OFMS Series Single Mode 1x1, 1x2 and 2x2 Add/Drop Optical Fiber Switches

OFMSSM Series

Product Description

Oplink's OFMS series optical fiber switches offer industry leading performance specifications with Telcordia compliant reliability. These switches are designed for use in re-configurable optical add/drop multiplexers, optical cross-connect systems, and network switching for fault protection applications.

These patented opto-mechanical switches can be directly mounted on printed circuit boards and feature less than 0.35dB typical insertion loss. Oplink's unique prism design improves the switch repeatability and stability. The OFMS switches are GR-1221 and GR-1073 qualified.

Oplink provides customized design to meet special control and applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.



Performance Specification

Parameters			Min	Typ.	Max	Unit
Operating Wavelength Range (λ_{Op})			1260 ~ 1360 and/or 1510 ~ 1610			nm
Insertion Loss [1,2]	Single Window	1x1, 1x2		< 0.5		dB
		2x2AD		< 0.6		
	Dual Window			< 0.8		
Wavelength Dependent Loss (within each window)	Single Window			< 0.15		dB
	Dual Window			< 0.25		
Temperature Dependent Loss				< 0.2		dB
Polarization Dependent Loss				< 0.1		dB
Return Loss [2]				> 55		dB
Channel Cross-talk				> 60		dB
Repeatability				±0.02		dB
Switching Speed				< 10		ms
Operating Current	Latching			75	115	mA
	Non-latching			28	43	
Operating Voltage	Latching		3.5		4.5	VDC
	Non-latching		4.5		5.5	
Durability				10^7		cycle
Operating Power Handling					500	mW
Operating Temperature (T_{Op})			0		70	°C
Storage Temperature			-40		80	°C
Switch Relay Type				Latching or Non-latching		
Fiber Type				Corning SMF-28		
Dimension [3]	Bare Fiber Pigtail			P1: 41.5 (L) x 15.5 (W) x 9.0 (H)		mm
	900µm Loose Tube Pigtail			P2: 44 (L) x 15.5 (W) x 9.0 (H)		mm

Features

- Telcordia qualified
- 1x1, 1x2 and 2x2 (Add/Drop)
- Compact Size
- Low Insertion Loss
- Seam-seal Package
- Latching or Non-latching Configurations
- Highly Stable & Reliable

Applications

- Network Switching
- Configurable Add/Drop
- Network Protection and Restoration
- Instrumentation, Testing and Measurement

Compliance

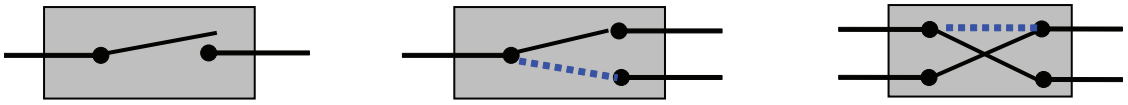
- Telcordia GR-1221 and GR-1073

Notes:
1) 23°C over operating wavelength range and all SOP.
2) Excluding connectors.
3) P2 package option is for pigtail fiber with 900 µm loose tube.

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Function Diagram



1x1 On/Off Switch | 1x2 Switch | 2x2 Add/Drop Switch

Ordering Information

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.

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Type
1x1 = 1100
1x2 = 1200
2x2 Add/Drop = 22AD

Switch Type
Latching = 0
Non-latching = 1

Wavelength
1310/1550nm = D
1310nm = 3
C+L bands = E

Mounting Type
Dual-row pins on the bottom = 0
Single-row pins on the side with screw tabs = 1

Package & Fiber Type
P1+250μm bare fiber = 11
P2+900μm loose tube = 22

Fiber Length
0.5 meter = H
1.0 meter = 1
1.5 meter = 5
2.0 meter = 2

Connector Type
None = 1
FC/PC = 2
FC/SPC = 3
FC/APC = 4
SC/PC = 5
SC/SPC = 6
SC/APC = 7
ST = 8
LC = 9
MU = A

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