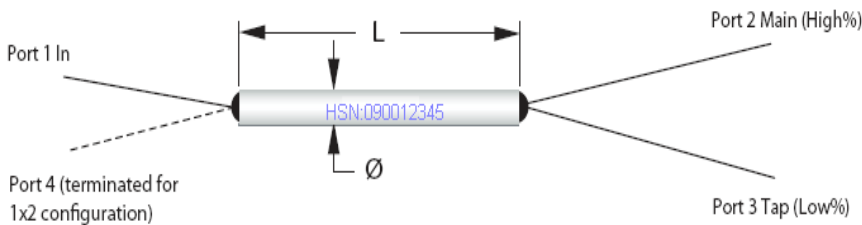


THREE WINDOW SINGLE MODE WIDEBAND FIBER COUPLER (1310NM AND 1490NM AND 1510NM BAND)

Product Description

The HiPhotonics fused dual window wideband fiber 1X2(2x2)couplers 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

TDWFC Series	Specifications	Unit
Wavelength Range	1310±40 and 1490±10 and 1550±40	nm
Fiber Type	Corning SMF-28	
Insertion Loss	See Insertion Loss Table	dB
Directivity(Min)	55	dB
Return Loss(Min)	55	dB
TDL (Max)	Signal Path:<0.10dB, Tap path:<0.15dB	dB
Maximum Power Handling	3	W
Operating Temperature Range	~ 40 ~ +75	°C
Storage Temperature Range	~ 40 ~+ 85	°C
Package Dimensions	P1:250um bare fiber ϕ 3.0X 45	mm
	P2:900nm loose tube ϕ 3.0X 54	
	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
- Network Monitoring
- CATV
- Local Area Networks
- Testing Instruments
- Laboratory R&D

Note:

- Values are referenced without connector loss.
- Temperature Sensitivity Coefficient~ 0.002°C at the range of -5 to 75°C
- Operating temperature range changes to -5 to 75°C in P2, P3 package and all package with connectors
- 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)		PDL (dB)		Uniformity	
	Signal	Tap	Signal	Tap	Signal	Tap	Signal	Tap
99/1	≤0.25	18~22.5	≤0.05	≤0.20	≤0.25	16~23.5	≤0.05	≤0.20
98/2	≤0.30	16~19	≤0.05	≤0.20	≤0.30	14.5~19	≤0.05	≤0.20
97/3	≤0.35	13.5~17	≤0.05	≤0.20	≤0.35	13~18.2	≤0.05	≤0.20
95/5	≤0.45	11.8~15	≤0.10	≤0.20	≤0.45	12.~16.5	≤0.10	≤0.20
90/10	≤0.65	9.6~11.3	≤0.10	≤0.15	≤0.65	9.2~12.2	≤0.10	≤0.15
85/15	≤0.98	7.8~9.4	≤0.10	≤0.15	≤0.98	7.8~9.8	≤0.10	≤0.15
80/20	≤1.25	6.5~7.85	≤0.15	≤0.15	≤1.25	6.4~8.0	≤0.15	≤0.15
75/25	≤1.60	5.5~6.8	≤0.15	≤0.15	≤1.80	5.3~7.0	≤0.15	≤0.15
70/30	≤2.00	4.7~6.0	≤0.15	≤0.15	≤1.95	4.7~6.0	≤0.15	≤0.15
65/35	≤2.10	4.3~5.2	≤0.15	≤0.15	≤2.30	4.3~5.5	≤0.15	≤0.15
60/40	≤2.70	3.5~4.7	≤0.15	≤0.15	≤2.80	3.2~5.0	≤0.15	≤0.15
55/45	≤3.00	3.0~4.2	≤0.15	≤0.15	≤3.20	2.8~4.5	≤0.15	≤0.15
50/50	2.70~3.60		≤0.15	≤0.70	2.40~3.90		≤0.20	≤1.2

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 Informatior SDWFC-①①-②-③-④-⑤-⑥-⑦

①①Operating Wavelength ②Port ③Coupling Ratio ④Grade ⑤Packaging Dimension
345=1310/1490/1550nm 12=1X2 01=01/99 P=P Grade A=P1+250um bare fiber
S=Special 22=2X2 05=05/99 A=A Grade B=P2+900um loose tube
10=10/90 C=P3+3mm cable
20=20/80
30=30/70
40=40/60
50=50/50
S=Special

⑥Fiber Length

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

S=Special

⑦Connector Type

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