

Ultra-Low Splitting Ratio PMF Fused Coupler



Specifications

Parameters	Unit	Values	
Center Wavelength	nm	780, 850, 980, 1064, 1310, 1550, 1570, 1625, 1850, 1940, 2000, 2050	
Operating Wavelength Bandwidth	nm	±15	
Grade	dB	P	A
Insertion Loss for Through Port	dB	≤0.15	
Max Excess Loss (EL) ^[1]	dB	≤0.8	≤1.0
Insertion Loss for 0.1% Tap Port ^[2]	dB	30±3	30±4
Insertion Loss for 0.01% Tap Port	dB	40±4	40±5
Insertion Loss for 0.001% Tap Port	dB	50±5	50±6
Polarization Extinction Ratio (Through Port)	dB	≥18	≥16
Polarization Dependent Loss (PDL)	dB	≤0.15	
Fiber Type		PM780, PM850, PM980, PM1300, PM1550, PM1950, PM2000	
Return Loss (RL)	dB	≥50	
Directivity (DIR) ^[3]	dB	≥55	
Max Loss for Each Connector ^[4]	dB	0.15	
Max Power Handling CW	W	0.5, 1, 3, 5, 20	
Operating Temperature	℃	-40 ~ +85	
Storage Temperature	℃	-50 ~ +85	

^[1] EL=10 * log₁₀ (P_{in}÷(P_{out1}+P_{out2})), P=power in mW.

^[2] Test at room temperature without connectors. With connectors, IL+0.3dB, RL-5dB, PER-2dB.

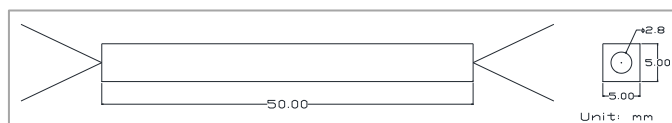
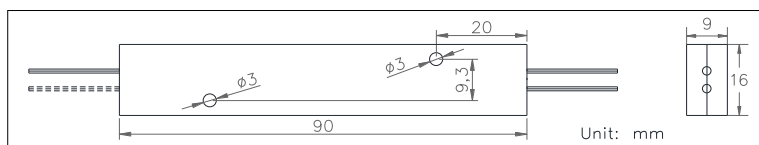
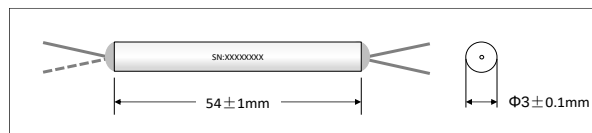
^[3] DIR=10 * log₁₀ (P_{out2}÷P_{out1}), or DIR=10 * log₁₀ (P_{in2}÷P_{in1}), P=power in mW, test light input from Port1.

When test DIR at output port, coil all input fibers 3-5 turns around a 10-30mm diameter loop, this prevents back reflections into output port2, which would significantly lower DIR.

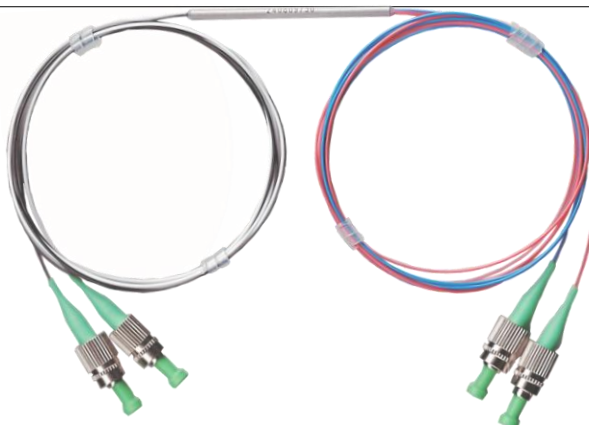
^[4] Connector Key aligned to slow axis. Max power handling for connector 1W (CW).

Package Information

Port Configuration	1x2 or 2x2		
Fiber Length	1m, others on request		
Pigtail Type	250µm Bare Fiber	900µm Loose Tube	2mm/3mm Loose Cable
Dimensions(mm)	φ3x54, 5x5x50	φ3x54	90x16x9
Approx Weight (g)	30	45	60



For power >5W



Ordering Information

CP- ①①-②③③③-④④④④-⑤⑤⑤⑤⑤-⑥⑥⑥⑥-⑦⑦⑦⑦-⑧⑨⑨⑨-⑩⑩⑩⑩⑩-⑪⑪⑪⑪⑪

①	Type	PS=PM Fused Coupler;
②	Grade	P=Grade P; A=Grade A;
③	Port Type	1x2; 2x2;
④	Wavelength	780; 850; 980; 1064; 1310; 1550; 1570; 1625; 1850; 1940; 2000; 2050;
⑤	Coupling Ratio	0.1%; 0.01%; 0.001%;
⑥	Pigtail Type	250=250μm Fiber; 900=900μm Loose Tube; 2mm=2mm loose tube; 3mm=3mm Loose Tube;
⑦	Fiber Type	P78=PM780; P85=PM850; P98=PM980; P13=PM1300; P15=PM1550; P19=PM1950; P20=PM2000;
⑧	Length	1=1m; X=Other Length;
⑨	Connector	NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;
⑩	Package	3x54; 90x16x9; 5x5x50;
⑪	Power Handling	0.5W; 1W; 3W; 5W; 20W;