



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 (λ_c)	nm	488, 532, 635	780, 830	980, 1064	1310, 1480, 1550	1700, 2000		
Operating Wavelength	nm	$\lambda_c \pm 5$	$\lambda_c \pm 10$	$\lambda_c \pm 10$	$\lambda_c \pm 20$	$\lambda_c \pm 20$	$\lambda_c \pm 20$	$\lambda_c \pm 20$
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/°C	≤ 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	°C	- 5 to + 70						
Storage Temperature	°C	- 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, λ_c	%	± 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, λ_c	dB	30 \pm 3			40 \pm 4				

¹ER 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.

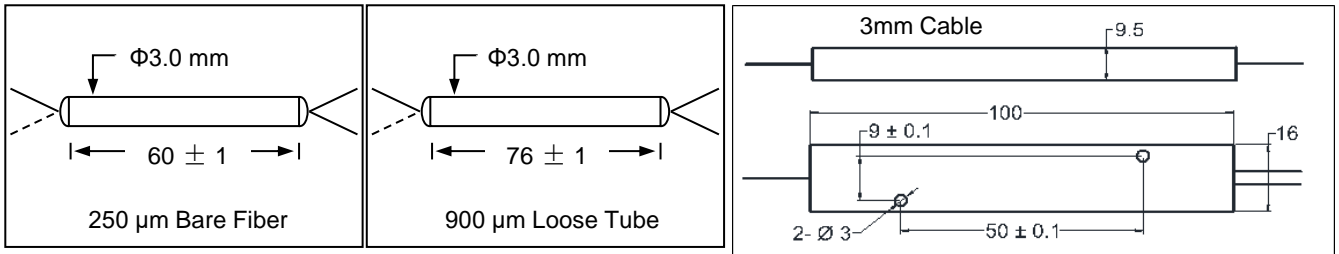
²ER will be 2 dB lower for Nufern FUD-3460 fiber and Nufern PM 1950.

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

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

⁵Data tested at central wavelength only.

Package Dimensions



Ordering Information

PMC -①-②②②②-③③-④-⑤-⑥-⑦-⑧:

①: Configuration

1 - 1 x 2

2 - 2 x 2

②②②②: Wavelength

488 - 488 nm 1064 - 1064 nm

532 - 532 nm 1310 - 1310 nm

635 - 635 nm 1480 - 1480 nm

780 - 780 nm 1550 - 1550 nm

830 - 830 nm 1700 - 1700 nm

980 - 980 nm 2000 - 2000 nm

SSSS - Specify

③③: Coupling Ratio

01 - 01/99 40 - 40/60

02 - 02/98 50 - 50/50

05 - 05/95 0.1 - 0.1/99.9

10 - 10/90 0.01 - 0.01/99.99

20 - 20/80 SS - Specify

30 - 30/70

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