



2x2 Singlemode Bypass Mechanical Fiberoptic Switch

AC Photonics' MS Series switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using patent pending opto-mechanical proprietary configurations 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 solutions for optical networking applications.



V Package



H Package

Features

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

Applications

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

Performance Specifications

Parameter	Specification	
Operating Wavelength (nm)	1260 ~ 1360 or 1510 ~ 1610	1310/1550±40
Insertion Loss (dB)	≤0.6(P Grade), ≤0.9(A Grade)	≤0.8(P Grade), ≤1.0(A Grade)
Wavelength Dependent Loss(WDL)(dB)	≤0.25	≤0.30
PDL (dB)	≤0.05	
Cross Talk (dB)	≥55	
Return Loss (dB)	≥55	
Repeatability(dB)	<±0.02	
Switching Speed(ms)	4(typ.)	
Drive Voltage(v)	5	
Power Handling(mW)	500	
Durability (Cycles)	10 Million	
Operating Temperature (°C)	0~+70	
Storage Temperature(°C)	-45~+85	
Dimensions (mm)	H Package 22.3x12.1x11.0 or V package 25x12.6x8.5	

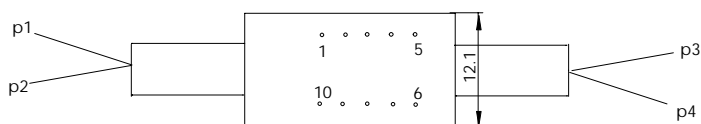
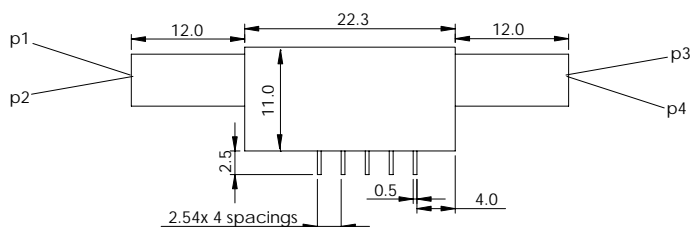
Specifications may change without notice

Ordering Information

Option	Operating Wavelength	Port	Grade	Pigtail Style	Fiber Length	In/Out Connector	Package
MS <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
L= Latching N= Non Latching	15= 1510~1610 13=1260~1360nm 35=1310/1550nm	BP2A= Bypass 2x2 Type A BP2B= Bypass 2x2 Type B	P=P grade A=A grade	1=Bare Fiber 2=900um Jacket	1=1 Meter 2=2 Meter	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC	H pak V Pak

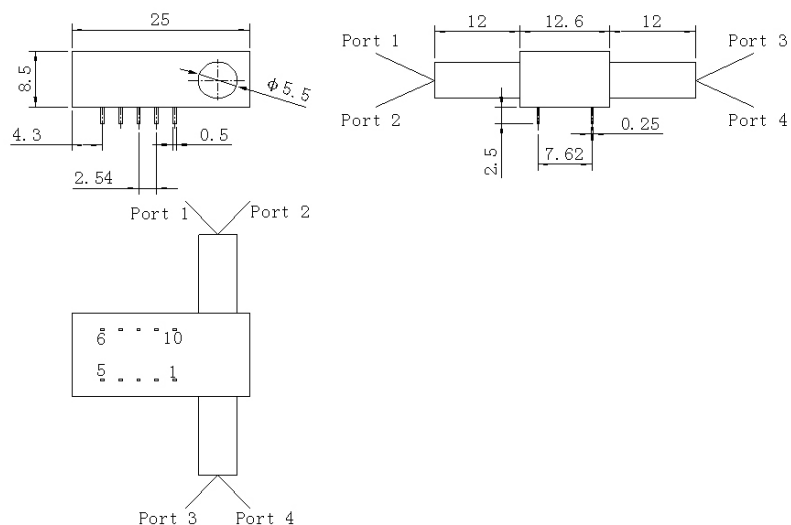


H Package Dimension (mm)



Bottom View

V Package Dimension (mm)



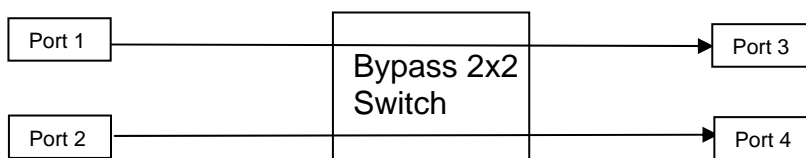
Electric Configuration

Parameter	Typical	Min	Max	Unit
Switch Voltage	5	4.5	5.5	V
Switch Current		≥40		mA
Pulse Duration		≥20		ms

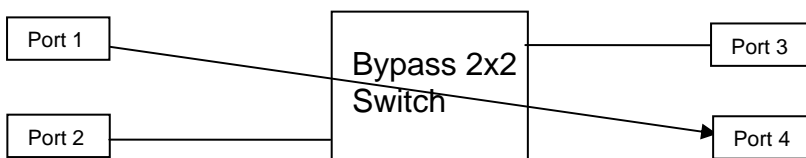


Bypass 2x2 switch ports configurations

Normal Mode



Bypass Mode



Electrical Pin Configuration:

Type: A

Optical Path		Port1 To Port4 (Bypass)		Port1 To Port3/Port 2 To Port4 (Normal)	
Electric Drive	Non Latching	Pin1	Pin10		
	Latching	Pin1	Pin5	Pin 6	Pin10
		V+	GND	GND	V+
Sensor Status	Non Latching	Pin2-3, Pin8-9 Open		Pin2-3, Pin8-9 Close	
		Pin3-4, Pin7-8 Close		Pin3-4, Pin7-8 Open	

Type: B

Optical Path		Port1 To Port3/Port 2 To Port4		Port1 To Port4	
Electric Drive	Non Latching	Pin6	Pin5		
	Latching	Pin6	Pin10	Pin1	Pin5
		V+	GND	GND	V+
Sensor Status	Non Latching	Pin7-8, Pin3-4 Open		Pin7-8, Pin3-4 Close	
		Pin8-9, Pin2-3 Close		Pin8-9, Pin2-3 Open	

