

## 810nm 1x2 2x2 SM Fiber Filter Coupler

810nm 1x2, 2x2 SM Fiber Coupler is built with thin-film filter technology. optical signal power can be splitted into two parts with even or various coupling ratio by the Filter Coupler, it's widely applied in fiber optic transmission and fiber optic sensor field, the high power type is available upon request.

### Application:

Optical Signal Transmission  
Fiber Optic Sensor  
Fiber Laser  
Optical Diffraction System

### Features:

Low Excess Loss  
High Return Loss  
Low Insertion Loss  
High Reliability



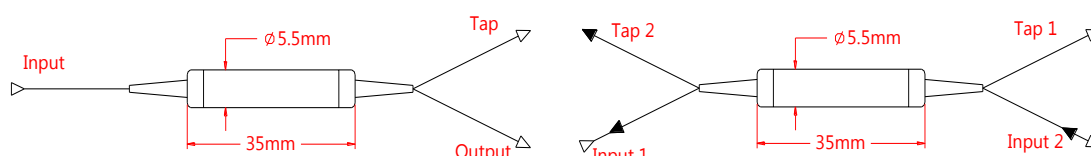
### Specification:

| Parameter                        | Symbol    | Value                                                            |     | Unit |
|----------------------------------|-----------|------------------------------------------------------------------|-----|------|
| Center Wavelength                | $\lambda$ | 810                                                              |     | nm   |
| Bandwidth                        | BW        | $\pm 20$                                                         |     | nm   |
| Configuration                    |           | 1x2                                                              | 2x2 | dB   |
| Max. Excess Loss                 | EL        | 1.0                                                              | 1.2 | dB   |
| Tap Ratio                        |           | 1 $\pm$ 0.2, 2 $\pm$ 0.4, 3 $\pm$ 0.7, 5 $\pm$ 1, 10, 20, 30, 50 |     | %    |
| Max. Polarization Dependent Loss | PDL       | 0.15                                                             |     | dB   |
| Min. Directivity                 |           | 50                                                               |     | dB   |
| Min. Return Loss                 | RL        | 50                                                               |     | dB   |
| Fiber Type                       |           | HI 780 fiber                                                     |     | -    |
| Max. Tensile Load                |           | 5                                                                |     | N    |
| Max. Optical Power (CW)          | P         | 500                                                              |     | mW   |
| Operating Temperature            | T         | 0~70                                                             |     | °C   |
| Storage Temperature              | T         | -40~85                                                           |     | °C   |
| Package Dimension                |           | $\Phi 5.5 \times L35$                                            |     | mm   |

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

### Drawing:



### Ordering Information (Part Number):

SMFIC-**WWW**-**PP**-**RR**-**FF**-**J**-**LL**-**CC**

| <b>WWW</b>  | <b>PP</b> | <b>RR</b>      | <b>FF</b>    | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
|-------------|-----------|----------------|--------------|----------------------|--------------|--------------|
| Wavelength  | Port      | Coupling Ratio | Fiber Type   | Fiber Jacket         | Fiber Length | Connector    |
| 800 - 800nm | 12 - 1x2  | 01 - 1/99      | H7 - HI 780  | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 808 - 808nm | 22 - 2x2  | 02 - 2/98      | SS - Specify | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 810 - 810nm |           | 03 - 3/97      |              |                      | 15 - 1.5m    | FU - FC/UPC  |
| 820 - 820nm |           | 05 - 5/95      |              |                      | 20 - 2.0m    | SA - SC/APC  |
| 830 - 830nm |           | 10 - 10/90     |              |                      | SS - Specify | SU - SU/APC  |
| 850 - 850nm |           | 20 - 20/80     |              |                      |              | LA - LC/APC  |
|             |           | 30 - 30/70     |              |                      |              | LU - LC/UPC  |
|             |           | 40 - 40/60     |              |                      |              | SS - Specify |
|             |           | 50 - 50/50     |              |                      |              |              |
|             |           | SS - Specify   |              |                      |              |              |