Fused Biconic Coupler/Tap (FBC) - FBFD Series

Agilecom's FBFD utilizes our 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 280ºC.
FBFD's 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.

Key Features

- Low excess loss and PDL
- High reliability
- High directivity
- Wide operating temperature up to 280℃
- Broad bandwidth

Applications

- Network monitoring
- EDFA
- Optical testing system
- Optical fiber sensors
- High temperature fiberoptic systems

FBC 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			SMF-28, MM fibers, PM fibers, others							
Wavelength			980、1060、1310、1480、1550、1620 nm							
Bandwidth	B	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		℃	-10 ~ +70							
Storage Temperature		℃	-40 ~ +85							
Package Type	B1	mm	Φ3×40 for 250μm bare fiber							
	L1		Φ3×60 for 900μm loose tube							
	B2		Miniature: Φ3×25 for 250μm bare fiber							
	M1		10×20×90 for 900μm loose tube or 3mm cable							
Special Feature	N		Normal							
	H	℃	High temperature of over 280°C							
	L	%	Very low branching ratio 0.01%, 0.1%,							
	U	dB	Ultra-low PDL of less than 0.02dB							

Notes：Specifications without fiber connectors

Agilecom Photonic Solutions (Zhongshan), Inc.
Tel:086-0760-86781899 Fax:086-0760-86781818
Address:Shenwan Industrial Park,Shenwan Town,Zhongshan,Guangdong,China
Zip:528462
Website:www.agilecom.net
E-mail:sales@agilecom.net

Splitting Ratio & Insertion Loss Conversion Table

		Maximum Insertion Loss (dB)															
Window																	
Band		Narrowband(±20)				Broadband(±40)				Broadband(±40)				Ultra-Broadband			
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

For more information on these or other products and their availability, please contact our sales department at 408-943-0815 in North America and 86-760-86781889 in China or via e-mail at info@agilecom.net.

Sample: FBC— 18506131-01

FBC — □ □ □□ □ □ □ □

Code	Configuration
0	1×1 (Attenuator)
1	1×2
2	2×2

Code	Wavelength
1	808nm
2	980nm
3	1310nm
4	1490nm
5	1550nm
6	850nm
7	1310&1490nm
8	1310&1550nm
9	1490&1550nm
0	1310&1490& 1550nm
X	Customize

Code	Ratio
01	1/99
02	2/98
03	3/97
.	.
.	.
.	.
49	49/51
50	50/50
X	Customize

Code	Package
0	None
1	Φ3×54 mm
2	Φ4×64 mm
3	Φ3×60 mm
4	Φ3×40 mm
5	Φ3×45 mm
6	10×20×90 mm
7	80×100×10mm
X	Customize

Code	Pigtail
0	250μm Bare Fiber
1	0.9mmLooseTube
2	2.0mmLoose Tube
3	3.0mmLoose Tube
4	0.9mmTight Tube
5	2.0mmTight Tube
6	3.0mmTight Tube
7	2.0mm MM Loose Tube
8	2.0mm MM Loose Tube
X	Customize

Code	Fiber Length
1	0.5m
2	1.0m
3	1.5m
4	2.0m
5	2.5m
6	3.0m
A	1.25m
B	1.75m
C	2.25m
X	Customize

Code	Connector
0	None
1	SC/UPC
2	SC/APC
3	FC/UPC
4	FC/APC
5	LC/UPC
6	LC/APC
7	ST/UPC
8	MU
X	Customize

Agilecom Photonic Solutions (Zhongshan), Inc.
Tel:086-0760-86781899 Fax:086-0760-86781818
Address:Shenwan Industrial Park,Shenwan Town,Zhongshan,Guangdong,China
Zip:528462
Website:www.agilecom.net
E-mail:sales@agilecom.net