Advanced Fiber Resources (HK), Ltd.

488 - 2100 nm Polarization Maintaining Fused Coupler (PMC Series)

Rev 11L

Key Features

- Wavelength 488 - 2100 nm Available
- Coupling Ratio from 0.01/99.99 to 50/50 Available
- Operating on both Fast and Slow Axes
- Low excess Loss
- High Power Handling
- High Stability and Reliability

Applications

- Power Monitoring
- Coherent Communication
- Fiber Gyroscope
- Fiber Laser
- Fiber Amplifier
- Test Equipment

Specifications

Parameter	Unit	Value				
Center Wavelength (λc)	nm	488, 532, 635	780, 830	980, 1064	1310, 1480, 1550	1700, 2000
Operating Wavelength	nm	λc ± 5	λc ± 10	λc ± 10	λc ± 20	λc ± 20
Typ. Excess Loss	dB	0.8	0.5	0.4	0.2	0.5
Max. Excess Loss	dB	1.2	0.8	0.6	0.4	0.8
Min. ER[1]	dB	18	18	20[2]	20	20
Max. Excess Loss for each Connector	dB	1.5	0.7	0.5	0.3	0.3
Max. Optical Power (Continuous Wave)	W	2				
Thermal Stability	dB/℃	⩽ 0.005				
Min. Return Loss	dB	50				
Min. Directivity	dB	50				
Fiber Type for Signal Port	-	PM Fiber				
Fiber Type for Tap Port	-	PM Fiber, or Singlemode Fiber				
Operating Temperature	℃	- 5 to + 70				
Storage Temperature	℃	- 40 to + 85				
Coupling Ratio & Its Tolerance						
Coupling Ratio	%	1/99	2/98	5/95	10/90	20/80	30/70	40/60	50/50
Max. Coupling Ratio Tolerance, λc	%	± 0.3	± 0.5	± 0.7	± 1.0	± 2.0	± 2.0	± 2.5	± 3.0
Coupling Ratio	%	0.1/99.9				0.01/99.99			
Tap Ratio Tolerance, λc	dB	30 ± 3				40 ± 4			

[1]ER data listed in the table are for the ports with coupling ratio greater than 10%. It will be 2 dB lower for a tap port with coupling ratio between 1-10%. For 1% tap port, ER is not considered.

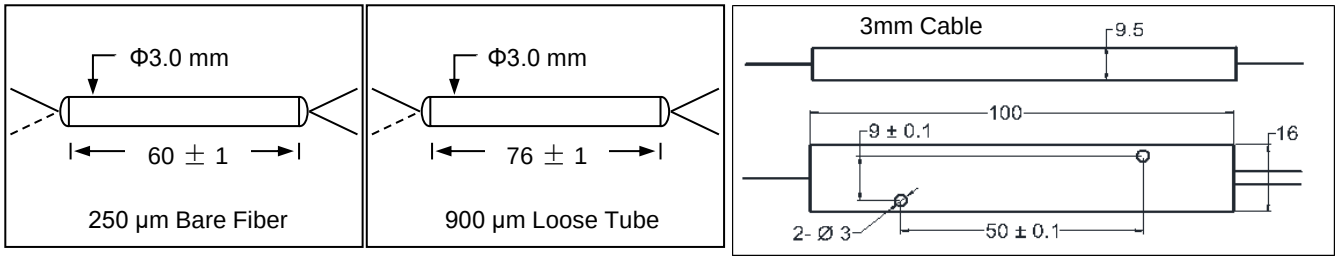
[2]ER will be 2 dB lower for Nufern FUD-3460 fiber and Nufern PM 1950.

[3]RL is 5 dB lower, ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

[4]The Optical Power is 1 W only for connector added. For visible wavelength, the limit is 50 mW.

[5]Data tested at central wavelength only.

Package Dimensions



Ordering Information

PMC -①-②②②②-③③-④-⑤-⑥-⑦-⑧:

①: Configuration

1 - 1 × 2

2 - 2 × 2

②②②②: Wavelength

488 - 488 nm
532 - 532 nm
635 - 635 nm
780 - 780 nm
830 - 830 nm
980 - 980 nm
1064- 1064 nm
1310 - 1310 nm
1480 - 1480 nm
1550 - 1550 nm
1700 - 1700 nm
2000 - 2000 nm
SSSS - Specify

③③: Coupling Ratio

01 - 01/99
02 - 02/98
05 - 05/95
10 - 10/90
20 - 20/80
30 - 30/70
40 - 40/60
50 - 50/50
0.1 - 0.1/99.9
0.01 - 0.01/99.99
SS - Specify

④: Fiber Type for Tap Port

P - PM Fiber

S - Singlemode Fiber

⑤: Connector Type

1 - FC/UPC
2 - FC/APC
3 - SC/UPC
4 - SC/APC
N - None
S - Specify

⑥: Fiber Jacket

B - 250 μm Bare Fiber
L - 900 μm Loose Tube
3 - 3 mm Cable
S - Specify

⑦: Fiber Length

H - 0.5 m
Q - 0.75 m
S - Specify

⑧: Fiber Type

1 - Nufern PM 460-HP
2 - Nufern PM 630-HP
3 - Corning Panda PM 850
4 - Corning Panda PM 980
5 - Corning Panda PM 1310
6 - Corning Panda PM 1550
7 - Nufern PM 1950
8 - Nufern FUD-3460
S - Specify