



2x2 Mechanical SM Fiber optic Switch

ACP's MS 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 fiber optic switches are true switching solution for optical networking applications.

PERFORMANCE SPECIFICATIONS

Parameter	Specifications	
Operating Windows	Single	Dual
Operating Wavelength	1310 ± 40 or 1550 ± 40nm	1310/1550 ± 30nm
Grade	P	P
Insertion Loss	0.60dB(Typ.) ≤ 1.0dB(Max.)	0.80dB(Typ.) ≤ 1.2dB(Max.)
Wavelength Dependent Loss	≤ 0.20dB	≤ 0.30dB
Polarization Dependent Loss	≤ 0.15dB	
Channel Crosstalk	≥ 55dB	
Return Loss	≥ 60dB	
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)	H Package: 29x15x10	

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

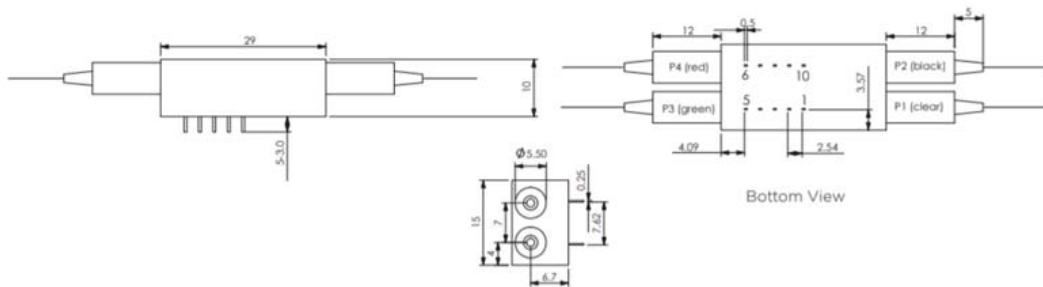
APPLICATION

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

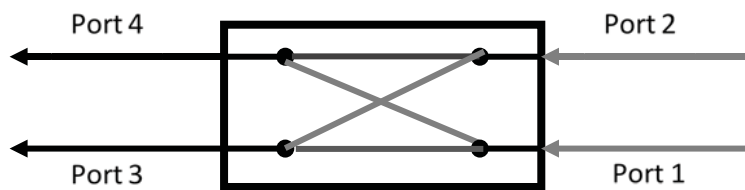
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MECHANICAL DIMENSIONS

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

ELECTRICAL SPECIFICATIONS

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

ORDERING INFORMATION

Option	Grade	Operating Wavelength	Port	Package	Fiber Type*	Pigtail Style	Fiber Length	In Connector	Out Connector
L=Latching N=Non-Latching	P=P Grade	31=1310nm 55=1550nm 3155=1310/1550nm	202=2x2	H=H Package	2=SMF-28 Ultra (G.657.A1) 3=ClearCurve ZBL(G.657.B3)	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

*1=SMF-28(G.652) is available upon request.