103:1x3	13:1310nm XX: Others	L:<0.5W 2:2W 5:5W 10:10W	40/20/40 35/30/35 33/33/33 30/40/30 25/50/25	20/60/20 15/70/15 10/80/10 5/90/5 XX: Others	0: SM fiber 1: PM Panda fiber	25:250μm bare fiber 90:900μm Loose tube XX: Others	08:0.8m 10:1.0m XX: Others	00: None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC XX: Others

Part Number Example: PMFBTC-P-103-13-L-33/33/33-1-90-10-FA

Description: 1310nm 1x3 Fused PM Fiber Splitter, slow axis working, P grade,0.5W, 33/33/33 coupling ratio, 1.0m PM1300 panda fiber with 0.9mm OD loose tube, and FC/APC connectors at all ports.

Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.