

# SFT- S35-01xN

## SFT- SWB-01xN Wavelength Independent Singlemode Dual Windows Wideband Couplers

### Description:

OPTOKON SFT-SWB wavelength independent couplers/splitters are designed to transmit optical signals within the full CWDM wavelength spectrum. The SFT Couplers/Splitters are ultra reliable devices featuring low backreflection, low insertion loss, and high port isolation over wide ranges of temperature and wavelength. The SFT Couplers/Splitters are designed to divide and/or combine different optical signals in optical fiber systems. With its innovative Fused Technology process, the SFT series Couplers/Splitters have proven to provide exceptional characteristics for all applications demanding critical performance. The splitting ratio can be customer specified to meet your needs. Available in a wide variety of packaging configurations, these SFT series are operable in all 1310 nm 1550 nm and 1625 nm wavelength ranges. Various types of pigtailed and connector terminations are available to meet your requirements.

### Features:

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

### Applications:

- Fiber to the home
- Telecommunications
- Local area network
- CATV
- Fiber optic sensing
- Testing instruments

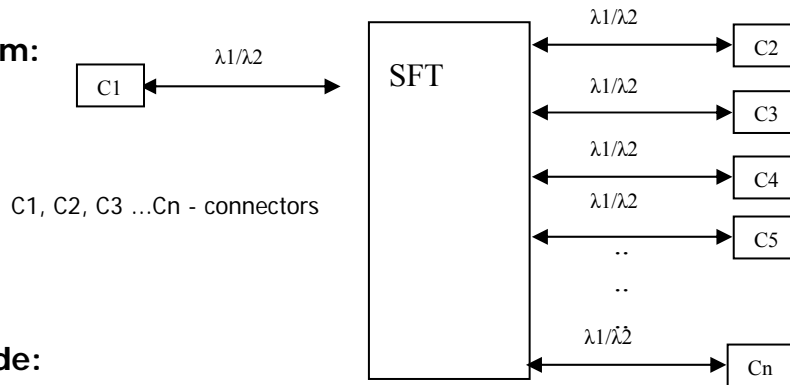


### Technical specifications:

<b>ITEM</b>				
Operating Wavelength, nm	S35: 1310 ± 40 and 1550 ± 80 / SWB: 1250 – 1630 (CWDM wavelength range)			
Port Configuration	1 x 3	1 x 4	1 x 5	1 x 6
Grade	S	S	S	S
Maximal Insertion loss, dB	6.1	7.2	8.5	9.4
Uniformity, dB (SWB: for 1310 and 1550)	0.9	1.0 / 0.8	1.4	1.6
PDL, dB	0.3	0.3	0.3	0.4
Thermal Stability, dB/°C	0.003	0.003	0.003	0.003
Directivity, dB	> 50, > 70 on request			
Operating Temperature*, °C	-40 to +70			
Storage Temperature*, °C	-40 to +85			
<b>ITEM</b>				
Operating Wavelength, nm	S35: 1310 ± 40 and 1550 ± 80 / SWB: 1250 – 1630 (CWDM wavelength range)			
Port Configuration	1 x 8	1 x 12	1 x 16	1 x 32
Grade	S	S	S	S
Maximal Insertion loss, dB	10.7	12.5	14.4	18.5
Uniformity, dB (SWB: for 1310 and 1550)	2.0 / 1.6	2.2	2.5	3.5 / 3.2
PDL, dB	0.5	0.6	0.6	0.8
Thermal Stability, dB/°C	0.004	0.005	0.005	0.006
Directivity, dB	> 50 standard, > 70 on request			
Operating Temperature*, °C	-40 to +70			
Storage Temperature*, °C	-40 to +85			

\*) Conditioned by the cable type

**Block diagram:**



**Ordering Code:**

**SFT - XXX - 01 x N - XX - XXX - NC-NC**

grade	wavelength
S35	1310/1550 nm
SWB1 <sup>1)</sup>	1270 – 1620 nm

packaging type	port configuration
CM3, FM3	01X03, 01X04
CM4, FM4	01X05, 01X06, 01X08
CM5	01X09, ...01x32
CAPM	01X03, 01X04, 01X05, 01X06
SA, RM, WM	up to 01x32

# port	ratio <sup>2)</sup>
01 x 03	33 01 x 03
01 x 04	25 01 x 04
01 x 05	20 01 x 05
01 x 06	16 01 x 06
01 x 08	12 01 x 08
01 x 12	08 01 x 12
01 x 16	06 01 x 16
01 x 32	03 01 x 32

2) other on request

no input and output connectors  
connector type:  
-can be defined according to CON\_14-01  
(Jumper Ordering Code)

**Note:** standard fiber/cable length = 1 m

**package option I**

- FM3** Fiber type, metal box 100x80x10 mm
- CM3** Cable type, metal box 100x80x10 mm
- FM4** Fiber type, metal box 140x110x10 mm
- CM4** Cable type, metal box 140x110x10 mm
- CM5** Cable type, metal box 140x110x20 mm

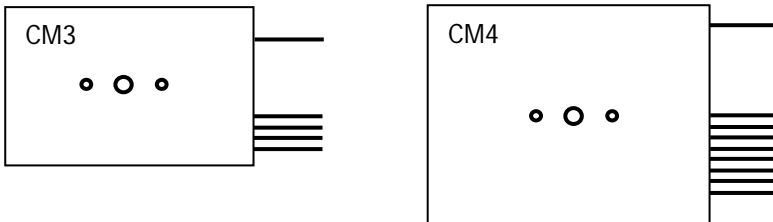
**package option II**

- CAPM** OPTOKON cassette
- SC** Splice cassette (TC251S-1X)
- SA** Stand alone (plastic box)
- RM** Rack mounted unit (MCNP-1U)<sup>3)</sup>
- WM** Wall mounted box (MPIC-4)<sup>3)</sup>

3) including CM3 – CM5 box or splice cassette

1) tolerance: 01x02 50/50 ±0.35 dB (1370,1390,1410 nm IL increased for 0.2-0.3 dB)  
01x04 ±0.70 dB (1370,1390,1410 nm IL increased for 0.4-0.6 dB)  
01x08 ±1.40 dB (1370,1390,1410 nm IL increased for 0.8-1.2 dB)  
01x16 ±2.80 dB (1370,1390,1410 nm IL increased for 1.8-2.2 dB)

CM package option



**Packaging variants:**

