Polarization Maintaining Fused Coupler

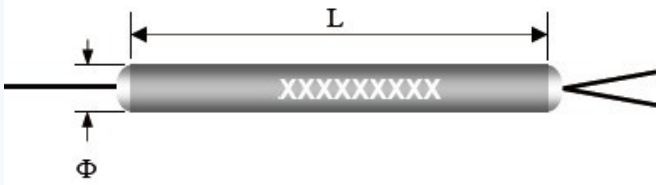
Features

- Low Insertion Loss
- High Extinction Ratio
- Compact In-Line Package
- High Stability and Reliability

Applications

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

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



Performance Specifications

Parameter		Values					
Grade		P grade	A grade	P grade	A grade	P grade	A grade
Center Wavelength (nm)		1310,1550		980,1064		780,850	
Wavelength Range (nm)		±15					
Excess Lose(dB)		≤0.3	≤0.4	≤0.4	≤0.6	≤0.6	≤0.8
Extinction Ratio(dB)		≥20	≥18	≥20	≥18	≥20	≥18
Insertion Loss (dB)	50/50	≤3.4	≤3.6	≤3.6	≤3.8	≤3.8	≤4.0
	20/80	≤7.6/1.4	≤8.0/1.5	≤8.0/1.5	≤8.2/1.7	≤8.2/1.8	≤8.5/1.9
	10/90	≤11.2/0.85	≤11.6/1.0	≤11.6/1.2	≤11.8/1.4	≤11.8/1.5	≤12.0/1.6
	5/95	≤14.2/0.6	≤14.8/0.8	≤14.8/0.8	≤15/1.0	≤15/1.2	≤15.2/1.2
	1/99	≤21.5/0.3	≤22/0.4	≤22/0.4	≤22.5/0.6	≤22.5/0.6	≤22.8/0.8
Directivity(dB)		≥55					
Optical Power (CW) (mW)		≤300					
Fiber Type		PM Panda					
Operating Temperature(℃)		-5 to +70					
Storage Temperature(℃)		-40 to +85					

*The specifications are w/o connector.
* For devices with connectors, 0.3dB higher for IL, 5dB lower for RL and 2dB lower for ER.
* The PM fiber and the connector key are aligned to the slow axis and fast axis is blocked.

Package information

Configuration	1x2 or 2x2		
Fiber Length	0.8m, Others on Request		
Fiber Diameter	250μm bare fiber	900μm loose tube	900μm/2mm/3mm loose tube
Dimensions (Φ×L)	Φ3.0mm×54mm	Φ3.0mm×60mm	90mm×20mm×9.5mm

Order information

PMFC-①①①-②②-③③-④-⑤⑤-⑥⑥-⑦⑦

①①①	②②	③③	④	⑤⑤	⑥⑥	⑦⑦
Port	Operating Wavelength	Coupling Ratio	Fiber Type for Tap Port	Fiber Diameter	Fiber Length	Connector
102:1x2 202:2x2	78:780nm 85:850nm 98:980nm 64:1064nm 13:1310nm 15:1550nm XX:Others	50:50/50 40:40/60 30:30/70 20:20/80 10:10/90 05:5/95 03:3/97 02:2/98 01:1/99 XX: Others	0:SMF-28 1: Panda fiber X:Others	25:250um 90:900um 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