

## Single Mode Standard Fiber Optical Coupler/Splitter (FBT Coupler)

### Features:

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



### Applications:

- ◆ Long-haul Telecommunications
- ◆ CATV Systems & Fiber Optical 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	0.12
Maximum Insertion Loss (dB)	3.4	3.5
Polarization Sensitivity (dB)	0.1	0.15
Operating Wavelength (nm)	850, 980, 1310, 1480, 1550, 1585, 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	3.5
Polarization Sensitivity (dB)	0.1	0.15
Operating Wavelength (nm)	1310±40, 1550±40, 1585±40, or custom wavelength	
Coupling Ratio (%)	1~50	
Directivity (dB)	≥55	
Operating Temperature(°C)	-20 ~ +85	
Storage Temperature(°C)	-40 ~ +85	

Fiber Type	Corning single mode SMF-28,DS fiber or flexcore
Fiber Pigtail Length (m)	1
Port Configuration	1x2 or 2x2
Dimensions (mm)	Package D,E,F,G

### Coupling Ratio/insertion Loss Conversion Chart

Coupling Ratio	Insertion Loss	
	P Grade	A Grade
40/60	4.4/2.5	4.6/2.8
30/70	5.6/1.8	6.0/2.0
20/80	7.4/1.1	7.7/1.3
10/90	10.8/0.6	11.6/0.8
5/95	14.2/0.4	14.6/0.5
2/98	18.5/0.2	19.0/0.3
1/99	21.0/0.2	21.5/0.3

### Package Dimensions & Pigtail Style

Package Dimensions:	
Package D:	3mm x 40mm 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:	3mm cable or 900um loose tube

### Nomenclature:

X	X	XX	XX	XXXX	X	X	X	XX
Type	Type	Wavelength	Coupling Ratio	Port	Package	Pigtail Style	Fiber Type	In/Out Connector
S W	S P A	83=830nm					0=SMF-28	0=None
		85=850nm	50=50/50			1=Bare Fiber	1=Corning	1=FC/APC
		98=980nm	30=30/70	0102=1x2		2=900µm	Flexcore 1060	2=FC/PC
		13=1310nm	10=10/90	0202=2x2		Jacket	2=Corning	3=SC/APC
		14=1480nm	05=5/95			3=3mmCable	Flexcore 780nm	4=SC/PC
		15=1550nm	01=1/99				D=DS Fiber	5=ST
		16=1585nm				S=Special	6=LC	

Type:

S----Single mode Standard Coupler

W----Single mode Widband Coupler