

# **SFW** series 2 channels WDMs

## **Description:**

The **SFW** series introduces a range of 2 wavelength division multiplexing (WDM) devices for high data rate applications requiring high wavelength isolation with a low insertion loss. The SFW series WDMs are designed to divide and/or combine different optical wavelengths by combining innovative fused technology. The SFW series are operable additional to the standard transmission windows 1310/1550 nm in wide range of wavelength combinations. Available in a wide variety of packaging configurations, various types of pigtailing and connector terminations are available to meet your requirements.



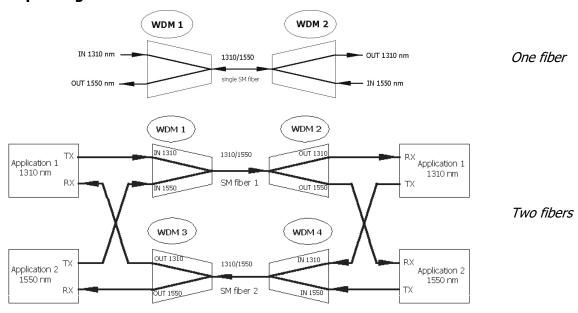
## **Applications:**

- Telecommunications
- Data networks
- **CATV**
- Testing instruments
- **RFTS**
- Network monitoring

#### **Features:**

- High port isolation
- Custom defined specifications
- Low insertion loss
- Low polarization dependent loss
- Bi-directional transmission with high directivity
- Wide spectral channels
- Environmentally stable
- Wide range of packaging types

# **Principle diagrams:**



## **Technical specifications:**

Polarization dependent loss, dB	≤ 0.1
Directivity, dB	> 55
Temperature sensitivity (dB/°C)	≤ 0.002
Operating temperature <sup>1</sup> , °C	-40 to +85
Storage temperature <sup>1</sup> , °C	-55 to +85

1) Conditioned by the cable type



## **Wavelength combinations:**

		Δλ				Δλ						
	120 nm	140 nm	160 nm				180 nm	200 nm	240 nm			
λ (nm)	1290/1410 1310/1430 1330/1450 1350/1470 1370/1490 1390/1510 1410/1530 1430/1550 1450/1570 1470/1590 1510/1625	1290/1430 1310/1450 1330/1470 1350/1490 1370/1510 1390/1530 1410/1550 1430/1570 1450/1590 1470/1610 1490/1625	1290/1450 1310/1470 1330/1490 1350/1510 1370/1530 1390/1550 1410/1570 1430/1590 1450/1610 1470/1625	bandwidth ±10 nm	IL ≤ 0.5 dB	Isolation ≥15 dB	1290/1470 1310/1490 1330/1510 1350/1530 1370/1550 1390/1570 1410/1590 1430/1610	1290/1490 1310/1510 1330/1530 1350/1550 1370/1570 1390/1590 1410/1610 1430/1625	1290/1530 1330/1570 1350/1590 1370/1610	bandwidth ±15 nm	IL ≤ 0.3 dB	Isolation ≥17 dB

## **Transmission parameters:**

		WDMs				
Operating Wavelength, nm		1310/1550				
Stage	С	D	E	С		
Insertion Loss <sup>1</sup> , dB	≤ 0.3	≤ 0.7	≤ 1.0	≤ 0.4		
Isolation, dB	≥ 17	≥ 30	≥ 40	≥ 12		
Bandwidth, nm		± 15 ± 5				

<sup>1)</sup> Without connectors

## **Ordering Code:**

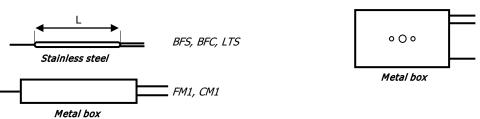
 $Xyy, Xyy/yy^1$  - XXX(-XX) - NC-NC  $(-PM)^3$ **Wavelength (nm) - yy** X**35** = 1310/1550, X**41/55** = 1410/1550 Grade - X No input and output connectors Cyy - Standard Connector type can be defined according to: X**45** = 1480/1550, X**29/41** = 1290/1410 Dyy - 2 Stage CON\_13-01 (Jumper Ordering Code) Eyy - 3 Stage Standard fiber/cable length => 1 m

Package version I (Basic type)		Package version II (Optional)				
BFS	Bare fiber 250 µm, standard tube <sup>2</sup> L=54, Ø3 mm	CAPM	OPTOKON cassette			
BFC	Fiber 0.9 mm, Compact tube L=70, Ø4 mm	SC	Splice cassette (TC251S-1X)			
LTS	Fiber 0.9 mm, Standard tube <sup>2</sup> L=54, Ø3 mm	SA	Stand alone (Plastic box)			
FM1	Fiber type, metal box 100x15x9 mm	RM	Rack mounted unit (MCNP-1U)			
CM1	Cable type, metal box 100x15x9 mm	WM	Wall mounted box (MPIC-4)			
FM3	Fiber type, metal box 100x80x10 mm, stackable					
СМЗ	CM3 Cable type, metal box 100x80x10 mm, stackable					
LGX	LGX box (Customized by a client)					

#### Package variants:

SFW - C: BFS, BFC, LTS, FM1, CM1, LGX

SFW - **D**, **E**: FM3, CM3, LGX



### **Packaging options:**







1) Other λ combination on demand

3) Polarization Maintaining fiber

2) Other tube dimensions on demand

FM3, CM3

SFW-E35-CM3-NC

SFW-D47/59-CAPM-NE2S

2x SFW-D35-RM-NE2S

CPL\_03\_02\_EN 22/05/2023