

PMFC Polarization Maintaining Fused Fiber Coupler (488 – 2000 nm)

Model #: PMFC

Description: Polarization Maintaining Fused Fiber Coupler PMFC (488 – 2000 nm)

Application: Power monitoring, coherent communications, fiber gyroscope, fiber laser, fiber amplifier, test equipment

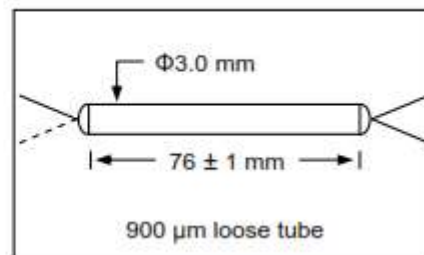
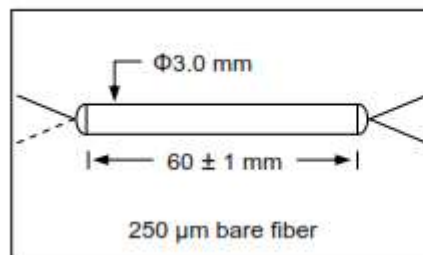
Specifications:

Parameter	Unit	Specifications								
		488, 532, 635	780, 830	980, 1064	1310, 1480, 1550	1700, 2000				
Central Wavelength (λ_c)	nm	488, 532, 635	780, 830	980, 1064	1310, 1480, 1550	1700, 2000				
Operating Wavelength	nm	$\lambda_c \pm 5$	$\lambda_c \pm 10$	$\lambda_c \pm 10$	$\lambda_c \pm 20$	$\lambda_c \pm 20$				
Typical 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. PER	dB	18	18	20	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	0.0005 over -5 °C to +70 °C								
Min. Return Loss	dB	50								
Min. Directivity	dB	50								
Fiber Type for Tap Port	mW	PM fiber or single mode fiber								
Operating Temperature	°C	-5 to +70								
Storage Temperature	°C	-40 to +85								
Dimension	mm	250 μ m bare fiber, Φ 3.0 \times 60 mm 900 μ m loose tube, Φ 3.0 \times 76 mm								
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	

Note:

- ER data listed in the table are for the points 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.
- ER will be 2dB lower for Nufern FUD-3460 fiber.
- RL is 5 dB lower, ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.
- The optical power is 1 W only if connector is added. For visible wavelength, the limit is 50 mW.
- Data tested at central wavelength only.

Package Dimensions



Ordering Information: PMFC-A-BBBB-CC-D-E-F-G-H-J

A: configuration	BBBB: wavelength	CC: coupling ratio	D - fiber type for tap port	E: connector type	F: fiber jacket	G: fiber length
1 – 1 x 2	488 – 488 nm	01 – 1/99	P – PM fiber	1 - FC/UPC	B – 250 µm bare fiber	H – 0.5 m
2 – 2 x 2	532 – 532 nm	02 – 2/98	M – single mode fiber	2 - FC/APC	L - 900 µm loss tube	Q – 0.75 m
	635 – 635 nm	05 – 5/95		3 - SC/UPC	X - other	X - other
	780 – 780 nm	10 – 10/90		4 - SC/APC		
	830 – 830 nm	20 – 20/80		N - none		
	980 – 980 nm	30 – 30/70		X - other		
	1064 – 1064 nm	40 – 40/60				
	1310 – 1310 nm	50 - 50/50				
	1480 – 1480 nm	XX - other				
	1550 – 1550 nm					
	1700 – 1700 nm					
	2000 – 2000 nm					
	XXXX - other					
H – 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 - other					