AC Photonics

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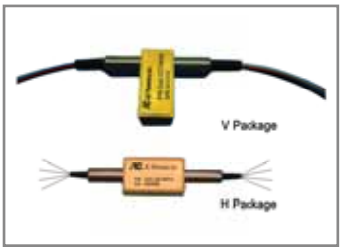
Dual 2x2 Mechanical Fiberoptic Switch(Latching or Non-Latching)



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 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

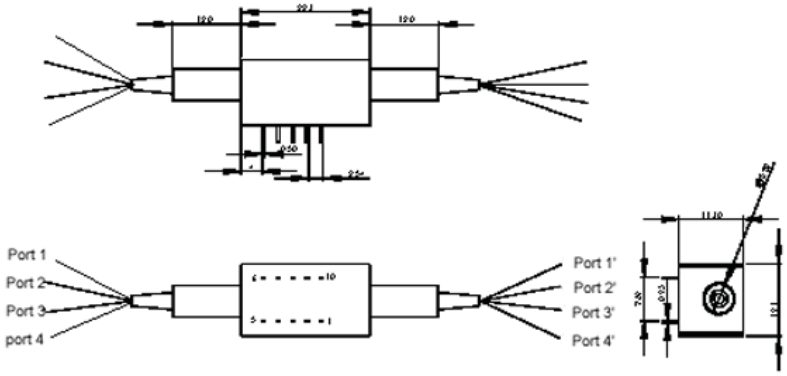
Applications

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

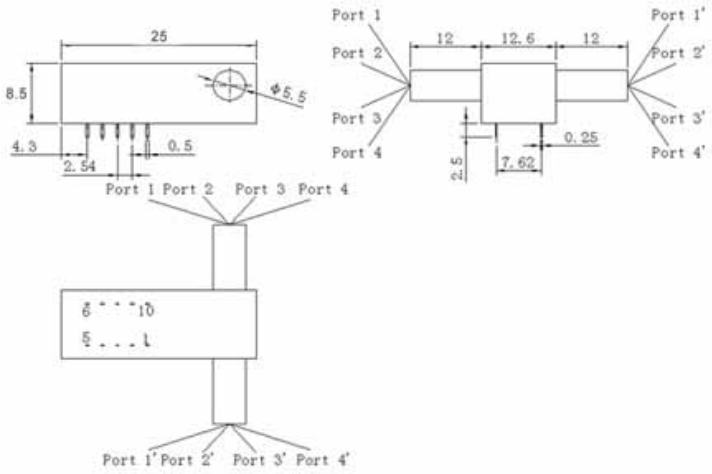
Performance Specifications

Parameter	Specifications			
Channel Wavelength	830nm ± 40nm,1310nm ± 40nm or 1550nm ± 40nm		830nm / 1310nm, 830nm / 1550nm or 1310nm / 1550nm	
Insertion Loss	P Grade	A Grade	P Grade	A Grade
	≤ 0.8dB	≤ 1.0dB	≤ 1.0dB	≤ 1.2dB
Wavelength Dependent Loss	≤ 0.25dB		≤ 0.30dB	
Polarization Dependent Loss	≤ 0.05dB			
Channel Cross Talk	≥ 55dB			
Return Loss	≥ 55dB			
Repeatability	± 0.02dB			
Switching Speed (Typ.)	≤10 ms (4ms Typ.)			
Operating Voltage	5V ±10%			
Durability (Cycles)	10 Million			
Optical Power	500mW			
Operating Temperature	0 to +70°C			
Storage Temperature	-40 to +85°C			
Fiber Type	SMF-28			
Fiber Length	1.0m +/- 0.1m			
Package Dimensions	H Package: L22.3mm x W12.1mm x H11.0mm			
	V package: L25mm x W12.6mm x H8.5mm			

Mechanical Dimensions (H Package)



Mechanical Dimensions (V Package)



Electrical Pin Configuration

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

Parameter	Typ.	Min.	Max.	Unit
Switch Voltage	5	4.5	5.5	V
Switch Current	>40			mA
Pulse Duration	>20			ms

Ordering Information

2MS □	□□	□□□□	□	□	□	□□	□
Option	**Operating Wavelength**	**Port**	**Grade**	**Pigtail Style**	**Fiber Length**	**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	P = P Grade A = A Grade	1 = Bare Fiber	1 = 1.0m 2 = 2.0m	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC	H = H Package V = V Package