ISO 9001:2015 Certified



About Us

Industries

Products

Capabilities

Quality

To search type and hit enter

Contact Us

Q

Home » Product Categories » Couplers & Splitters » Single Mode » Single Wavelength

Fused Single Wavelength Singlemode 1X2 and 2X2 Fiber Optic Couplers, Taps & Optical Signal Splitter.

Gould's singlemode Single Wavelength Fiber Optic 1X2 and 2X2 couplers, taps and optical signal splitters are used to split light with minimal optical loss from one to two fibers or to combine light from two fibers into one fiber. These components are excellent for duplex transmission on a single fiber, CATV systems or within fiber optic test sets.

These components are manufactured using the fused biconical taper process on fully software controlled automatic fabrication stations. The process consists of placing two or more fibers adjacent to each other, then fusing and stretching them to create a central coupling region. A fused coupler is a structure formed by two independent optical fibers. Please visit our Fused Biconical Taper (FBT) page for more information.

Gould Fiber Optics has developed a GlasSolder process for making a glass to glass bond between optical fibers and silica substrate. The patented technique produces a uniform "solder" bead that affixes the fiber to the substrate to provide exceptional mechanical and environmental stability.

Gould's single mode Fused Single Wavelength Couplers and Splitters are manufactured using Corning SMF-28° Fiber and available in various coupling ratios such as 50/50, 40/60, 30/70, 20/80, 10/90, 05/95 & 1/99 with operating wavelengths 1270, 130, 1350, 1400, 1480, 1550 & 1630. Other coupling ratio & wavelength options are available upon request. Available connector options are ST, FC, SC, LC, FC/APC & SC/APC.



Features

- Low Excess Loss (EL)
- Low Optical Insertion Loss (IL)
- Low Polarization Dependent Loss
- Available in1x2, 2×2 & 1×2 with LRT™ port Configurations

Applications

- Telecom
- CATV Systems
- Testing
- Duplex Transmission

Request a Quote »

Planar Waveguide Optical Signal Splitters

Short Wavelength

Single Wavelength

Wavelength Flattened

Wavelength Independent

Pure Silica Fiber Single Mode (SM) Single Wavelength

C&L Band

Ultra band and Wideband

Fused Single wavelength star

Fused Wavelength Flattened star

Fused Wavelength Independent

Low Polarization TAP

High Precision TAP

Eye Safe 2000nm

Concatenated Single Wavelength

Concatenated Wavelength flattened

Concatenated Wavelength Independent

Quality

Gould Fiber Optics is ISO 9001:2015 Certified, and has the following certifications as well: TAR Certification - M24562, Telcordia GR-1209 and GR-1221 compliance for product qualifications, and ROHS compliance.

View Quality Policy »

Optical Specifications for Fused Single Wavelength Single Mode fiber optic Couplers, taps & optical Splitters. Wavelengths (1270, 1310, 1350, 1400, 1480, 1550 &

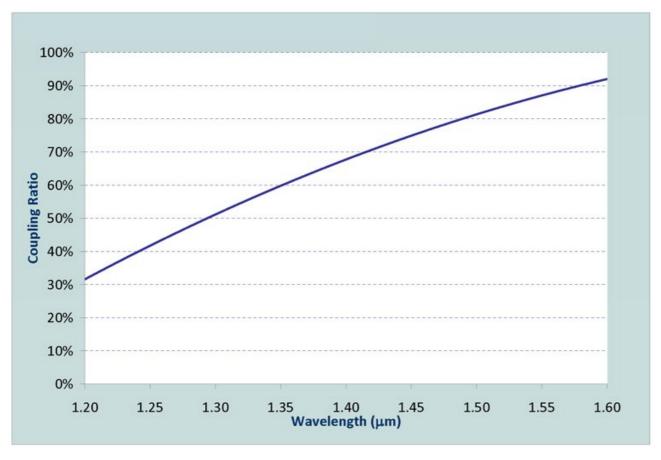
1630). Corning SMF-28™ Fiber.

Specifications Based on 50/50 Coupling Ratio				
		Series 1	Series 2	
Operating Wavelengths (± 10) (nm)		1270, 1310, 1350, 1400, 1480, 1550, and 1630		
Insertion Loss (dB)		≤3.4	≤3.7	
Uniformity (dB)		≤0.6	≤1.1	
Typical Thermal Stability (dB)		≤±0.1		
Typical Polarization Stability (dB)		≤±0.1		
Typical Directivity (dB)	2x2	≥65		
	1x2	≥40		
	1x2 w/LRT™	≥ 60		

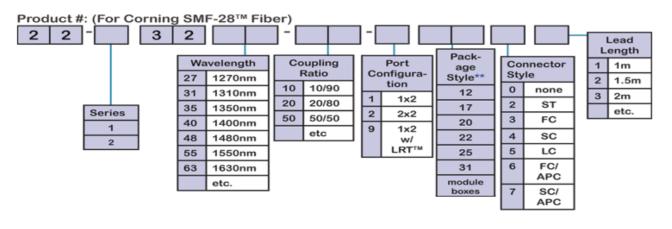
Coupling Ratio/Insetion Loss chart.

Coupling Ratio/Insertion Loss Chart			
Desired Split Ratio	Insertion Loss (dB)		
	Series 1	Series 2	
50/50	3.4	3.7	
40/60	4.5/2.6	4.8/2.8	
30/70	5.8/2.0	6.1/2.0	
20/80	7.7/1.3	8.0/1.3	
10/90	11.2/0.8	12.0/0.8	
5/95	14.6/0.4	18.4/0.5	
1/99	23.0/0.2	23.0/0.3	

Coupling Ratio/Wavelength chart.



Ordering Information for Fused Single Wavelength Single Mode Couplers, Taps & Splitters. Corning SMF-28™ Fiber.



** Click here for Product Packaging details