

Polarization Maintaining Fused Coupler



Key Features

- Low Excess Loss & Insertion Loss
- High Power Handling
- High Stability and Reliability
- High Extinction Ratio
- Operating On Both Fast and Slow Axes

Applications

- Power Monitoring
- Coherent Communication
- Fiber Gyroscope
- Fiber Laser and Amplifier
- Fiber Sensor
- Instrumentation

Performance Specifications

Parameter	Specifications					
	P Grade	A Grade	P Grade	A Grade	P Grade	A Grade
Center Wavelength	780, 850nm		980, 1064nm		1310, 1550nm	
Bandwidth	± 20nm		± 20nm		± 20nm	
Excess Loss (Tap.)	0.6dB	0.8dB	0.6dB	0.8dB	0.2dB	0.3dB
Excess Loss (Max.)	≤ 0.8dB	≤ 1.0dB	≤ 0.8dB	≤ 1.0dB	≤ 0.4dB	≤ 0.6dB
Extinction Ratio* (Min.)	≥ 18dB	≥ 16dB	≥ 18dB	≥ 16dB	≥ 20dB	≥ 17dB
Thermal Stability	≤ 0.005dB/°C					
Return Loss	≥ 55dB					
Directivity (Min.)	≥ 50dB					
Optical Power (Continuous Wave)	2W					
Operating Temperature	-40 to +85°C					
Storage Temperature	-40 to +85°C					
Fiber Type	Panda fiber					
Pigtail Type	250µm bare fiber		900µm loose tube		900µm/2mm/3mm loose tube	
Dimensions	3.0mm×54mm		3.0mm×70mm		L98mm x W14mm x H8.5mm	

Coupling Ratio & Its Tolerance

Coupling Ratio	1/99%	2/98%	5/95%	10/90%	20/80%	30/70%	40/60%	50/50%
Coupling Ratio Tolerance (Δc) (Max.)	± 0.2%	± 0.3%	± 0.5%	± 1.0%	± 2.0%	± 2.0%	± 2.5%	± 3.0%

NOTE: 1. RL is 5 dB lower, ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

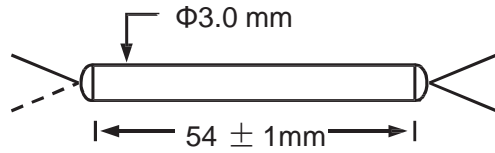
2. The optical power is 1 W only for connector added.

3. Data tested at central wavelength only.

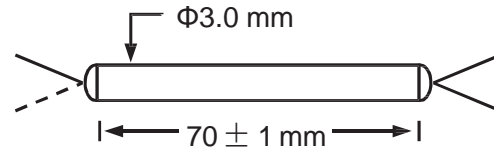
4. Slow Axis working with specified coupling ratio; however, Fast Axis is not blocked.

* 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.

Mechanical Dimensions



250 μ m bare fiber



900 μ m loose tube

Ordering Information

PFC	Grade	Wavelength	Coupling Ratio	Port	Package Dimensions	Pigtail Style	Fiber Type	Fiber Length	In/Out Connector
		78 = 780nm 85 = 850nm 98 = 980nm 10 = 1064nm 13 = 1310nm 14 = 1480nm 15 = 1550nm SS = Specify	01 = 1/99 02 = 2/98 05 = 5/95 10 = 10/90 20 = 20/80 30 = 30/70 40 = 40/60 50 = 50/50 SS = Specify	0102 = 1x2 0202 = 2x2	1 = 3.0mmx54mm 2 = 3.0mmx70mm 3 = L98mmxW14mm xH8.5mm S = Specify		1 = PM 780 2 = PM 850 3 = PM 980 4 = PM 1310 5 = PM 1550 S = Specify	1 = 0.8m S = Specify	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC X = Special
A = Grade A P = Grade P					1 = 250um Bare Fiber 2 = 900um Losse Tube 3 = 900um /2mm/3mm Losse Tube S = Specify				