

## 780~850nm SM Filter Coupler (1x2/2x2)

### Key Features

- Low Insertion Loss
- Broad operating band
- Compact In-Line Package
- High Stability and Reliability

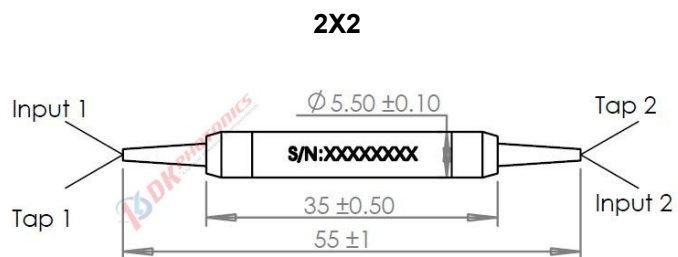
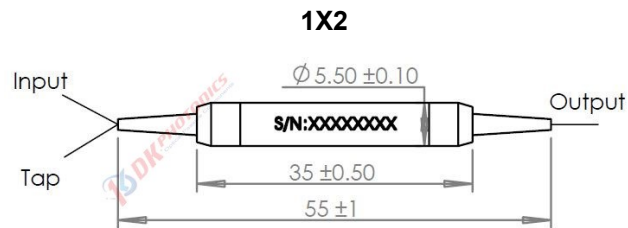
The Filter Coupler using advanced micro-optic filter technology, offers very low excess loss, broad operating band and high stability and reliability. These components are extensively used with large-core double-clad fiber, multi-mode fiber, as these fibers cannot use the FBT process to make fused couplers.

### Applications

- Fiber Optic Instruments
- Fiber Sensors
- Coherent Detecting
- Research



### Package Dimension:



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

## For more Info

Please contact us at:

Tel: +86-755-23736280

Fax: +86-755-26746512

E-mail: [sales@dkphotonics.com](mailto:sales@dkphotonics.com)

<https://www.dkphotonics.com>

Add.:

4F, Bldg. 18, Qinghu Industrial Park,

Dahe Road, Longhua Dis.,

Shenzhen, China 518109

## 780~850nm SM Filter Coupler (1x2/2x2)

### Performance Specifications

Parameter	Unit	Values	
Configuration	-	1x2	2x2
Center Wavelength	nm	780, 850	
Operating Wavelength Range	nm	±50, ±100,	
Tap Coupling Ratio	%	1±0.5%, 5±2.0%, 10±2.0%, and 50%	
Max. Insertion Loss	dB	IL related to CR	
Max. Excess Lose	dB	0.7	1.0
Uniformity (Only for 50/50)	dB	0.5	0.7
Min. Return Loss	dB	50	
Max. Power Handling	W	0.5, 1, 2, 5, 10, 20	
Max. Tensile Load	N	5	
Fiber Type	-	780-HP fiber	
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-40 to +85	
Package Dimensions	mm	Ø5.5 x L35	

1. above specifications are for device without connector. All parameters are tested at room temperature.
2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower. Power transmits through the connector less than 2W.
3. For >10W high power applications, we will use heat sink package, contact us for details.
4. If there is pulse application, please be sure to inform us of pulse energy and peak power.

### Order information P/N: SMFC-①-②-③-④-⑤-⑥-⑦

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250µm bare fiber pigtail.

①	②	③	④	⑤	⑥	⑦
Port	Operating Wavelength	Power Handling	Coupling Ratio	Pigtails Diameter	Fiber Length	Connector
102:1x2	78:780nm	L:<0.5W	50:50/50	25:250µm bare fiber	08:0.8m	00: None
202:2x2	85:850nm	1:1W	40:40/60	90:900µm Loose Tube	10:1.0m	FP: FC/PC
		2:2W	30:30/70	XX: Others	XX: Others	FA: FC/APC
		10:10W	20:20/80			XX: Others
			10:10/90			
			01:1/99			
			XX: Others			

**Part Number Example:** SMFC-102-78-L-50-90-10-FA

**Description:** 780nm SM Filter 1x2 Coupler- 0.5W, 50:50 coupling ratio, 1.0m 780-HP fiber with 0.9mm OD loose tube, and FC/APC connectors at all ports.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.