LIGHTEL
True Color Components

FBT Coupler

Three Window Wideband Coupler

Specifications (50/50)

Parameter		Premium	A Grade
Operating Wavelength Range		1260-1360 nm, 1480-1550 nm, 1535-1570 nm	
Insertion Loss		≤ 3.6 dB	≤ 3.8 dB
Uniformity		≤ 0.7 dB	≤ 1.0 dB
Return Loss		≥ 55 dB (1x2) ≥65 dB (2x2)	
PDL		≤ 0.15 dB	≤ 0.2 dB
TDL		≤ 0.2 dB (-10°C ~ +75°C) ≤ 0.35 dB (-40°C ~ +85°C)	
Operating & Storage Temperature		- 40° C ~ + 85° C	
Package Dimensions	Light Duty (B)	3.0mm (Φ) x 55.0mm (L)	
	Medium Duty (L)	3.0mm (Φ) x 60.0mm (L)	
	Heavy Duty (K, R)	100.0mm x 12.0mm x 8.0mm	

Tap Coupler

Coupling Ratio	Premium	A Grade
40/60	4.7/2.7 dB	5.0/2.5 dB
30/70	6.0/1.9 dB	6.4/2.2 dB
20/80	7.9/1.2 dB	8.5/1.4 dB
10/90	11.3/0.6 dB	12.7/0.8 dB
5/95	15.0/0.4 dB	16.0/0.5 dB
1/99	23.5/0.3 dB	25/0.4 dB

Tree Couplers

*Port #	Max IL		Uniformity	
	Premium	A Grade	Premium	A Grade
1 x 4	7.2 dB	7.6 dB	1.3 dB	1.8 dB
1 x 8	11.0 dB	11.3 dB	2.0 dB	2.4 dB
1 x 16	14.4 dB	15.2 dB	2.7 dB	3.2 dB
1 x 32	18.1 dB	19.0 dB	3.4 dB	4.2 dB

**Other port numbers upon request.*

Note1: All values specified are without connectors.
Note2: Higher performance specifications are available upon request.
Note3: Fiber Type – Corning SMF-28e.

Ordering Information

T W C – ___ – ___ – ___ – ___ – ___ – ___

Port Number
12: 1 x 2
14: 1 x 4
18: 1 x 8
16: 1 x 16
32: 1 x 32

Grade
P: Premium
A: A Grade

Coupling Ratio
xy % : xy %

Fiber Length
1: 1 meter
2: 2 meter
S: Special

Pigtail Style
(=Package style)
B: bare fiber
L: 900 µm loose tube
K: 2mm cable
R: 3mm cable

Connector
0: None
1: FC/PC
2: FC/APC
3: SC/ PC
4: SC/APC
5: FC/SPC
6: SC/SPC
7: LC/UPC
8: LC/SPC
9: Special
A: FC/UPC
B: SC/UPC
C: ST

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