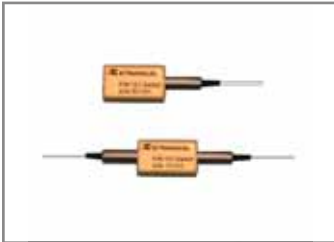


1x1 Mechanical Fiberoptic Switch(Latching or Non-Latching)



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

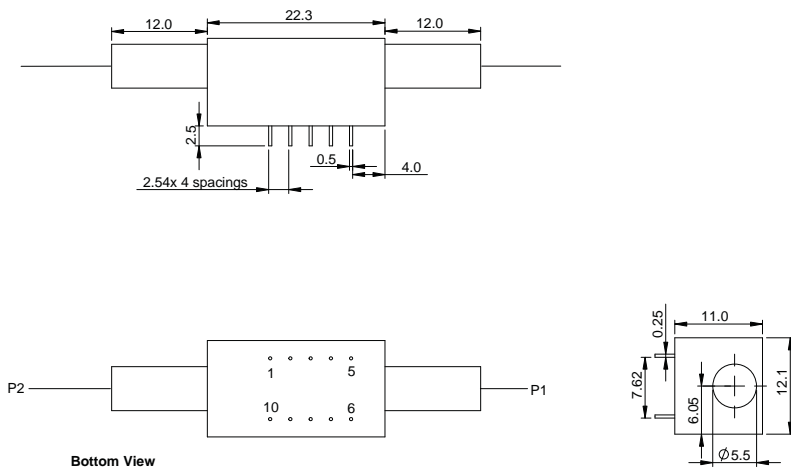
Applications

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

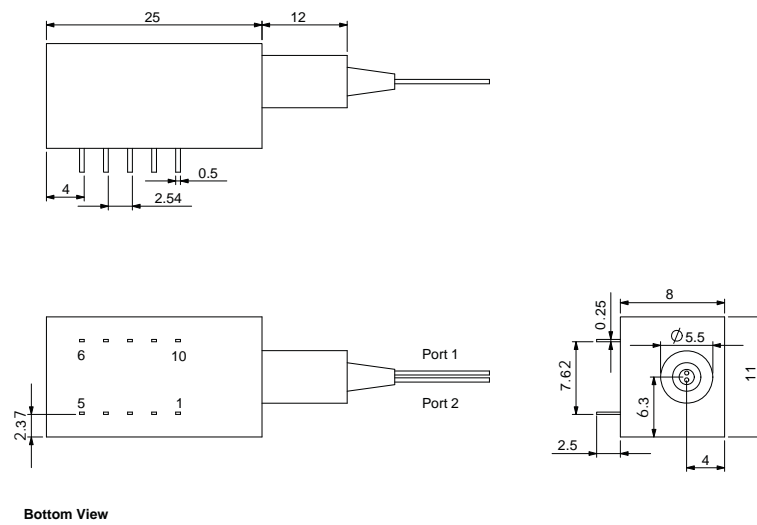
Performance Specifications

| Parameter | Specifications | | | |
|-----------------------------|--|---------------------|----------------------------|---------------------|
| Channel Wavelength | 1260nm to 1360nm or 1510nm to 1610nm | | 1310nm / 1550nm \pm 40nm | |
| Insertion Loss | P Grade | A Grade | P Grade | A Grade |
| | $\leq 0.5\text{dB}$ | $\leq 0.6\text{dB}$ | $\leq 0.6\text{dB}$ | $\leq 0.7\text{dB}$ |
| Wavelength Dependent Loss | $\leq 0.25\text{dB}$ | | $\leq 0.30\text{dB}$ | |
| Polarization Dependent Loss | $\leq 0.05\text{dB}$ | | | |
| Channel Cross Talk | $\geq 55\text{dB}$ | | | |
| Return Loss | $\geq 55\text{dB}$ | | | |
| Switching Speed (Typ.) | 4ms | | | |
| Operating Voltage | 5V | | | |
| 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 | Single Port: L25mm x W11mm x H8.0mm | | | |
| | Dual Port: L22.3mm x W12.1mm x H11.0mm | | | |

Mechanical Dimensions (Dual Port)



Mechanical Dimensions (Single Port)



Electrical Pin Configuration

| Optical Path | | OFF | | ON | |
|----------------|---------------------------|----------------------|-------|----------------------|-------|
| 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

| 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"/> |
|----------------------------------|---|---|---|------------------------------------|--------------------------|--|---|--------------------------|
| Option | Operating Wavelength | Port | Grade | Pigtail Style | Fiber Length | In/Out Connector | | |
| L = Latching N = Non-Latching | 15 = 1510 to 1610nm 13 = 1260 to 1360nm 35 = 1310 to 1550nm | 0101 = 1x1 | P = P Grade A = A Grade | 1 = Bare Fiber 2 = 900um Jacket | 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 | S = Single Port D = Dual Port | |