

# Single Mode 1x2 FBT Splitter



## Description

Single Mode 1×2 FBT Splitter, also known as an FBT coupler or FBT coupler splitter, is a fused biconical taper fiber optic device designed to split one input optical signal into two output paths with a specified splitting ratio. It provides stable optical performance, low insertion loss, and reliable power distribution for single mode fiber systems.

## Features

- Low Insertion Loss
- High Stability and Reliability
- Compact Size

## Applications

- WDM System
- Fiber Sensor/Amplifier/Bragg Grating
- Chromatic Dispersion Compensation Devices

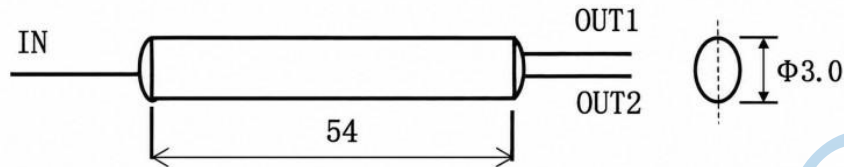
## Specifications

Parameter		Unit	Value			
Ports (In x Out)		-	1x2			
Type		-	Single Window	Dual Window	Three Window	All Band
Center Wavelength		nm	1310nm or 1550nm	1310/1490nm or 1490/1550nm or 1310/1550nm	1310/1490/1550nm	1260~1620nm
Operating Wavelength Range		nm	±40	±40	±40	1260~1620nm
Insertion Loss (Max.)	50/50	dB	3.4	3.6	3.6	3.8
	40/60	dB	4.4/2.6	4.7/2.7	4.7/2.7	5.1/3.1
	33/67	dB	5.3/2.1	5.7/2.2	5.7/2.2	6.0/2.55
	30/70	dB	5.7/1.9	6.0/1.9	6.0/1.9	6.4/2.3
	20/80	dB	7.6/1.25	7.9/1.3	7.9/1.3	8.3/1.7
	10/90	dB	10.65/0.65	11.2/0.75	11.2/0.75	11.4/1.15
	5/95	dB	13.8/0.4	14.15/0.4	14.15/0.4	14.3/0.8
	3/97	dB	16.15/0.3	16.45/0.3	16.45/0.3	16.7/0.75
	2/98	dB	18.05/0.25	18.45/0.3	18.45/0.3	18.75/0.7
	1/99	dB	21.15/0.2	21.6/0.25	21.6/0.25	21.95/0.65
Return Loss (Min.)		dB	50			
Polarization Dependent Loss		dB	≤0.15			
Directivity (Min.)		dB	55			
Max Optical Power (CW)		W	0.5/1/5/10			
Fiber Type		-	SMF-28e			
Package Dimensions	Steel Tube	mm	Φ3 x L54			
	ABS Box	mm	90 x 20 x 10mm			
Operating Temperature		°C	-10 to +70			
Storage Temperature		°C	-40 to +85			

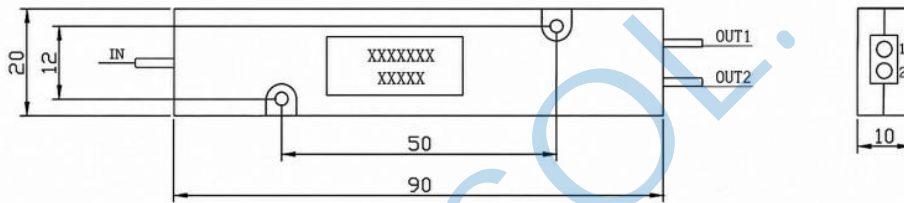
**Notes:** Tested at 25 °C. Data exclude connectors; adding connectors increases insertion loss by 0.3 dB and reduces return loss by 5 dB.

## Product Dimensions

### Steel Tube Package



### ABS Box Package



## Ordering Information

Ports (In x Out)	Center Wavelength	Type	Split/Coupling Ratios	Max Optical Power (CW)	Fiber Type	Pigtail Length	Pigtail Diameter	Connector	Package Type
1x2	1310nm	Single Window	50/50	0.5W	SMF-28e	0.5m	250µm Bare Fiber	None	Steel Tube
	1550nm	Dual Window	40/60	1W		1.0m	900µm Loose Tube	LC/UPC	ABS Box
	1310/1490nm	Three Window	30/70	5W		1.5m	2.0mm	LC/APC	
	1490/1550nm	All Band	20/80	10W		2.0m	3.0mm	SC/UPC	
	1310/1550nm		10/90					SC/APC	
	1310/1490/1550nm		5/95					FC/UPC	
	1260~1620nm		Custom					FC/APC	
								ST/UPC	
								ST/APC	