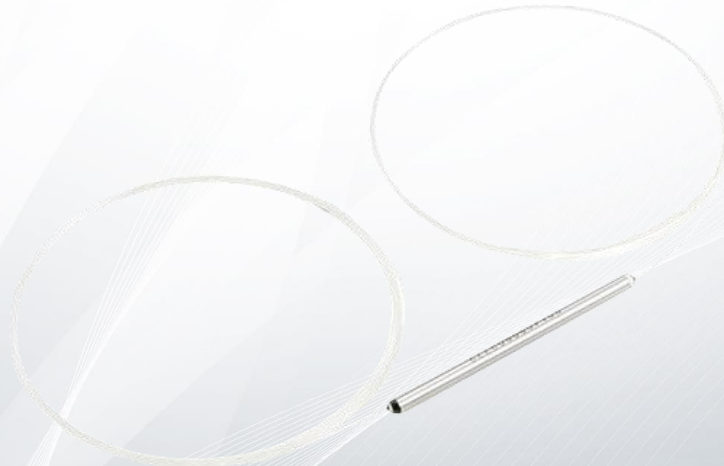


# Steel Tube FBT Couplers Splitters, Single Mode

Data Center & Cloud Computing Infrastructure Solutions



## Overview

Steel Tube FBT splitter is based on Fused Biconical Taper (FBT) technology to combine or distribute light from single inputs to single outputs bi-directionally. It's designed for power splitting and tapping in telecommunication equipment, CATV network, and test equipment.

FBT splitter can be customized in a variety of styles, sizes, port configurations, split values, and wavelength specifications, allowing a high degree of flexibility in tailoring the product to suit your precise requirements and application.

## Features

- Low insertion loss
- Low PDL (Polarization Dependent Loss)
- Compact design
- Exceptional reliability and stability
- Wide operating temperature: from  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Conformed to RoHS certificate

## Application

- FTTX System
- LAN, WAN and Metro Network
- Analog/Digital Passive Optical Network

## Technical Specification

Parameter	Description		
<b>Configuration</b>	1 × 2/ 2 × 2		
<b>Type</b>	Single window	Dual window	Three window
<b>Operating Wavelength</b>	1310nm or 1550nm	1310/1490nm or 1490/1550nm or 1310/1550nm	1310/1490/1550nm
<b>Operating Bandwidth</b>	± 40nm	± 40nm	± 20nm
<b>Max Insertion Loss* (50/50)</b>	3.4dB		3.6dB
<b>Max Insertion Loss (10/90)</b>	11dB/0.65dB		9.20-11dB/0.75dB
<b>Max Insertion Loss (5/95)</b>	14.2dB/0.4dB		12.05-14.14dB/0.4dB
<b>Max Insertion Loss (1/99)</b>	21.5dB/0.2dB		18.60-21.6dB/0.25dB
<b>PDL</b>	≤ 0.1dB		≤ 0.15dB
<b>Return Loss</b>		≥ 50dB	
<b>Directivity</b>		≥ 55dB	
<b>Operating Temperature</b>	-40°C ~ +85°C		
<b>Storage Temperature</b>	-40°C ~ +85°C		
<b>Fiber Length</b>	0.5m/1m/1.5m		
<b>Fiber Diameter</b>	250μm		
<b>Connector Type</b>	None		
<b>Housing</b>	Steel tube		
<b>Dimensions (WxD)</b>	3mmx45mm		3mmx54mm
<b>Grade Type</b>	P		
<b>Quality Certification</b>	RoSH		

\* Note: 1. Above specifications are for devices without connectors.

2. Only the popular coupling ratios are listed. For more parameters, please contact our account manager.

## Technical Specification

Parameter	Description			
Configuration	1×3		3×3	
Type	Single window	Dual window	Single window	Dual window
<b>Operating Wavelength</b>	1310 or 1550nm	1310 and 1550nm	1310 or 1550nm	1310 and 1550nm
<b>Operating Bandwidth</b>	± 40nm	± 40nm	± 15nm	± 40nm
<b>Insertion Loss *(50/50)</b>	≤ 5.4dB	≤ 5.8dB	≤ 5.6dB	≤ 5.8dB
<b>PDL</b>	≤ 0.15dB	≤ 0.25dB	≤ 0.25dB	≤ 0.25dB
<b>Uniformity Loss</b>	≤ 0.8dB	≤ 1.2dB	≤ 1dB	≤ 1.3dB
<b>Return Loss</b>	≥ 50dB			
<b>Directivity</b>	≥ 55dB			
<b>Operating Temperature</b>	-40°C ~ +85°C			
<b>Storage Temperature</b>	-40°C ~ +85°C			
<b>Fiber Length</b>	0.5m/1m/1.5m			
<b>Fiber Diameter</b>	250μm			
<b>Connector Type</b>	None			
<b>Housing</b>	Steel tube			
<b>Dimensions (WxD)</b>	3x45mm		3x54mm	
<b>Grade Type</b>	P			
<b>Quality Certification</b>	RoSH			

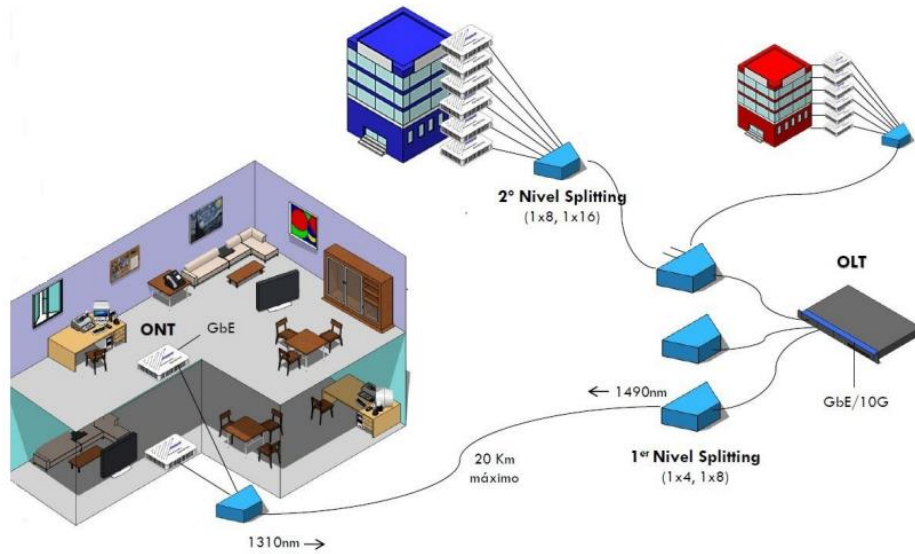
\* Note: Above specifications are for devices without connectors.

## Technical Specification

Parameter	Description	
<b>Configuration</b>	1×4	
<b>Type</b>	Single window	Dual window
<b>Operating Wavelength</b>	1310 or 1550nm	1310 and 1550nm
<b>Operating Bandwidth</b>	± 40nm	± 40nm
<b>Coupler Ratio</b>	50/50	50/50
<b>Insertion Loss *</b>	≤ 6.8dB	≤ 7.2dB
<b>PDL</b>	≤ 0.2dB	≤ 0.3dB
<b>Uniformity Loss</b>	≤ 1dB	≤ 1.2dB
<b>Return Loss</b>	≥ 50dB	
<b>Directivity</b>	≥ 55dB	
<b>Operating Temperature</b>	-40°C ~ +85°C	
<b>Storage Temperature</b>	-40°C ~ +85°C	
<b>Fiber Length</b>	0.5m/1m/1.5m	
<b>Fiber Diameter</b>	250μm	
<b>Connector Type</b>	None	
<b>Housing</b>	Steel tube	
<b>Dimensions (WxD)</b>	3x54mm	
<b>Grade Type</b>	P	
<b>Quality Certification</b>	RoSH	

\* Note: Above specifications are for devices without connectors.

## Applications Configuration Diagram



## FBT Splitters Series

Type	ID#	Description
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### Single Mode FBT Coupler Splitters

Steel Tube	<a href="#">#21045</a>	1x2 Single Mode Dual Window FBT 900µm Coupler Splitter, FC/APC
Steel Tube	<a href="#">#65799</a>	MxN Single Mode 250µm Steel Tube FBT Couplers Splitters, Unconnectorized
Steel Tube	<a href="#">#65798</a>	MxN Single Mode 900µm Steel Tube FBT Couplers Splitters, LC/SC/FC
ABS Module	<a href="#">#65800</a>	MxN Single Mode ABS Module FBT Couplers Splitters, LC/SC/FC

### MultiMode FBT Coupler Splitters

Steel Tube	<a href="#">#65801</a>	1x2 Multimode Steel Tube FBT Couplers Splitters, Unconnectorized/LC/SC/FC
ABS Module	<a href="#">#65803</a>	1xN Multimode ABS FBT Couplers Splitters, LC/SC/FC



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