



## 1x2 / 2x2 Single Mode Broadband Fiber Optic Coupler/Splitter

#### **Product Description**

The FC Series fiber optic coupler is based on Agiltron's fused biconical taper technology and compact packaging structure. It features good uniformity, low excess loss and very low polarization sensitivity. The device is ideal for splitting or combining light with exceptional performance over a wide wavelength range

#### **Features**

- Wavelength Independent
- Low Insertion Loss
- Low PDL
- Highly Stable & Reliable
- Ultra Low Cost

#### **Applications**

- Optical communications
- FTTX
- Local Access Network (LAN)
- Fiberoptic Instrumentation

#### **Performance Specifications**

| FC Series                   |                | Premium           | Grade A  | Unit |
|-----------------------------|----------------|-------------------|----------|------|
| Splitting Ratio             |                | 0.5/99.0          |          |      |
| Bandwidth                   |                | ±                 | nm       |      |
| Excess Loss                 |                | 0.07 0.1          |          | dB   |
|                             | 50/50          | 3.4/3.4           | 3.6/3.6  | dB   |
| Insertion Loss              | 40/60          | 4.4/2.5           | 4.8/2.8  | dB   |
|                             | 30/70          | 5.6/1.8           | 6.1/2.0  | dB   |
|                             | 20/80          | 7.5/1.2           | 8.0/1.3  | dB   |
|                             | 10/90          | 10.8/0.6          | 12.0/0.8 | dB   |
|                             | 5/95           | 14.6/0.4          | 18.4/0.5 | dB   |
|                             | 4/96           | 16.0/0.3          | 19.0/0.4 | dB   |
|                             | 3/97           | 17.5/0.3          | 19.5/0.4 | dB   |
|                             | 2/98           | 19.0/0.2          | 20.0/0.3 | dB   |
|                             | 1/99           | 21.5/0.2          | 22.0/0.3 | dB   |
|                             | 0.5/99.5       | 23.0/0.2          | 24.0/0.3 | dB   |
| Polarization Dependent Loss |                | 0.1               | 0.15     | dB   |
| Uniformity                  |                | 0.6               | 1.0      | dB   |
| Optical Power Handling      |                |                   | W        |      |
| Operating Temper            | ature          | -40               | °C       |      |
| Storage Temperature         |                | -50               | °C       |      |
| •                           |                | Bare fiber: (ø)3x |          |      |
| Package Dimension           | n *            | 900um loose tub   | - mm     |      |
| 22.000                      | · <del>·</del> | 900um loose tub   |          |      |
| nackago ontions av          |                | Cable: (L)90x(W): |          |      |

<sup>\*</sup> Other package options available on request



# 1x2 / 2x2 Single Mode Broadband Fiber Optic Coupler/Splitter

### **Ordering Information**

| FCSB- |      |   |                            |   |   |           |  |  |   |
|-------|------|---|----------------------------|---|---|-----------|--|--|---|
|       | Port | Wavelength  | Grade                      | Package   | Splitting<br>Ratio  | Fib       | er Type  | Fiber<br>Length                                  | Connector   |
|       |      | 1 = 1625nm<br>2 = 1590nm<br>3 = 1570nm<br>4 = 1550nm<br>5 = 1480nm<br>6 = 1475nm<br>7 = 1310nm<br>P = 2000nm<br>0 = Special | P = P Grade<br>A = A Grade | 1 = 54(L)<br>2 = 70(L)<br>3 = 90(L)<br>4 = 40(L)<br>0 = Special | 1 = 01/99<br>2 = 02/98<br>3 = 05/95<br>4 = 10/90<br>5 = 20/80<br>6 = 30/70<br>7 = 40/60<br>8 = 50/50<br>9 = 0.5/99.5<br>A = 3/97<br>B = 4/96<br>0 = Special | 1 = G.652 | 1 = 250µm fiber<br>2 = 900um tube<br>3 = 2mm cable<br>4 = 3mm cable<br>0 = Special | 1 = 0.5m<br>2 = 0.75m<br>3 = 1.0m<br>0 = Special | 0 = None<br>1 = FC/PC<br>2 = FC/SPC<br>3 = FC/APC<br>4 = FC/UPC<br>5 = SC/SPC<br>6 = SC/APC<br>7 = SC/UPC<br>8 = ST<br>9 = MU<br>A = LC/PC<br>B = LC/APC<br>C = LC/UPC<br>0 = Special |

 $^*$ Product dimensions may change without notice. This is sometimes required for non-standard specifications.