

SFMx -Vxx-01x02

SFMx -Vxx-01x04

Multimode Band Couplers

Description:

Multimode Band Couplers are ultra reliable devices featuring low backreflection, low insertion loss, and high port isolation over wide ranges of temperature and wavelength. The Multimode Band Couplers are designed to divide and/or combine different optical signals in optical fiber systems. With its innovative Fused Technology process, series SFM Band Couplers have proven to provide exceptional characteristics for all applications demanding critical performance. Splitting ratios can be customer specified in range 1%:99% and 50%:50%. Available in a wide variety of packaging configurations, these SFM series are operable in 850 nm and 1310 nm wavelength range. Various types of pigtailed and connector terminations are available to meet your requirements.

Features:

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



SFM5-V85-01x02 basic packaging

Applications:

- Fiber optic sensing
- Testing instruments

Coupling Ratio vs. Insertion Loss:

Coupling Ratio (%)	Insertion Loss ¹ (dB)
50 / 50	4.0
40 / 60	5.0 / 3.0
30 / 70	6.2 / 2.2
20 / 80	8.1 / 1.7
10 / 90	11.5 / 1.3
5 / 95	16.0 / 0.9
1 / 99	22.8 / 0.7
Other ratio	To be confirmed

Note: 1) Above specifications are for devices without connector. Add an additional IL refer to connector specification

Performance specifications:

ITEM	Multimode Band Couplers		
Operating Wavelength, nm	850 or 1310		
Operating Bandwidth, nm	±40		
Polarization dependent loss, dB	≤ 0.15		
Directivity, dB	≥ 55		
Coupling Ratio	1:99 to 50:50, (50:50 standard)		
Insertion Loss, dB	Refer to the Coupling ratio vs. Insertion loss chart		
Operating Temperature ² , °C	-15 to +75		
Storage Temperature ² , °C	-40 to +85		
Fiber/cable type, μm	250	900	900/2000/3000
Package type	BFS	LTS	CP1/CP4
	3x35	3x54	90x20x10/100x80x10

Ordering Code:

SFMX - V85 - 01 x XX - XX - XXX - NC-NC

SFM5	MM 50/125
SFM6	MM 62.5/125

port
01 x 02
01 x 04³

coupling ratio
50 50/50
40 40/60
30 30/70
20 20/80
10 10/90
05 5/95
other

wavelength

V85	850 nm
V13	1310 nm

no input and output connectors
connector type:
-can be defined following CON_13-01
(Patchcord Ordering Code)

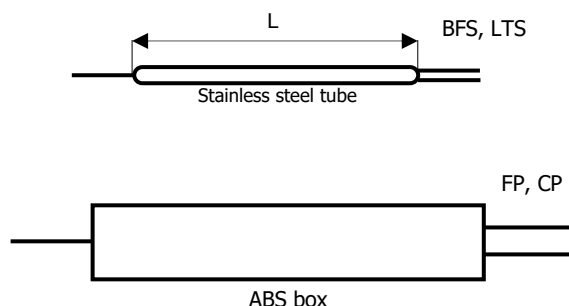
Note: 3) standard fiber/cable length = 1 m

package option I

BFS Fiber 250 μm, tube Ø 3 mm, L=35 mm
LTS Fiber 900 μm, tube Ø 3 mm, L=54 mm
FP1 Fiber 900 μm, ABS box 90x20x10 mm
FP4 Fiber 900 μm, ABS box 100x80x10 mm
CP1 Cable 3 mm, ABS box 90x20x10 mm
CP4 Cable 3 mm, ABS box 100x80x10 mm

package option II

CAPM OPTOKON cassette
RM rack mounted unit (MCNP-1U)
WM wall mounted box (MPIC-4)



Note: 2) Conditioned by the cable type
3) 01x04 in FP4/CP4 package only