

## **FBT-2×□□□ Series**

**Dual-wavelength 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.

## **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 2×□□□ type optical splitter optical performance index:

Specification		2×002	2×004	2×008
Fiber type		G.657.A		
Optical wavelength		1260nm~1650nm		
Maximum insertion loss(dB)		More details please refer to 4.2、4.3	≤7.4	≤10.7
Port insertion loss homogeneity (dB)		≤0.6	≤0.6	≤0.8
Wavelength insertion loss homogeneity (dB)		≤0.8	≤0.8	≤0.8
Return loss (dB)		≥55	≥55	≥55
Directivity(dB)		≥55	≥55	≥55
Package	Device type		3×14×8	
	Box Type	Minitype	89×19×10	
		General	100×80×10	

Note:2×002 specific maximum insertion loss please refer to 4.2

### 4.2 FBT-2 × 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-2 × 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		
	2	2□	002	2□	1310	1310nm	A	Device	FP	FC/UPC	
			004	4□	1550	1550nm	B1		Box	FA	FC/APC
			008	8□	1315	1310nm , 1550nm	B2	General		SP	SC/UPC
			xxx	□□□							
									LP	LC/UPC	
								LA	LC/APC		

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