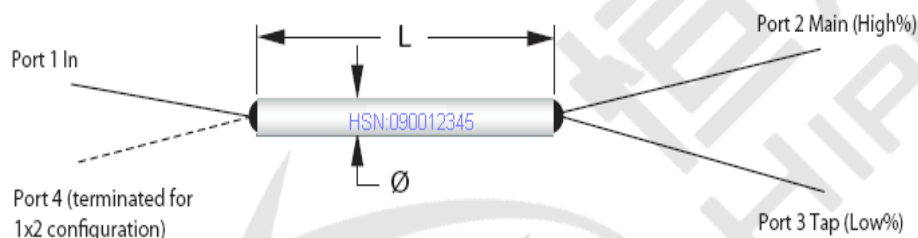


SINGLE WINDOW SINGLE MODE WIDEBAND FIBER COUPLER (1310,S,L,and C+L band)

Product Description

HiPhotonics's fused single 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

SSWFC 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 Path:<0.10dB, Tap path:<0.15dB	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
- Network Monitoring
- CATV
- Local Area Networks
- Testing Instruments
- Laboratory R&D

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°C in P2,P3 package and all package with connectors
- (4) The mechanical tolerance should be $\pm 0.2\text{mm}$ 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	18.2~21	≤ 0.04	≤ 0.15	≤ 0.23	16~23.5	≤ 0.05	≤ 0.20
98/2	≤ 0.25	16~18.6	≤ 0.04	≤ 0.12	≤ 0.30	14.5~19	≤ 0.05	≤ 0.20
97/3	≤ 0.30	14.4~16.4	≤ 0.04	≤ 0.12	≤ 0.35	13~18.2	≤ 0.05	≤ 0.20
95/5	≤ 0.35	12.2~14.0	≤ 0.04	≤ 0.10	≤ 0.45	12~16.5	≤ 0.06	≤ 0.20
90/10	≤ 0.60	9.40~11.0	≤ 0.05	≤ 0.10	≤ 0.65	9.2~12.2	≤ 0.06	≤ 0.15
85/15	≤ 0.90	7.7~8.85	≤ 0.05	≤ 0.10	≤ 0.98	7.8~9.8	≤ 0.07	≤ 0.15
80/20	≤ 1.15	6.30~7.80	≤ 0.05	≤ 0.10	≤ 1.25	6.4~8.0	≤ 0.07	≤ 0.15
75/25	≤ 1.50	5.45~6.70	≤ 0.06	≤ 0.10	≤ 1.80	5.3~7.0	≤ 0.08	≤ 0.15
70/30	≤ 1.75	4.6~5.75	≤ 0.06	≤ 0.10	≤ 1.95	4.7~6.0	≤ 0.08	≤ 0.15
65/35	≤ 2.05	4.1~5.05	≤ 0.08	≤ 0.10	≤ 2.20	4.3~5.0	≤ 0.09	≤ 0.15
60/40	≤ 2.50	3.85~4.4	≤ 0.08	≤ 0.09	≤ 2.60	3.7~4.6	≤ 0.09	≤ 0.15
55/45	≤ 2.85	3.15~3.8	≤ 0.08	≤ 0.09	≤ 2.9	3.1~4.0	≤ 0.09	≤ 0.15
50/50	2.70~3.40		≤ 0.08		2.60~3.50		≤ 0.10	

1. Insertion loss over operating wavelength range at $\sim 23^\circ\text{C}$ (excluding PDL and TDL).
2. Insertion loss change over the all input polarization states.

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

①① Operating Wavelength	② Port	③ Coupling Ratio	④ Grade	⑤ Packaging Dimension
13=1310nm	12=1X2	01=01/99	P=P Grade	A=P1+250um bare fiber
15=1550nm	22=2X2	05=05/99	A=A Grade	B=P2+900um loose tube
13=1310nm		10=10/90		C=P3+3mm cable
0S=1420~1500nm		20=20/80		
0C=1530~1565nm		30=30/70		
0L=1570~1605nm		40=40/60		
CL=1530~1610nm		50=50/50		
		S=Special		

⑥ Fiber Length

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

S=Special

⑦ Connector Type

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