



# 1x2 Mechanical PM Fiberoptic Switch

ACP's PMS 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 configuration and activated via an electrical control signal. At the same time, the polarization state of the signal is preserved.



Parameter	Specifications
Operating Wavelength	$1310 \pm 40 \text{ or } 1550 \pm 40 \text{nm}$
Insertion Loss	≤ 0.80dB
Wavelength Dependent Loss	≤ 0.15dB
Extinction Ratio	≥ 18 (Typ.: 20)dB
Channel Crosstalk	≥ 55dB
Return Loss	≥ 50dB
Repeatability	± 0.02dB
Switching Speed (Typ.)	4ms
Switching Speed (Max.)	≤ 5ms
Operating Voltage	5V
Durability (Cycles)	10Million
Optical Power	≤ 500mW
Fiber Type	Panda PM fiber
Operating Temperature	0 to +70°C
Storage Temperature	- 40 to +85°C
Package Dimensions (LxWxH)	H Package: 22.3x12.1x11.0mm



#### **FEATURES**

High Extinction Ratio
Low Insertion Loss
High Channel Isolation
High Stability and Reliability
Epoxy Free Optical Path

#### **APPLICATION**

Optical Signal Routing Network Test Systems Instrumentation

#### Note:

- 1. The PM fiber and the connector key are aligned to the slow axis.
- 2. The ER is for fiber  $\leq$  0.75 meter. Increase fiber length can decrease the ER.
- 3. For devices with connectors, insertion loss will be 0.3dB higher, return loss will be 5dB lower, and extinction loss will be 2dB lower.

All values referenced are without connector.

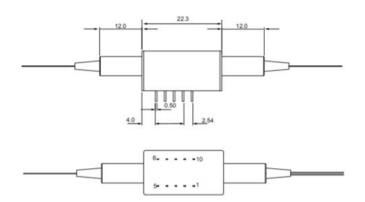




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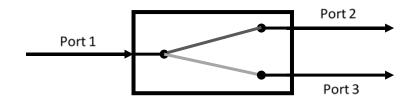
#### **MECHANICAL DIMENSIONS**

H Package





#### **PORT CONFIGURATIONS**







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## OPTICAL PATH AND ELECTRICAL PIN CONFIGURATION

Optical Path		Port 1 to	o Port 2	Port 1 to Port 3		
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	Pin 2-3, Pin 8-9 Open		Pin 2-3, Pin 8-9 Close		
	and Latching	Pin 3-4, Pin 7-8 Close		Pin 3-4, Pin 7-8 Open		

#### **ELECTRICAL SPECIFICATIONS**

Parameter	Min.	Тур.	Max.	Unit
Switch Voltage	4.5	5.0	5.5	V
Switch Current		≥ 40		mA
Pulse Duration		≥ 20		ms

## **ORDERING INFORMATION**

PMS									
Option	Operating Wavelength	Port	Package	Fiber Type	Pigtail Style	Fiber Length	In Connector	Out Connector	Working axis
L=Latching N=Non- Latching	31=1310nm 55=1550 nm	102=1x2	H=H Package	M=PM1310 N=PM1550	1=Bare fiber 2=900um loose tube	07=0.75m 10=1.0m	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	S=Slow axis B=Both axis F=Fast axis