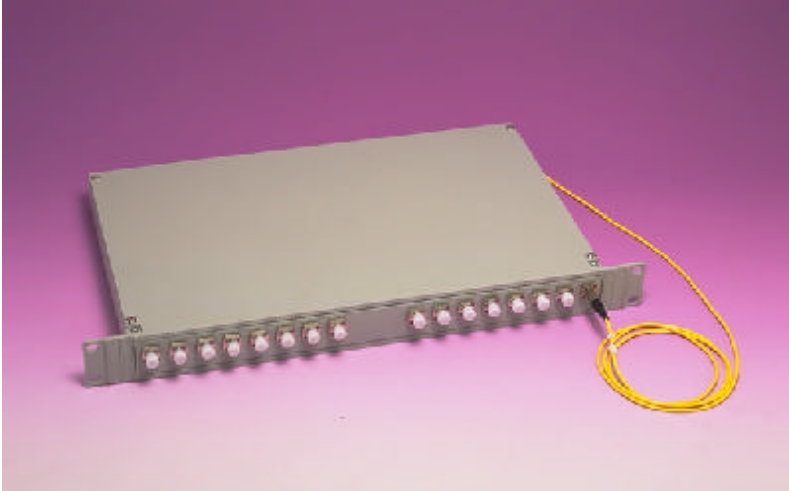




SINGLEMODE STAR COUPLERS C-SS

DESCRIPTION



FOCI's Singlemode Star Couplers are excellent for local loop distribution (FITL) and CATV branching. Designed to divide optical signals of single wavelength from a number of inputs to several outputs with minimal loss, these couplers feature low back reflectance, low insertion loss and high port-to-port isolation. They are ideally suited for networking applications where electrically noisy environments and radiated emissions from high data rates are a concern.

With its innovative Fused Biconical Taper (FBT) process, FOCI's C-SS series Singlemode Star Couplers have proven to provide exceptional characteristics for all applications demanding critical performance.

Operable in the 1310nm or 1550nm wavelength range, with splitting ratios, packaging and connector termination customer specified to meet your needs, these devices consistently out-perform the competition.

FEATURES

- Low insertion loss
- High port isolation
- Custom defined specifications
- Environmentally stable

APPLICATIONS

- Telecommunications
- Local area network
- Fiber to the home
- Local loop distribution
- CATV
- Video transmission
- Fiber optic sensing
- Testing instruments

SINGLEMODE STAR COUPLERS

PERFORMANCE SPECIFICATIONS

ITEM		Singlemode Star Couplers							
Port Configuration		4 x 4		8 x 8		16 x 16		32 x 32	
Operating Wavelength, nm		1310 ± 10 or 1550 ± 10							
Grade		H	A	H	A	H	A	H	A
Insertion Loss, dB		6.9	7.6	10.5	11.5	13.7	15.0	17.3	18.2
Uniformity, dB		1.0	2.0	1.5	3.0	2.0	4.0	2.5	5.0
Operating Temperature, °C		-40 ~ +85 ^(*)							
Storage Temperature, °C		-55 ~ +85							
Package Options (for different pigtailling)	1. coated fiber (250μm)	A3, MA, MB		MB, M1		M1, M2		M2	
	2. loose tube (900μm)	A3, MA, MB		MB, M1		M1, M2		M2	
	3. PVC cable (3.0mm)	A3, MA, MB		MB, M1		M1, M2		M2	

Note : 1. The packaging option codes are explained in Packaging Dimensions below.

2.*-20°C ~ +70°C for PVC cable.

PACKAGING DIMENSION

The dimensions of various packaging options are given below. For further detailed mechanical drawings, please refer to Appendix A :

- A3.....140 x 90 x 10 (mm)
- MA.....Interrack 4U
- MB.....154 x 110 x 16 (mm)
- M1485 x 255 x 45 (mm)
- M2485 x 255 x 90 (mm)



ENVIRONMENTAL RELIABILITY TEST

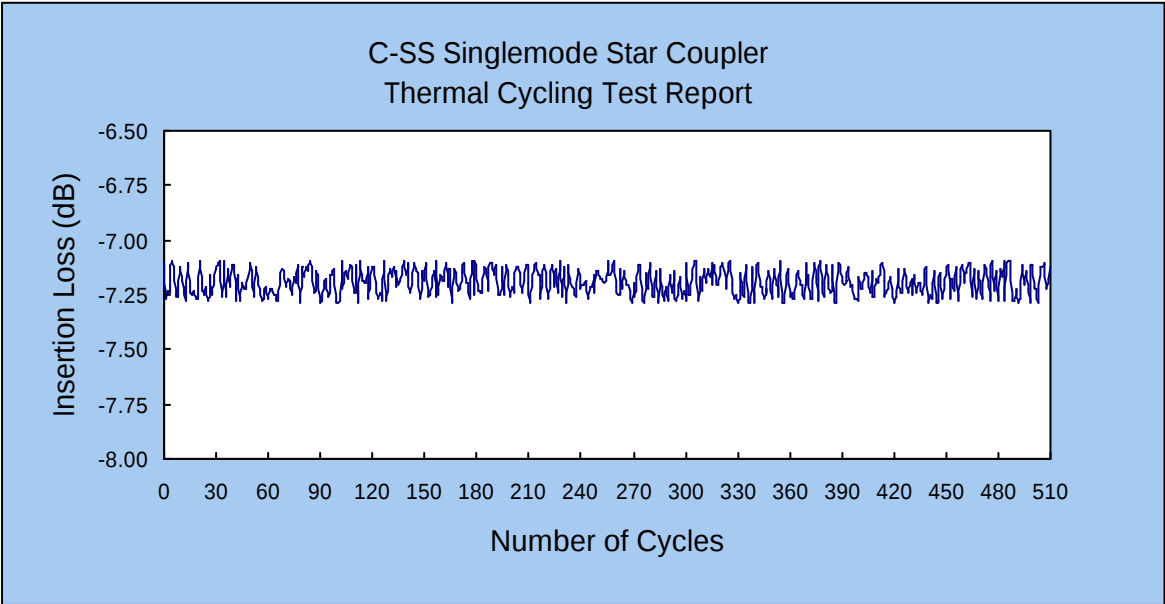
The performance of the couplers has been carefully designed to meet the toughest Bellcore standards

TA-NWT-001221

in the tests of :

	■	OPTICAL CHARACTERISTICS
	■	VIBRATION TEST
	■	THERMAL CYCLING
	■	IMPACT RESISTANCE
	■	SALT SPRAY EROSION
	■	THERMAL AGING
	■	HUMIDITY RESISTANCE
	■	OTHERS
	■	High Temperature Storage Test..... 85°C for 5,000 hours
	■	Low Temperature Storage Test..... -40°C for 5,000 hours
	■	Damp Heat Test..... 75°C / 95% RH for 5,000 hours
	■	Thermal Cycling Test..... -40°C / 75°C for 500 cycles
	■	Fiber Pulling Test..... 0.23Kg for 250µm fiber and 900µm loose tube 1.36Kg for jacketed cable
	■	Water Immersion Test..... 43°C, pH = 5.5, 168 hours
	■	Vibration Test..... 10 ~ 2,000Hz random, 20G, 3 axis
	■	Impact Test 8 drops, 1.8 meters high
	■	Fiber Torsion Test 180° twist, both directions, 5N force

SPECTRAL PERFORMANCE



SINGLEMODE
STAR COUPLERS

ORDERING INFORMATION

C - SS - - - - - - /

Fiber Type

A.....Corning SMF-28 ™
B.....Dispersion-shift fiber
X.....Others, please specify

Package Option

CA3 with coated fiber
DMA/MB/M1/M2 with coated fiber
LA3 with loose tube cable
MMA/MB/M1/M2 with loose tube cable
QA3 with PVC 3.0mm cable
RMA/MB/M1/M2 with PVC 3.0mm cable
SM1/M2 with adaptors
X.....Others, please specify

Input Port No.

Please specify desired
port number in two digits.

Grade

HHigh
A.....Average

Output Port No.

Please specify desired
port number in two digits

Pigtail Length (for each port)

10.....1 meter
20.....2 meter
00.....Modulized
05.....0.5 meter
15.....1.5 meter
XX.....Others, please specify

Wavelength

13.....1310nm
15.....1550nm
XX.....Others, please specify

Connector Type (for both ends)

FC.....FC type
SC.....SC type
STST type
NCNone
APFC/APC type
AS.....SC/APC type
D4D4 type
XX.....Others, please specify