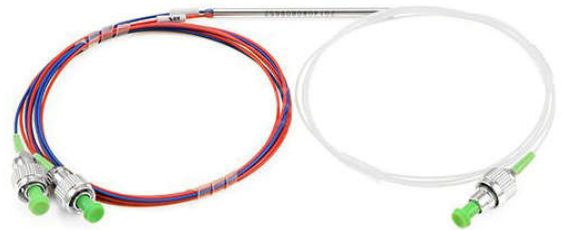


## Fused Biconic Taper Splitter

FBT splitter utilizes unique material and manufacturing process ,which allow accurate control of fiber position, fusion and packaging processes to provide low excess loss, low wavelength dependence, low PDL and insensitive to working temperature up to 280°C . FBT splitter are available in a wide variety of configurations, tape ratios wavelength ranges, housing and connector options, and can therefore be readily specified in a wide variety of applications, enabling rapid design cycles and new project builds. These products meet or exceed Telcordia GR-1209-CORE and GR-1221-CORE reliability qualification requirement.



**1\*2 Boxed Type FBT Splitter**  
(with 3.0mm loose tube pigtail)



**1\*2 Steel Tube Type FBT Splitter**  
(with 0.9mm tight tube pigtail)

### Features & Benefits

- Supports industry standard SC, LC, FC and ST singlemode and multimode connectors
- 100% performance tested for insertion loss, return loss and final mechanical inspect
- Virtually any combination of split ratios and number of components
- highly stable for multiport optical signal splitting with low insertion loss
- Compliant to Telcordia GR-1221 and GR-1209

### FBT Specifications

Parameter	Unit	Single-Window				Dual-/Triple-Window				
Grade		P	A	P	A	P	A	P	A	
Configuration		1×1(Attenuator), 1×2, 2×2								
Fiber Type		SM fibers, MM fibers, PM fibers, others								
Wavelength		980、1060、1310、1480、1550、1620 nm								
Bandwidth	nm	±20		±40		±40		1270-1610		
Insertion Loss	Max	dB	3.4	3.6	3.4	3.7	3.6	3.9	3.7	4
Excess Loss	Typ	dB	0.06	0.1	0.1	0.15	0.06	0.1	0.1	0.15
Uniformity	Max	dB	0.5	0.8	0.6	0.9	0.8	1.1	1	1.4
PDL	Max	dB	0.05	0.1	0.1	0.15	0.15	0.2	0.15	0.2
Return Loss	Min	dB	50 (Test at central wavelength only)							
Operating Power	Max	W	5.0							
Operating Temperature		°C	-40 ~ +85							
Storage Temperature		°C	-40 ~ +85							
Package Type			bare fiber、tigh tube、loose tube							
Special Feature			Normal							
		°C	High temperature of over 280°C							
		%	Very low branching ratio 0.01%, 0.1%,							
		dB	Ultra-low PDL of less than 0.02dB							

Notes: Specifications without fiber connectors

Splitting Ratio & Insertion Loss Conversion Table

Window		Maximum Insertion Loss (dB)															
		Narrowband(±20)				Broadband(±40)				Broadband(±40)				Ultra-Broadband			
Band		P		A		P		A		P		A		P		A	
Grade		P		A		P		A		P		A		P		A	
Output port		1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Splitting Ratio	50 : 50	3.4	3.4	3.6	3.6	3.4	3.4	3.6	3.6	3.6	3.6	3.9	3.9	3.7	3.7	4.0	4.0
	60 : 40	2.5	4.4	2.8	4.8	2.5	4.4	2.8	4.8	2.7	4.7	2.9	5.0	2.7	4.8	2.9	5.1
	70 : 30	1.8	5.6	2.0	6.1	1.8	5.6	2.0	6.1	1.9	6.0	2.1	6.4	2.0	6.2	2.2	6.6
	80 : 20	1.2	7.4	1.3	8.0	1.1	7.4	1.3	8.0	1.2	7.9	1.4	8.5	1.3	8.0	1.5	8.5
	90 : 10	0.7	10.8	0.8	12.0	0.6	10.8	0.8	12.0	0.6	11.3	0.8	12.7	0.6	11.5	0.8	12.9
	95 : 05	0.4	14.6	0.5	18.4	0.4	14.6	0.5	18.4	0.4	15.2	0.5	18.9	0.4	15.6	0.5	19.2
	96 : 04	0.3	16.0	0.4	19.0	0.3	16.0	0.4	19.0								
	97 : 03	0.3	17.5	0.4	19.5	0.3	17.5	0.4	19.5								
	98 : 02	0.2	19.0	0.3	20.0	0.2	19.0	0.3	20.0	0.3	19.8	0.4	21.0	0.3	20.0	0.4	21.5
	99 : 01	0.2	21.5	0.3	22.0	0.2	21.5	0.3	22.0	0.3	23.5	0.4	24.0	0.3	24.0	0.4	24.6
99.5 : 0.5	0.2	23.0	0.3	24.0	0.2	23.0	0.3	24.0									

Ordering Information

Using the available configurations amend/create product codes using the formula below.

Part Number: **FBT-ABC-DEFG**

Ordering Guide

<b>A</b>	Configuration	<b>0</b> =1x1(Attenuator), <b>1</b> =1x2, <b>2</b> =2x2.
<b>B</b>	Wavelength(nm)	<b>1</b> =808, <b>2</b> =980, <b>3</b> =1310, <b>4</b> =1490, <b>5</b> =1550, <b>6</b> =850, <b>7</b> =1310&1490, <b>8</b> =1310&1550, <b>9</b> =1490&1550, <b>0</b> =1310&1490&1550, <b>X</b> =Customize.
<b>C</b>	Split Ratio	<b>01</b> =1/99, <b>02</b> =2/98, <b>03</b> =3/97, ... <b>49</b> =49/51, <b>50</b> =50/50, <b>X</b> =Customize.
<b>D</b>	Package	<b>0</b> =None, <b>1</b> = φ 3x54 mm, <b>2</b> = φ 4x64 mm, <b>3</b> = φ 3x60 mm, <b>4</b> = φ 3x40 mm, <b>5</b> = φ 3x45 mm, <b>6</b> =10x20x90 mm, <b>7</b> =80x100x10 mm, <b>X</b> =Customize. (Steel Tube Package Type: <b>1~5</b> , Boxed Package Type: <b>6~7</b> .)
<b>E</b>	Pigtail	<b>0</b> =250um Bare Fiber, <b>1</b> =0.9mm Tight Tube, <b>2</b> =2.0mm Loose Tube, <b>3</b> =3.0mm Loose Tube, <b>X</b> =Customize.
<b>F</b>	Fiber Length(M)	<b>1</b> =0.5M, <b>2</b> =1.0M, <b>3</b> =1.5M, <b>4</b> =2.0M, <b>5</b> =2.5M, <b>6</b> =3.0M, <b>A</b> =1.25M, <b>B</b> =1.75M, <b>C</b> =2.25M, <b>X</b> =Customize.
<b>G</b>	Fiber Connector type	<b>FP</b> , <b>SP</b> , <b>SA</b> , <b>LP</b> (As noted in Connector type code chart)

Connector Type Code

Code	Connector	Code	Connector	Code	Connector	Code	Connector	Code	Connector	Code	Connector
<b>FP</b>	FC/PC	<b>FA</b>	FC/APC	<b>LP</b>	LC/PC	<b>LA</b>	LC/APC	<b>MU</b>	MU	<b>DN</b>	DIN
<b>SP</b>	SC/PC	<b>SA</b>	SC/APC	<b>TP</b>	ST/PC	<b>TA</b>	ST/APC	<b>MT</b>	MTRJ	<b>E2</b>	E2000

Ordering Sample

Part Number	Description
<b>FBT-13401-12SP</b>	1*2 FBT splitter, 1310nm wavelength, 40/60 split ratio, φ 3x54 mm steel tube type package, 0.9mm tight tube pigtail, length 1.0M, and connector SC/PC.