



FIS couplers and WDM's are manufactured in the USA using proven fused biconical taper (FBT) technology, and are designed to meet Telcordia requirements. Our high quality, low cost couplers are available in single wavelength and dual window varieties in an assortment of split ratios. Our WDM's feature low insertion loss and high isolation. All device types are available with bare fiber, 900µm, or 3mm jacket, and can be terminated with your choice of connectors or installed in rack mount modules.

SPECIFICATIONS

Singlemode Coupler

Operating wavelength	1310 nm or 1550nm +/- 10nm
Thermal stability(-40°C to 85°C)	+/-0.1dB
Return Loss (Pre-Connectors)	1x2 ≥ -55dB, 2x2 ≥ -65dB
Polarization Dispersion Loss	≤0.1 dB, ≤0.15dB
Max. Insertion Loss (dB) 50/50	3.6
40/60	4.7/2.7
30/70	6.0/1.9
20/80	7.9/1.3
10/90	12.0/0.8
5/95	18.4/0.5
1/99	22.0/0.3
Package Dimensions	250µm = ø3mm x 55mm 900 µm = ø3mm x 60 mm

Multimode Coupler

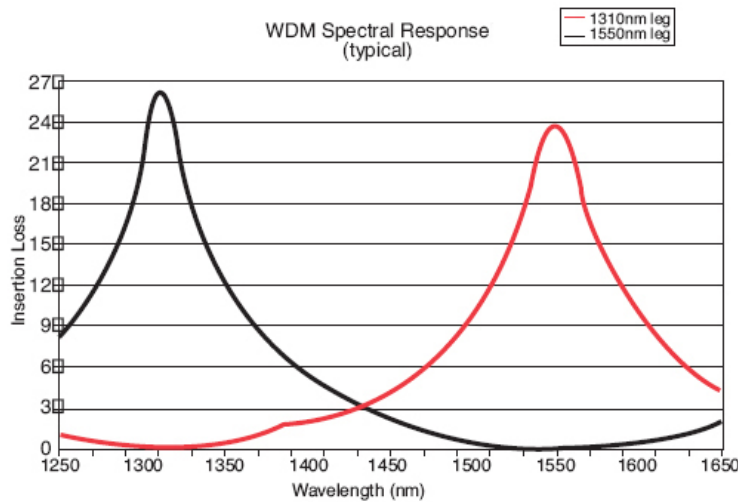
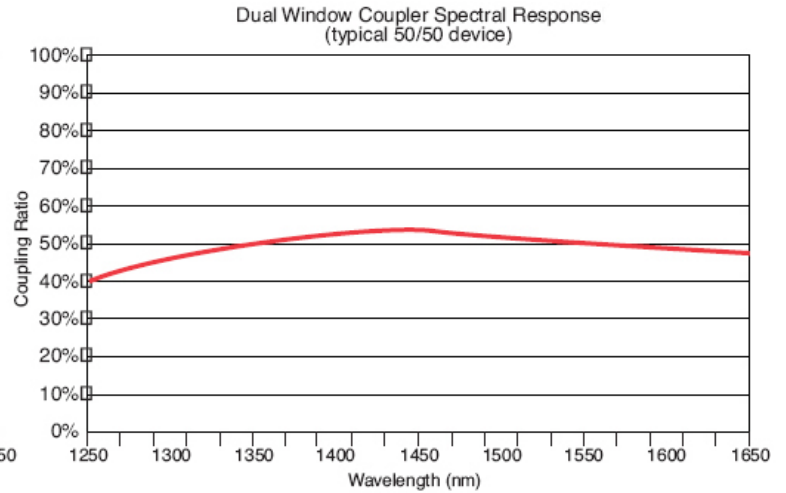
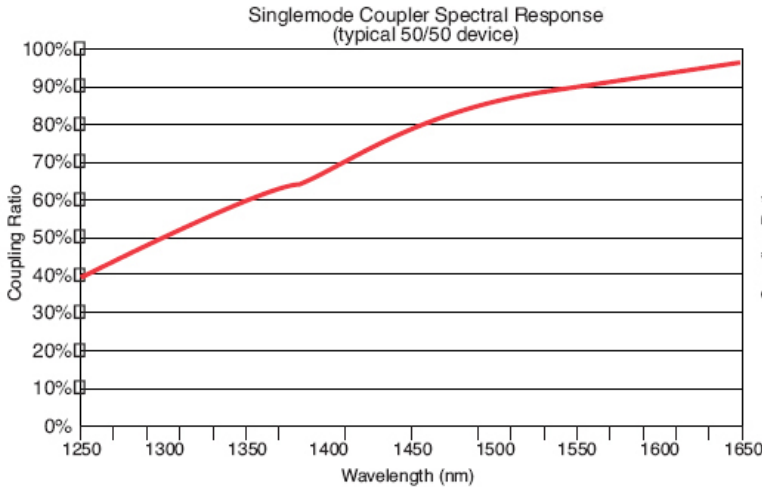
	62.5/125	50/125
Operating wavelength	800nm or 1600nm +/- 10nm	
Thermal stability(-40°C to 85°C)	+/-0.1dB	+/-0.1dB
Polarization Dispersion Loss	≤0.15dB	≤0.15dB
Max. Insertion Loss	≤4dB	≤4.3dB
Package Dimensions	250µm = ø3mm x 55mm 900 µm = ø3mm x 60 mm	

Dual Window Singlemode Coupler

Operating wavelength	1310 nm & 1550nm +/- 10nm
Thermal stability(-40°C to 85°C)	+/-0.1dB
Return Loss (Pre-Connectors)	1x2 ≥ -55dB, 2x2 ≥ -65dB
Polarization Dispersion Loss	≤0.1 dB, ≤0.15dB
Max. Insertion Loss (dB) 50/50	3.8
40/60	5.0/2.9
30/70	6.4/2.2
20/80	8.5/1.4
10/90	12.7/0.8
5/95	18.0/0.6
1/99	24.0/0.5
Package Dimensions	250µm = ø3mm x 55mm 900 µm = ø3mm x 60 mm

Premium

Operating wavelength	1310 nm & 1550nm +/- 10nm
Thermal stability(-40°C to 85°C)	+/-0.1dB
Return Loss (Pre-Connectors)	1x2 ≥ -55dB, 2x2 ≥ -65dB
Polarization Dispersion Loss	≤0.1 dB, ≤0.15dB
Max. Insertion Loss (dB) 50/50	3.8
40/60	5.0/2.9
30/70	6.4/2.2
20/80	8.5/1.4
10/90	12.7/0.8
5/95	18.0/0.6
1/99	24.0/0.5
Package Dimensions	250µm = ø3mm x 55mm 900 µm = ø3mm x 60 mm



Coupler Part Number System

Coupler Type	Fiber Type	Wavelength	Coupling Ratio	Port Configuration	Coating Type	Grade
SMC	1	13	50	12	9	U
WDM - Wavelength Division Multiplexer SMC - Singlemode Coupler SDW - Singlemode Dual Window MMC - Multimode Coupler	1 - SMF28 Singlemode 2 - 62.5/125 Multimode 3 - 50/125 Multimode	85 - 850 nm 13 - 1310 nm 15 - 1550 nm 35 - 1310/1550 nm	01 to 50, please specify (use 00 for WDMs)	12 - 1x2 22 - 2x2	2 - 250 μm 3 - 3 mm 9 - 900 μm	U - Ultra

Part # Example:

SMC11350129U

Translates to:

Singlemode coupler, SMF28, 1310nm, 50/50 split, 1x2, 900μm, ultra grade

Please call FIS if you need any assistance with configuration of your custom coupler