

FBT-1×□□□ Series
Fused Biconical Taper Optical Splitter
(FBT Splitter)

TECHNICAL INDEX

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1.0 PRODUCT SUMMARY

Huatai Fused Biconical Taper optical splitter(FBT Splitter), two or more fibers be tied together, then fused and stretched in Fused cone machine, real-time monitoring the change of splitting ratio. When the splitting ratio reaches the demand, fusion and stretch come to the end. One end reserve a fiber (cut off the rest) as input end, and another as multi-output end.

2.0 PRODUCT FEATURE

- Can be single/dual window
- Low loss
- Low polarization sensitivity
- Resistance to environmental change
- Low added loss
- High wavelength isolation
- Small size
- Optional splitting ratio

3.0 MAIN APPLICATION

- Optical communication equipment
- Optical Local Area Network(LAN)
- CATV
- FTTH
- Optical fiber sensor(OFS)
- Measuring device

4.0 TECHNICAL INDEX

4.1 1×□□□ type optical splitter optical performance index:

Specification		1×002	1×003	1×004	1×005	1×006	1×007	1×008	1×N
Fiber type		G.657.A							
Optical wavelength		1310nm or 1550nm or 1310&1550nm or 1310&1490&1550nm							
Maximum insertion loss(dB)	Max	3.4	5.6	7.0	7.4	8.6	8.8	10.7	~
	Min	2.7	5.4	6.2	6.9	7.9	8.2	9.3	
Port insertion loss homogeneity (dB)		0.3	0.3	0.6	0.6	0.6	0.6	0.6	~
Wavelength insertion loss homogeneity (dB)		0.4	0.6	0.8	0.8	0.8	0.8	0.8	~
Return loss (dB)		≥55							
Directivity(dB)		≥55							
Package	Device type	3x35/3x40							
	BoxType	89x19x10mm/100x80x10mm				100x80x10mm			

Note: 1. Optical fiber type can be required be customer, e.g. G652D, G657A, 980nm etc.

2. Package type also can be with 900um type

3. N=9、10、11 etc.

4.2 FBT-1 × 002 optical splitter single-window optical performance index:

Single-window (P level)						
Splitting ratio	Main route			SUB route		
	Max	Type	Min	Max	Type	Min
50/50	3.00	3.25	2.70	3.40	3.25	2.70
45/55	2.90	2.80	2.30	3.80	3.70	3.10
40/60	2.50	2.40	2.00	4.40	4.30	3.70
35/65	2.10	2.05	1.50	4.90	4.80	4.20
30/70	1.80	1.20	1.40	5.60	5.30	4.90
25/75	1.50	1.40	1.20	6.50	6.40	5.80
20/80	1.10	1.04	0.90	7.40	7.30	6.90
15/85	0.90	0.85	0.60	8.80	8.07	8.00
10/90	0.60	0.55	0.40	10.80	10.50	9.60
5/95	0.40	0.36	NA	13.80	13.70	11.80
4/96	0.30	0.25	NA	15.50	15.00	12.30
3/97	0.30	0.25	NA	16.20	15.80	14.50
2/98	0.20	0.16	NA	19.00	18.00	16.80
1/99	0.20	0.16	NA	21.00	20.50	19.00

4.3 FBT-1 × 002 optical splitter Dual-window optical performance index:

Dual-window (P level)						
Splitting ratio	Main route			SUB route		
	Max	Type	Min	Max	Type	Min
50/50	3.60	3.40	2.60	3.60	3.00	2.60
45/55	3.20	3.05	2.10	4.10	4.00	2.90
40/60	2.70	2.55	1.80	4.70	4.52	3.50
35/65	2.30	2.20	1.33	5.30	5.15	4.00
30/70	1.90	1.80	1.30	6.00	5.78	4.70
25/75	1.60	1.50	1.00	6.80	6.60	5.60
20/80	1.20	1.12	0.80	7.90	7.65	6.50
15/85	1.00	0.95	0.50	9.20	9.00	7.80
10/90	0.60	0.54	0.40	11.30	11.00	9.60
5/95	0.40	0.25	NA	15.20	14.60	11.80
4/96	0.30	0.25	NA	16.00	15.50	12.20
3/97	0.30	0.25	NA	17.40	16.50	14.00
2/98	0.20	0.16	NA	19.40	18.70	16.00
1/99	0.20	0.16	NA	21.50	21.00	18.00

5.0 ORDER INFORMATION

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Fused Biconical Taper Optical Splitter (FBT Splitter)	Input port		Output port		Pass wavelength		Package		Optical connect	
	1	1□	002	2□	1310	1310nm	A	Device	FP	FC/UPC
			003	3□	1550	1550nm	B	Box	FA	FC/APC
			004	4□	1315	1310nm , 1550nm			SP	SC/UPC
			005	5□					SA	SC/APC
			006	6□					LP	LC/UPC
			007	7□					LA	LC/APC
			008	8□						
			N	N□						

Note: Can be multi-channel, non-average splitting ratio FBT type splitter