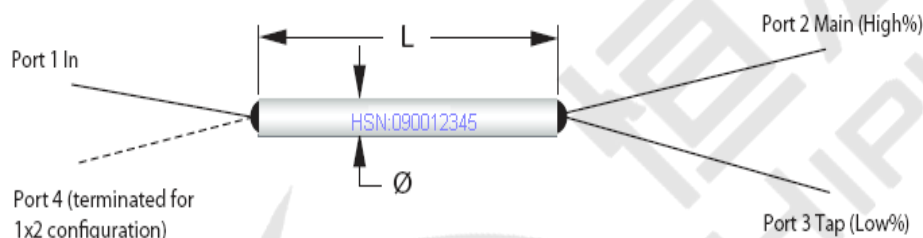


ULTRA-LOW PDL FUSED TAP COUPLER

(1310/S/C/L BAND)

Product Description

The HiPhotonics fused single window wideband Fixed In-line Attenuators provide accurate optical signal coupling and splitting over wide bandwidth with high performance and high reliability. These couplers have excellent uniformity, low excess loss and very low polarization sensitivity and are available with various tap ratios, fiber types, and connector options. All devices are shown to be able to handle high optical power up to 3W and are tested according to industry standard procedures. Reliability is guaranteed through stringent tests to fully meet Telcordia GR-1221 requirements



Performance Specification

USDWFC Series	Specifications	Unit
Wavelength Range	1310±40 or 1460±40 or 1550±40	nm
Fiber Type	Corning SMF-28 Ultra	
Insertion Loss	See Insertion Loss Table	dB
Directivity (Min)	55	dB
Return Loss (Min)	55	dB
TDL (Max)	Signal P:0.02~0.10dB, Tap P:0.1-0.2dB	dB
Maximum Power Handling	1	W
Operating Temperature Range	-40 ~ +75	℃
Storage Temperature Range	-40 ~ + 85	℃
Package Dimensions	P1:250um bare fiber Ø 3.0X 45	mm
	P2:900nm loose tube Ø 3.0X 50	
	P3:3mm cable L90xW20xH10	
Qualifications	Telcordia GR-1221	

Features:

- Wavelength Independent
- Low Insertion Loss and PDL
- High Power Handling
- Guaranteed Reliability

Applications:

- Signal monitoring in EDFA
- Testing Instruments
- CATV
- Local Area Networks

Note:

- (1) Values are referenced without connector loss.
- (2) Temperature Sensitivity Coefficient~ 0.002℃ at the range of-5to75℃
- (3) Operating temperature range changes to -5 to 75℃in P2, P3 package and all package with connectors
- (4) The mechanical tolerance should be±0.2mm on all package dimensions unless otherwise custom specified

Coupling Ratio	P Grade				A Grade			
	IL (dB)		PDL (dB)		IL (dB)		PDL (dB)	
	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap
99/1	≤0.18	19.0~21.0	≤0.03	≤0.03	≤0.20	17.7~21.5	≤0.05	≤0.05
98/2	≤0.25	16.4~18.4	≤0.03	≤0.03	≤0.30	16.0~19.4	≤0.05	≤0.05
97/3	≤0.30	14.6~16.2	≤0.03	≤0.03	≤0.35	14.0~16.8	≤0.05	≤0.05
95/5	≤0.35	12.4~13.8	≤0.03	≤0.03	≤0.40	12.0~14.4	≤0.05	≤0.05
90/10	≤0.60	9.60~10.8	≤0.03	≤0.03	≤0.65	9.2~11.2	≤0.05	≤0.05
85/15	≤0.90	7.80~8.80	≤0.03	≤0.03	≤0.90	7.5~9.0	≤0.05	≤0.05
80/20	≤1.15	6.60~7.60	≤0.03	≤0.03	≤1.15	6.4~8.0	≤0.05	≤0.05
75/25	≤1.35	5.75~6.50	≤0.03	≤0.03	≤1.44	5.6~6.7	≤0.05	≤0.05
70/30	≤1.75	5.00~5.50	≤0.03	≤0.03	≤1.85	4.9~5.8	≤0.05	≤0.05
65/35	≤2.05	4.40~4.90	≤0.03	≤0.03	≤2.15	4.3~5.0	≤0.05	≤0.05
60/40	≤2.50	3.95~4.30	≤0.03	≤0.03	≤2.60	3.7~4.6	≤0.05	≤0.05
55/45	≤2.85	3.35~3.80	≤0.03	≤0.03	≤2.9	3.1~4.0	≤0.05	≤0.05
50/50	2.80~3.30		≤0.03		2.70~3.30		≤0.05	

1. Insertion loss over operating wavelength range at ~23°C (excluding PDL and TDL).
2. Insertion loss change over the all input polarization states.

Order Information USDWFC-①①-②②-③③-④④-⑤⑤-⑥⑥-⑦⑦

①①Operating Wavelength

13=1310nm
15=1550nm
13=1310nm
0S=1420~1500nm
0C=1530~1565nm
0L=1570~1605nm

②②Port

12=1X2
22=2X2

③③Coupling Ratio

01=01/99
05=05/99
10=10/90
20=20/80
30=30/70
40=40/60
50=50/50
S=Special

④④Grade

P=P Grade
A=A Grade

⑤⑤Packaging Dimension

A=P1+250um bare fiber
B=P2+900um loose tube
C=P3+3mm cable

⑥⑥Fiber Length

A=0.5 Meter
B=1 Meter
C=1.5 Meter
D=2.0 Meter

S=Special

⑦⑦Connector Type

0=None
1=FC/UPC
2=FC/APC
3=SC/UPC
4=SC/APC
5=LC
S=Special