

OPTICAL FIBER MECHANICAL SWITCHES

OFMS Series

Features

- Wide Operating Wavelength Range
- Compact Package
- Low Insertion Loss
- Low Channel Crosstalk
- Seam-seal Package
- Highly Stable & Reliable
- Epoxy-Free Optical Path

Applications

- Configurable Add/Drop
- Metropolitan Area Networks
- System Monitoring
- Laboratory R&D

OPTICAL FIBER MECHANICAL SWITCHES

Oplink's 1X2 mechanical switch boasts industry-leading performance specifications. The patented opto-mechanical switch features less than 0.35 dB typical insertion loss, less than 0.50 dB maximum insertion loss, and the smallest size of any device of its kind available today. Designed for use in configurable Optical Add/Drop Multiplexers, Optical Cross-Connect systems and optical system performance monitoring and fault protection applications, its compact size (41.5 x 15.5 x 9.0 mm) allows the switch to be easily integrated into high-density optical systems.

Performance Specifications

OFMS Series									Unit
Wavelength Range				1260 ~ 1360 or 1510 ~ 1610					nm
Insertion Loss				< 0.5					dB
Wavelength Dependent Loss (WDL)				< 0.15					dB
Polarization Dependent Loss (PDL)				< 0.1					dB
Return Loss				> 55					dB
Channel Crosstalk				> 60					dB
Repeatability				< +/- 0.02					dB
Coil Resistance, Pin 1-6, or 7-12				45 ~ 55					Ω
Operating Voltage				2.8 ~ 4.5					V
Switch Type				Latching, 2 Coils					
Durability				> 10 Million					Cycles
Switching Time				< 10					ms
Operating Power, Optical				< 500					mW
Operating Temperature				0 ~ 70					°C
Storage Temperature				-40 ~ 85					°C
Fiber Type				Corning SMF-28					
Fiber Length				1.0 +/- 0.1					m
Physical Dimension (L x W x H)*				Pl: (L)41.5 x (W)15.5 x (H)9.0					mm
Electrical Pin Configuration									
Optical Path		Electrical Drive			Status Sensor				
	Pin 1	Pin 6	Pin 7	Pin 12	Pin 4-3	Pin 4-5	Pin 9-8	Pin 9-10	
Path 1 - 2	V+	Gnd	N/A	N/A	Open	Close	Close	Open	
Path 1 - 3	N/A	N/A	Gnd	V+	Closed	Open	Open	Close	

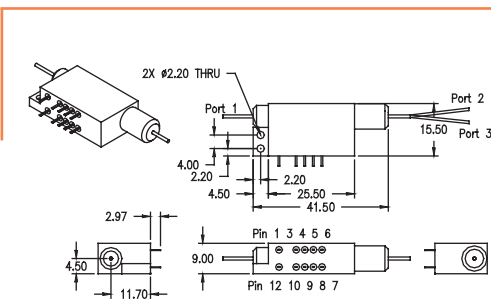
* The mechanical tolerance should be +/- 0.2 mm on all package dimensions unless otherwise custom specified.

Ordering Information

Oplink custom designs and manufactures high performance fiber optic networking components and integrated optical modules. Oplink can provide a remarkable range of customized optical solutions to meet your specific design needs. By combining our technical expertise with our extensive micro-optic manufacturing and packaging capability, your volume requirements for components and customized integrated products can be met. We are happy to discuss your requirements. Please contact Oplink's OEM Design Team or Sales Representative for ordering and price information (408) 965-7270.



Package Dimensions:



Spectral Performance:

