

OFMS SERIES MULTI-MODE 1x1, 1x2 AND 2x2 (ADD/DROP) OPTICAL FIBER SWITCHES

OFMSMM Series

Product Description

Oplink's OFMS series optical fiber switches offer industry leading performance specifications with Telcordia compliant reliability. The multi-mode switches are designed for use in protection, channel selection, fiber ring network node bypassing and testing.

These patented opto-mechanical switches can be directly mounted on printed circuit boards and feature less than 0.5dB 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	Symbol	Min	Typ.	Max	Unit
Wavelength Range	λ_{op}	770 ~ 890 and/or 1260 or 1360			nm
Insertion Loss ¹	IL			1.0	dB
Cross-talk		40			dB
Repeatability				±0.05	dB
Return Loss	RL	30			dB
Optical Input Power				300	mW
Coil Resistance	Latching		101.2 ± 10%		Ω
	Non-latching		145 ± 10%		Ω
Switching Speed				10	ms
Durability		10 ⁷			cycle
Cycle Rate				10	Hz
Switch Relay Type		Two coils, latching or single coil, non-latching			
Driving Voltage ²			4.5 ~ 5.5		VDC
Operating Temperature	T _{op}	0		70	°C
Storage Temperature	T _{sto}	-40		80	°C
Fiber Type		50μm or 62.5μm core multi-mode fiber			
Dimension	Bare fiber	P1: 41.5 (L) x 15.5 (W) x 9.0 (H)			mm
	900μm loose tube	P2: 44.0 (L) x 15.5 (W) x 9.0 (H)			mm

Notes:

1) Based on FOTP-34 method A, steady state equilibrium launch conditions. Within operating temperature range. Exclude connector insertion loss.

2) A minimum >20ms pulse is recommended for latching type of switch.

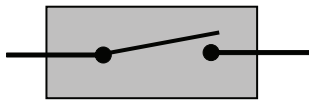
Features

- ◆ Low Insertion Loss
- ◆ Wide Wavelength Range
- ◆ Highly Stable & Reliable
- ◆ Epoxy-Free Optical Path
- ◆ Latching or Non-latching Configurations

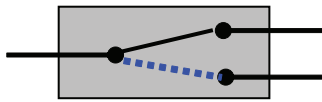
Applications

- ◆ Optical Bypass Protection
- ◆ Optical Routing
- ◆ Fiber Optic Component Test

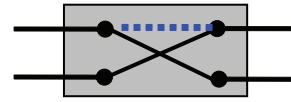
Function Diagram



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.

