

FUSED FIBER COUPLERS

ULTRA LOW PDL FBT COUPLER

DiCon's Ultra Low PDL FBT Coupler is a compact low loss singlemode component designed for splitting power signals in the 1550 nm or 1310 nm windows.



FEATURES

- Low insertion loss
- Low PDL
- Low wavelength dependence loss
- Tested to Telecordia GR-1221 (bare fiber version)

APPLICATIONS

Ultra Low PDL FBT Couplers are designed for power splitting and tapping telecommunication equipment, CATV networks, and test equipment. These components are available individually or integrated into DiCon's modules for fiber protection switching, MUX/DMUX, optical channel monitoring, and add/drop multiplexing applications.



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SPECIFICATIONS¹

Grade	Premium	Standard
Uniformity ²	0.6 dB max.	0.8 dB max.
PDL	0.05 dB max.	0.1 dB max.
Directivity	50 dB min. (for 1 X 2)	
	60 dB min. (for 2 X 2)	
Back-reflection	-50 dB max. (for 1 X 2)	
	-60 dB max. (for 2 X 2)	
Thermal stability	0.002 dB/°C max.	
Fiber type	9/125 Corning SMF-28	
Operating temperature	-40°C to + 70°C	
Storage temperature	-40°C to + 85°C	

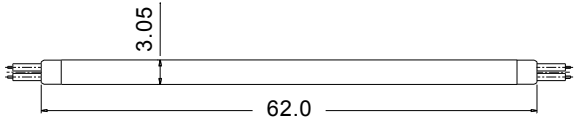
1. All specifications referenced without connectors.
2. For 50/50 coupler only.

COUPLING RATIO TABLE

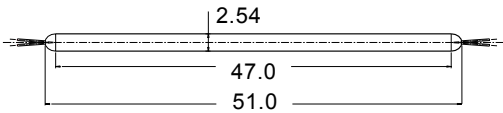
Tap ratio	Insertion loss P1		Insertion loss P2	
	Premium	Standard	Premium	Standard
1%	0.2	0.3	21.5	23
2%	0.25	0.35	19.0	20
5%	0.4	0.5	14.6	18.4
10%	0.6	0.8	11.0	12
20%	1.2	1.3	7.5	8.0
30%	1.8	2.0	5.6	6.1
40%	2.5	2.8	4.4	4.8
50%	3.4	3.7	3.4	3.7

HOUSING DIMENSIONS

Loose Tube Package



Bare Fiber Package



Units: mm

ORDERING INFORMATION

UPC - - - - - - -

Tap Ratio

1	1%
2	2%
5	5%
10	10%
20	20%
30	30%
40	40%
50	50%

Passband C - P1

13	1285 - 1335 nm
15	1525 - 1575 nm
X	Specify value

Grade

1	Premium
2	Standard

Port Configuration

1	1x2
2	2x2

Connector Type

FC	FC/SPC
FC/APC	FC/APC
FC/UPC	FC/UPC
SC	SC/SPC
SC/APC	SC/APC
SC/UPC	SC/UPC
ST	ST/SPC
ST/UPC	ST/UPC
LC	LC/SPC
LC/UPC	LC/UPC
MU/UPC	MU/UPC
N	None

Fiber Jacket

2	250 micron, 200 kpsi bare fiber
9L	900 micron, loose tube

Pigtail Length

1	1 meter
X	Specify X meters