

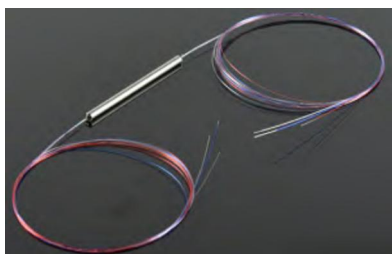
## FBT Singlemode Fiber Coupler Splitter- Steel tube type

### Description

Fused Biconic Taper (FBT) coupler, also be called FBT splitter, based on the traditional technology, it is to bundle together two or more optical fibers, and then pull the cone machine melt stretching, and real-time monitoring the change of the ratio, spectral ratio requirements after melt stretching, one side retain a single fiber (the rest of the cut) as input, the other end is a multi-channel output.

As one of the key components for GPON FTTx networks, optical splitters can be placed in the Central Office or in one of the distribution points (outdoor or indoor) because the FBT coupler are highly stable for multiport optical signal splitting with low insertion loss. FBT couplers are designed for power splitting and tapping in telecommunication equipment, CATV network, and test equipment

FBT Singlemode coupler 1X2 2X2 offer very low insertion loss, low polarization dependence and excellent environmental stability Accurate coupling ratio from 50/50 to 1/99 and fiber type 250um bare fiber, 3mm and 900um loose tube fiber are available with very tight uniformity. Singlemode standard coupler and wideband coupler components find extensive application to perform power splitting and monitoring functions in all kinds of optical communication.



*FBT Coupler with Bare Fiber without connector*

### Key Features

- Low insertion loss
- Low polarization dependent loss
- High Return Loss Optional
- Split Ratio 20/80, 40/60. (50/50 as default.)
- Compact for small application areas like in closure or splice trays
- Wide Operating Temperature and Wavelength
- Excellent Environmental & Mechanical Stability
- Qualified under Telcordia GR-1221 and GR-1209 High Quality Plastic ABS Box

### Applications

- FTTX (FTTP, FTTH, FTTN, FTTC)
- Passive Optical Networks (PON)
- Local Area Networks (LAN)
- CATV Systems Amplifying,
- Monitoring System

### Coupling Ratio/insertion Loss Conversion Chart

Coupling Ratio	Insertion Loss	
Quality Level	P Grade	A Grade
40/60	4.4/2.5	4.6/2.8
30/70	5.6/1.8	6.0/2.0
20/80	7.4/1.1	7.7/1.3
10/90	10.8/0.6	11.6/0.8
5/95	14.2/0.4	14.6/0.5
2/98	18.5/0.2	19.0/0.3
1/99	21.0/0.2	21.5/0.3

\*Measured under the stable mode condition with LED light source.

## FBT Singlemode Fiber Coupler Splitter- Steel tube type

### Specification

Single Standard Couplers		
Grade	P Grade	A Grade
Coupling Ratio (%)	50/50	50/50
Excess Loss (Typical) (dB)	0.07	0.1
Maximum insertion loss (dB)	3.4	3.5
Polarization Sensitivity (dB)	0.15	0.2
Operating Wavelength (nm)	1310,1480,1550 or custom wavelength	
Single Wideband Couplers		
Grade	P Grade	A Grade
Coupling Ratio (%)	50/50	50/50
Excess Loss (Typical) (dB)	0.07	0.1
Maximum Insertion loss (dB)	3.4	3.6
Polarization Sensitivity (dB)	0.15	0.2
Operating Wavelength (nm)	1310±40,1550±40,or custom wavelength	
Coupling Ratio (%)	1~50	
Directivity (dB)	≥55	
Operating Temperature(°C)	-20~+80	
Storage Temperature(°C)	-40~+85	
Fiber Type	SMF-28	
Fiber Pigtail Length (m)	1	
Port Configuration	1×2 or 2×2	
Dimensions (mm)	Package D	

### Package Dimensions & Pigtail Style

Package Dimensions:	
Package D:	3mm x 45mm stainless steel tube
Pigtail Style:	
Package D,	250um bare fiber

### The relation picture of Insertion Loss & Wavelength、Temperature

