

Flyin Singlemode Standard Coupler

Flyin Optronics' Singlemode coupler 1X2 2X2 offer very low insertion loss, low polarization dependence and excellent environmental stability. Accurate coupling ratio from 50/50 to 1/99 and fiber type 250um bare fiber, 3mm and 900um loose tube fiber are available with very tight uniformity. Singlemode standard coupler and wideband coupler components find extensive application to perform power splitting and monitoring functions in all kinds of optical communication systems.

All Flyin Optronics' products are Telcordia qualification tested.

Features

- Low Excess Loss
- Various Coupling Ratio
- Compact Size
- High Stability and Reliability



Applications

- Long-haul Telecommunications
- CATV Systems & Fiberoptic Sensors
- Local Area Network
- FTTH & LAN

Performance Specifications

Single Standard Couplers		
Grade	P Grade	A Grade
Coupling Ratio (%)	50/50	50/50
Excess Loss (Typical) (dB)	0.1	0.15
Maximum Insertion loss (dB)	3.4	3.6
Polarization Sensitivity (dB)	0.15	0.2
Operating Wavelength (nm)	1310, 1480, 1550, or custom wavelength	
Single Wideband Couplers		
Grade	P Grade	A Grade
Coupling Ratio (%)	50/50	50/50
Excess Loss (Typical) (dB)	0.07	0.1
Maximum Insertion loss (dB)	3.4	3.6
Polarization Sensitivity (dB)	0.15	0.2
Operating Wavelength (nm)	1310±40,1550±40, or custom wavelength	
Coupling Ratio (%)	1~50	
Directivity (dB)	≥55	
Operating Temperature(°C)	-20 ~ +85	
Storage Temperature(°C)	-40 ~ +85	
Fiber Type	Corning singlemode SMF-28	

Fiber Pigtail Length (m)	1
Port Configuration	1x2 or 2x2
Dimensions (mm)	Package D,E,F,G

Note: All values referenced are without connector.

Coupling Ratio/insertion Loss Conversion Chart

Coupling Ratio	Insertion Loss	
	P Grade	A Grade
40/60	4.7/2.7	4.9/2.9
30/70	5.9/2.0	6.3/2.2
20/80	7.9/1.5	8.4/1.7
10/90	11/0.65	11.5/0.8
5/95	14.8/0.4	15.3/0.55
2/98	18.8/0.35	19.0/0.4
1/99	21.5/0.3	23/0.35

Package Dimensions & Pigtail Style

Package Dimensions:	
Package D: 3mm x 45mm stainless steel tube	
Package E: 3mm x 54mm stainless steel tube	
Package F: 3mm x 60mm stainless steel tube	
Package G: 10mm x 20mm x 90mm case	
Pigtail Style:	
Package D, E, :	250um bare fiber
Package F:	250um bare fiber or 900um loose tube
Package G:	2mm,3mm cable or 900um loose tube

Ordering Information

X	X	XX	XX	XXXX	X	X	X	XX
Type	Type	Wavelength	Coupling Ratio	Port	Package	Pigtail Style	Fiber Type	In/Out Connector
S	P	13=1310nm	50=50/50	0102=1x2	D=D type	1=Bare Fiber	0=SMF-28	0=None
W	A	14=1480nm	30=30/70	0202=2x2	E=E type	2=900µm		1=FC/APC
		15=1550nm	10=10/90		F=F type	loose tube		2=FC/PC
			05=5/95		G=G type	3=2mm Cable		3=SC/APC
			01=1/99			4=3mm		4=SC/PC
			00=Other			Cable		5=ST
								6=LC

*Type: S----Singlemode Standard Coupler

W----Singlemode Widband Coupler