



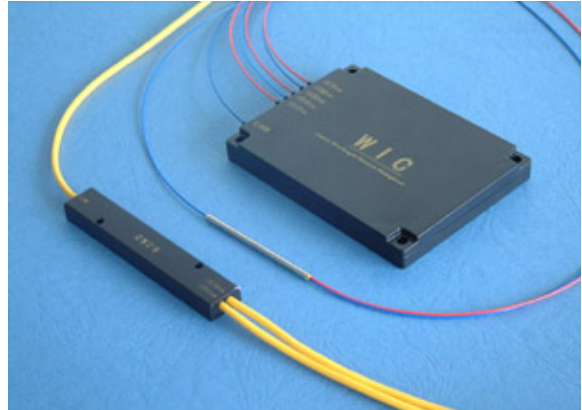
STANDARD COUPLERS

Description

Fused Biconic Taper (FBT) Technique is used to make our standard single mode couplers. They have minimal excess loss and long-term stability. Unused ports are terminated to reduce back reflection.

1x2 couplers are used to split light with minimal loss from one into two fibers or to merge light from two fibers into one. These components are excellent for duplex transmission on a single fiber in CATV systems or within fiber optic test sets.

1xN tree couplers and NxN star couplers are made with fuse cascade-connecting (N-1) pieces of 1x2 and 2x2 couplers respectively.



Features

- Low loss
- Low polarization dependence
- Environmentally stable
- Good thermal stability
- Excellent uniformity

Applications

- Local Area Networks
- CATV
- Fiber optic sensors
- Test instrument

Specifications

Characteristics		Unit	Value/Performance			
1X2, 2X2						
Center Wavelength		nm	1310 or 1550, others on request			
Bandwidth		nm	±20			
Excess Loss		dB	≤0.08 (0.05 typ.)			
Coupling Ratio		-	50/50	40/60	30/70	20/80
Typ. Insertion Loss		dB	3.05	4.1/2.3	5.3/1.6	7.1/1.0
Max. Insertion Loss		dB	3.3	4.4/2.5	5.6/1.8	7.4/1.1
Polarization Dependent Loss		dB	≤0.1	≤0.1	≤0.15/0.1	≤0.15/0.1
Thermal Stability		dB/°C	≤0.002 over -40 ~ +80°C			
Directivity	1x2	dB	≥50, ≥60 on request			
	2x2	dB	≥65			
Lead Length		m	1, others on request			
Lead Type		-	250um bare fiber	900um loose tube	2 or 3mm loose tube	
Package Type		-	A1	A3 or B	B	
Operating Temperature		°C	-40 ~ +80	-20 ~ +70	-20 ~ +70	

Specifications

Characteristics	Unit	Value/Performance			
1xN, NxN					
Configuration	-	N x 4 N=1,2, 4	N x 8 N=1,2, 8	N x 16 N=1,2, 16	N x 32 N=1,2, 32
Center Wavelength	nm	1310 or 1550, others on request			
Bandwidth	nm	±20			
Max. Excess Loss	dB	0.2	0.3	0.4	0.5
Typ. Insertion Loss	dB	6.2	9.3	12.4	15.5
Max. Insertion Loss	dB	6.8	10.2	13.6	17.0
Uniformity	dB	≤1.2	≤1.8	≤2.4	≤3.0
Polarization Dependent Loss	dB	≤0.2	≤0.3	≤0.4	≤0.5
Thermal Stability	dB	≤0.2	≤0.3	≤0.4	≤0.5
Directivity	dB	≥60			
Operating Temperature	°C	-20 ~ +70			
Lead Length	m	1, others on request			
Lead Type	-	900um, 2mm or 3mm loose tube			
Package Type	-	C	D	E	E

Dimensional Drawing

Please see coupler package information.

Ordering Information

Part Number: **SC-12 1 -50/50SM 2 A3- 1 FU**

1 2 3 4 5 6 7

1 Configuration	12=1x2, 22=2x2, 18=1x8, 1616=16x16, 132=1x32, etc.
2 Wavelength	1=1310nm, 2=1550nm
3 Coupling Ratio	50/50, 40/60, 20/80, 25x4(for 25/25/25/25), etc.
4 Lead Type	1=250um, 2=900um, 3=2.0mm, 4=3.0mm
5 Package Type	A1, A3, B, C, D or E
6 Lead Length	0.5=0.5m, 1=1m, etc.
7 Connectors Terminated	Blank=no connector, FU=FC/UPC, FA=FC/APC, SU=SC/UPC, SA=SC/APC

Products manufactured in
ISO 9001 certified facilities



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