



MEMS Multimode Fiber Optical Switch Module (<64ch)

Features	
Low Insertion Loss	
Fast Switch time	
Compact package	
Application	
Fiber monitoring(working with OTDR or OCM))	
Optical network routing	
Fiber sensing	
Optical network protection and restoration	

Specifications

SPEC	Value		
Channel	4	8	12
Wavelength (nm)	850±30 or 1310±30 or 1550±30		
Insertion Loss(dB)	0.7	0.8	1
Return Loss (dB)	≥30		
Repeatability (dB)	≤0.03		
Cross Talk(dB)	≥30		
Operation Temperature(°C)	-5~70		
Storage Temperature °C	-40~85		
Fiber Type	MM 50/125 62.5/125		
Switch Time (ms)	≤20		
Durability (cycle)	≥1×10 ⁹		

Electrical and Mechanical Specifications

PARAMETER	VALUE
Switch Mode	Non-latching
Control Voltage (V)	5±0.25
Control Type	TTL or TTL/RS232 or TTL/I2C
Dimension (Module) (mm)	47x24.7x13.50 (Module)

The diagram illustrates the system architecture for the MEMS 1xN optical switch. The switch is connected to a common port and 1 to N optical channels. The switch is controlled by a DAC, which is connected to an MCU. The MCU is also connected to a temperature sensor and has various input/output pins: RX, TX, DATA, CLOCK, STROBE, D0 ~ DN, and DONE. The MCU is connected to GND, VCC, and /RST.

Ordering information

MS W	Port	Wavelength	Pigtail Type	Fiber Type	Length	Connector
	02=1x2 08=1x8 12=1x12 16=1x16 64=1x64	85=850nm 15=1550nm 13=1310nm	1=900um loose tube	2=50/12 5 3=62.5/ 125	1= 1m	NE=None FA=FC/APC FC=FC/UPC SA=SC/APC SC=SC/UPC LC=LC/UPC XX=Other