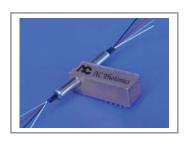


phone: 408.986.9838

email: sales@acphotonics.com website: www.acphotonics.com

# **Dual 2x2 Multi-mode Mechanical Fiberoptic Switch**



**ACP's** MMS Series switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using a patent pending opto-mechanical proprietary configuration and activated via an electrical control signal. The Switch offers ultra-high reliability and fast switching speed as well as bi-directional performance. The MMS fiberoptic switches are true switching solution for optical networking applications.

#### **Key Features**

- Unmatched Low Cost
- Low Insertion Loss
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path
- Latching or Non-Latching

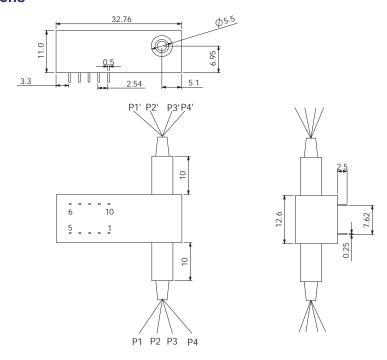
#### **Applications**

- Optical Netrwork Protection/Restoration
- Optical Signal Routing
- Configurable Optical Add/Drop
- Transmitter and Receiver Protection
- Network Test Systems
- Instrumentation

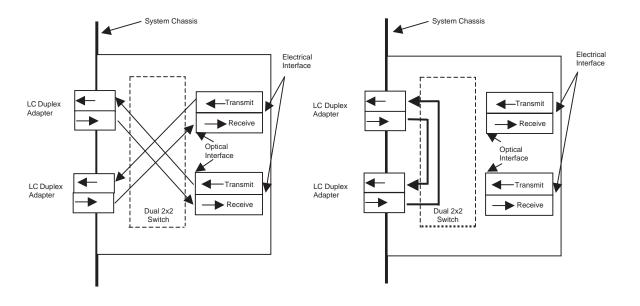
#### **Performance Specifications**

Parameter		Specifications				
Channel Wavelength	850nm, 1310nm,	850nm, 1310nm, or 1550 ± 40nm		850nm / 1550nm / 1550nm		
Incoming Long	P Grade	A Grade	P Grade	A Grade		
Insertion Loss	≤ 1.0dB	≤ 1.2dB	≤ 1.2dB	≤ 1.4dB		
Wavelength Dependent Loss	≤ 0.2	≤ 0.25dB		30dB		
Polarization Dependent Loss		≤ 0.05dB				
Channel Cross Talk		≥ 35dB				
Return Loss		≥ 35dB				
Switching Speed		≤ 10ms (4ms Typ.)				
Operating Voltage		5 ± 10%V				
Durability (Cycles)		10 Million (Min.)				
Optical Power		500mW				
Operating Temperature		0 to +70°C				
Storage Temperature		-40 to +85°C				
Package Dimensions	L32.76	L32.76mm x W12.6mm x H11.0mm (Or custom size)				

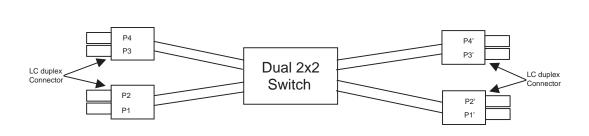
#### **Mechanical Dimensions**



### **Application**



Normal Mode



Bypass Mode

## **Electrical Pin Configuration**

Optical Path		Port1- Port3' an	d Port2 - Port4'	Port1 - 1', Port2 - 2', Port3 - 3' and Port4 - 4'		
Electric Drive	Non-Latching	Pin1	Pin10			
	Latching	Pin1	Pin5	Pin6	Pin10	
		V+	GND	GND	V+	
Sensor Status	Non-Latching	Pin2-3, Pin8-9 Open		Pin2-3, Pin8-9 Close		
	and Latching	Pin3-4, Pin7-8 Close		Pin3-4, Pin7-8 Open		

Parameter	Typical Minmum		Maxmum	
Switch Voltage	5V	4.5V	5.5V	
Switch Current	> 40mA			
Pulse Duration	> 25ms			

## **Ordering Information**

2MMS						
Option	Operating Wavelength	Port	Grade	Fiber Type	Pigtail Style	In/Out Connector
L = Latching N = Non-Latching	13 = 1310±40nm 15 = 1550±40nm 85 = 850±40nm 35 = 1310/1550nm 38 = 1310/850nm 58 = 1550/850nm	0202 = 2x2 (Normal) B2P2 = 2x2 (Bypass)	P = P Grade A = A Grade	1 = 50/125 Multi-mode 2 = 62.5/125 Multi-mode	1 = Bare Fiber 2 = 900um Jacket	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = Duplex LC