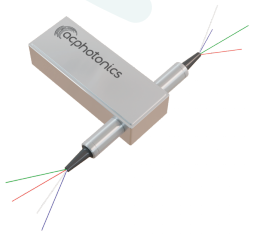
acphotonics

RoHS COMPLIANT

Dual 2x2 Mechanical MM 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 MS fiberoptic switches are true switching solution for optical networking applications.

PERFORMANCE SPECIFICATIONS

Parameter	Specifications			
Operating Windows	Single		Dual	
Operating Wavelength	850±40, 1310±40, 1550±40nm		850/1310±30, 850/1550±30, 1310/1550±30nm	
Grade	P	A	P	A
Insertion Loss	≤ 1.0dB	≤ 1.2dB	≤ 1.2dB	≤ 1.4dB
Temperature Dependent Loss (TDL)	≤ 0.20dB	≤ 0.25dB	≤ 0.25dB	≤ 0.30dB
Wavelength Dependent Loss	≤ 0.25dB		≤ 0.30dB	
Channel Crosstalk	≥ 35dB			
Return Loss	≥ 35dB			
Repeatability	± 0.02dB			
Switching Speed (Typ.)	4ms			
Switching Speed (Max.)	≤ 10ms			
Operating Voltage	5V			
Durability (Cycles)	10Million			
Optical Power	≤ 500mW			
Operating Temperature	0 to +70°C			
Storage Temperature	- 40 to +85°C			
Package Dimensions (LxWxH)	V Package: 32.76x12.6x11.0			

All values referenced are without connector.

FEATURES

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

APPLICATION

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

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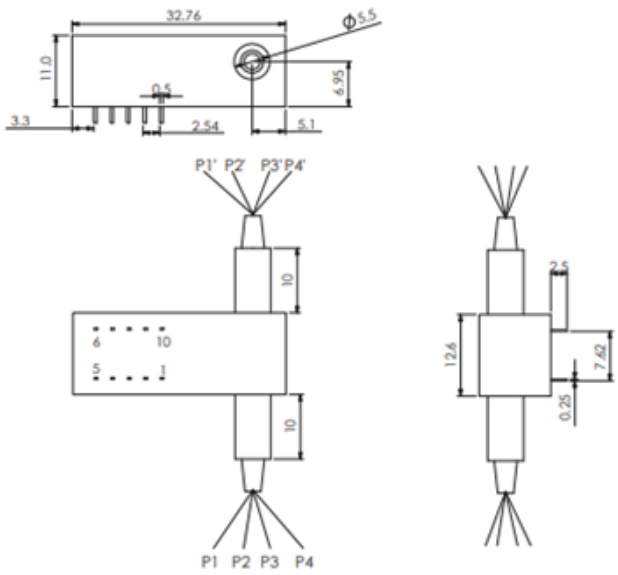
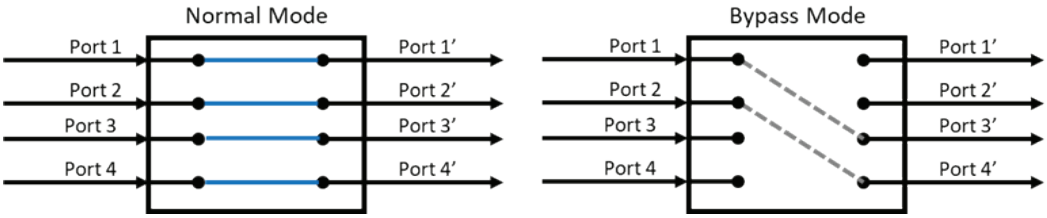
MECHANICAL DIMENSIONS

V Package



PORT CONFIGURATIONS



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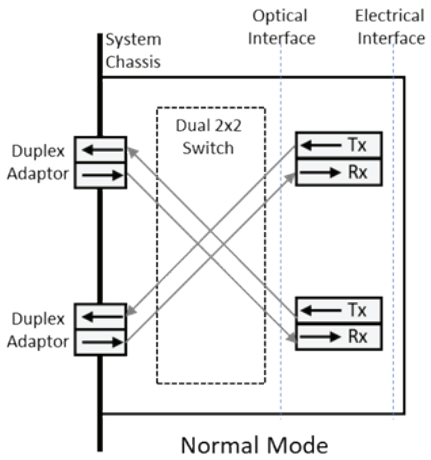
OPTICAL PATH AND ELECTRICAL PIN CONFIGURATION

Optical Path		Port 1 to 3′ and Port 2 to 4′		Port 1 to 1′ and Port 2 to 2′ Port 3 to 3′ and Port 4 to 4′	
Electrical Drive	Non-Latching	Pin 1	Pin 10		
	Latching	Pin 1	Pin 5	Pin 6	Pin 10
		V+	GND	GND	V+
Sensor Status	Non-Latching and Latching	Pin 2-3, Pin 8-9 Open		Pin 2-3, Pin 8-9 Close	
		Pin 3-4, Pin 7-8 Close		Pin 3-4, Pin 7-8 Open	

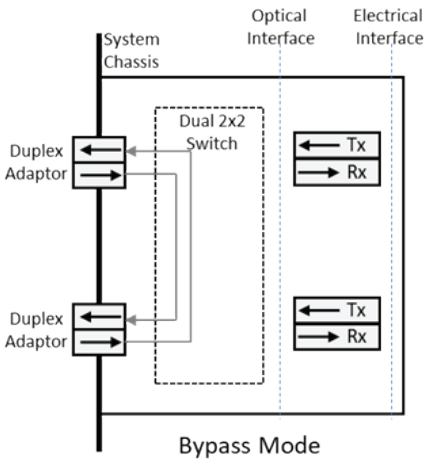
ELECTRICAL SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Unit
Switch Voltage	4.5	5.0	5.5	V
Switch Current		≥ 40		mA
Pulse Duration		≥ 25		ms

APPLICATION



Normal Mode



Bypass Mode

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ORDERING INFORMATION

DMMS

Option	Grade	Operating Wavelength	Port	Package	Fiber Type	Pigtail Style	Fiber Length	In Connector	Out Connector
L=Latching N=Non-Latching	P=P Grade A=A Grade	85=850nm 31=1310nm 55=1550nm 8531=850/1310nm 8555=850/1550nm 3155=1310/1550nm	0202=Normal B2P2=Bypass	V=V Package	A=50/125 B=62.5/125	1=Bare fiber 2=900um loose tube	05=0.5m 10=1.0m . . . 20=2.0m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC