SFT 01x02 Singlemode Couplers

SFT-SWB Wavelength Independent
SFT-S35 Dual Windows Wideband

NEW

Description:

OPTOKON SFT-SWB wavelength independent couplers/splitters are designed to transmit optical signals within the full CWDM wavelength spectrum. With its innovative Fused Technology Process, the SFT series couplers have proven to provide exceptional characteristics for all applications demanding critical performance. These ultra reliable devices feature low backreflection, low insertion loss, and high port isolation over wide temperature and wavelength ranges. The SFT couplers are designed to divide and/or combine different optical signals in optical fiber systems. Splitting ratios can be customer specified between 1%:99% and 50%:50%. Various types of pigtailing and connector terminations are available to meet your requirements. Available in a wide variety of packaging configurations

The OPTOKON SFT-S35 dual windows wideband series are operable in both 1310 nm and 1550 nm wavelength range.

Features:

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

Applications:

- Telecommunications
- Local area network
- FTTH - PON
- CATV
- Testing instruments

SFT-SWB-01x02-50-BFS-NC

Technical specifications:

ITEM	Dual Window Wideband Couplers
Operating Wavelength, nm	S35: 1310 ± 40 and 1550 ± 80 SWB: 1270 – 1630 (CWDM wavelength range)
Typical Excess Loss, dB	0.2
Uniformity, dB (50:50)	≤ 0.8
Thermal Stability, dB (peak-peak)	< 0.2
PDL, dB (50:50 coupling ratio)	< 0.15, PDL free (< 0.05) – on request
Port Configuration	1 x 2 or 2 x 2
Coupling Ratio	1:99 to 50:50, (50:50 standard)
Insertion Loss[1)], dB	Refer to the coupling ratio vs. Insertion loss chart
Directivity, dB	> 50
Return Loss, dB	> 50
Operating Temperature[2)], °C	-40 to +85
Storage Temperature[2)], °C	-50 to +85
WARNING	This product should never be installed in an optical network handling above Class I emissions

Note: 1) Without connectors
2) Conditioned by the cable type

Underwriters Laboratories approval, file number OBFA. E248452

Block diagram:

C1, C2, C3 – IN/OUT connectors

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Coupling Ratio vs. Insertion Loss:		Coupling Ratio PDL Conversation Chart:	
Coupling Ratio (%)	**Insertion Loss (dB)**	**Coupling Ratio (%)**	**PDL (dB)**
50 / 50	3.6	> 40 %	0.15
40 / 60	4.8 / 2.7	30 to 39 %	0.20
33 / 67	5.7 / 2.2	10 to 29 %	0.30
30 / 70	6.2 / 1.9	1 to 9 %	0.35
20 / 80	8.3 / 1.3		
10 / 90	11.7 / 0.7		
5 / 95	15.2 / 0.4		
1 / 99	23.3 / 0.2		

Ordering Code:

SFT - XXX - 01 x 02 - XX - XXX - NC-NC

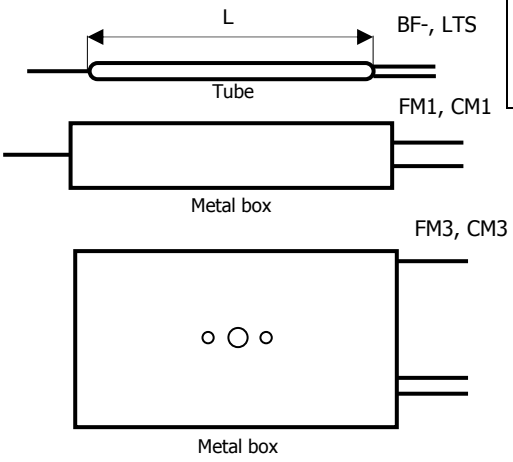
grade	wavelength
S35	1310/1550 nm
SWB[1)]	1270 - 1630 nm

port
01 x 02
02 x 02

coupling ratio	
50	50/50
40	40/60
30	30/70
20	20/80
10	10/90
05	5/95
01	1/99
	other[2)]

no input and output connectors[3)]
connector type - according to CON_14-01
(Jumper Ordering Code)

Note:
1) ±0.3 dB tolerance
(1370, 1390, 1410 nm IL increased for 0.2-0.3 dB)
2) please define
3) standard fiber/cable length = 1 m



basic packaging	
BFS	bare fiber 250 µm, tube L=54, Ø=3 mm
BFM	bare fiber 250 µm, mini tube L=25, Ø=3 mm
LTS	Fiber 0.9 mm, tube L=54, Ø=3 mm
BFC	fiber 0.9 mm, compact tube L=70, Ø=4 mm
FM1	fiber type, metal box 100x15x9 mm
CM1	cable type, metal box 100x15x9 mm
FM3	fiber type, metal box 100x80x10, stackable
CM3	cable type, metal box 100x80x10, stackable

additional packaging	
CAPM	OPTOKON cassette
SC	splice cassette
SA	stand alone (plastic box)
RM	rack mounted unit (MCNP-1U)
WM	wall mounted box (MPIC-4)

Packaging variants:


SFT-SWB-01x02-50-BFS-NC


SFT-S35-01x02-50-BFC-NC


SFT-S35-01x02-50-CM1-NC


SFT-S35-01x02-50-CM3-NC-NC


2x SFT-S35-01x02-50-RM-NE2S


SFT-S35-01X02-WM-NE2S

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