AC Photonics

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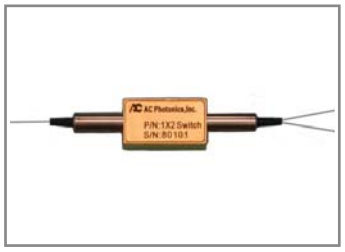
1x2 Mechanical PM Fiberoptic Switch



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.

Key Features

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

Applications

- Optical Signal Routing
- Network Test Systems
- Instrumentation

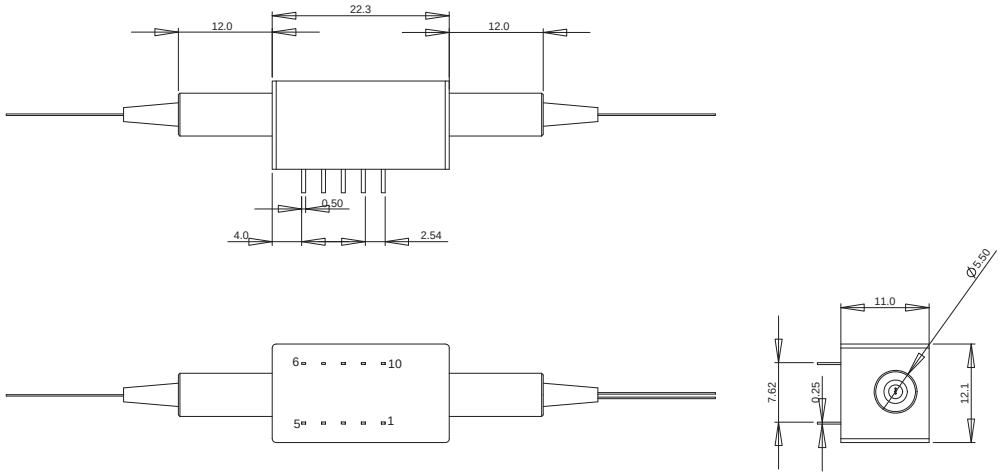
Performance Specifications

Parameter	Specifications
Channel Wavelength	1310nm , 1550nm
Insertion Loss	≤ 0.8dB
Wavelength Dependent Loss	≤ 0.15dB
Extinction Ratio	≥ 18dB (20dB Typ.)
Channel Cross Talk	≥ 55dB
Return Loss	≥ 50dB
Repeatability	± 0.02dB
Switching Speed (Typ.)	10ms (4ms Typ.)
Operating Voltage	5V
Durability (Cycles)	10 Million
Optical Power	500mW
Fiber Type	Panda PM fiber
Operating Temperature	0 to +70°C
Storage Temperature	-40 to +85°C
Package Dimensions	L22.3mm x W12mm x H10mm

Note:

1. The PM fiber and the connector key are aligned to the slow axis.
2. The ER is for fiber ≤ 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.

Mechanical Dimensions



Electrical Pin Configuration

Optical Path		Port1- Port2		Port1- Port3	
Electric Drive	Latching	Pin1	Pin10	Pin1	Pin10
		V+	GND	Gnd	V+
Sensor Status	Latching	Pin2-3, Pin8-9 Open		Pin2-3, Pin8-9 Close	
		Pin3-4, Pin7-8 Close		Pin3-4, Pin7-8 Open	

Parameter	Typical	Minmum	Maxmum
Switch Voltage	5V	4.5V	5.5V
Switch Current	> 40mA		
Pulse Duration	> 20ms		

Ordering Information

PMS ☐	☐☐	☐☐☐☐	☐	☐	☐	☐☐	☐
Option	**Operating Wavelength**	**Port**	**Grade**	**Pigtail Style**	**Fiber Length**	**In/Out Connector**	**Working axis**
L = Latching	15 = 1550nm 13 = 1310nm	0102 = 1x2	P = P Grade	1 = Bare Fiber 2 = 900um Jacket	1 = 0.75m 2 = 1.0m 3 = 1.5m S = Specify	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 working B = Both axes working F = Fast axis working