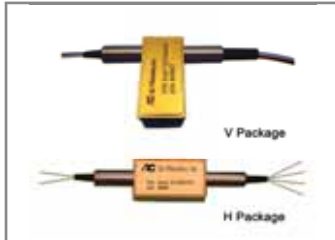


## Dual 1x2 Mechanical Fiberoptic Switch(Latching or Non-Latching)



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

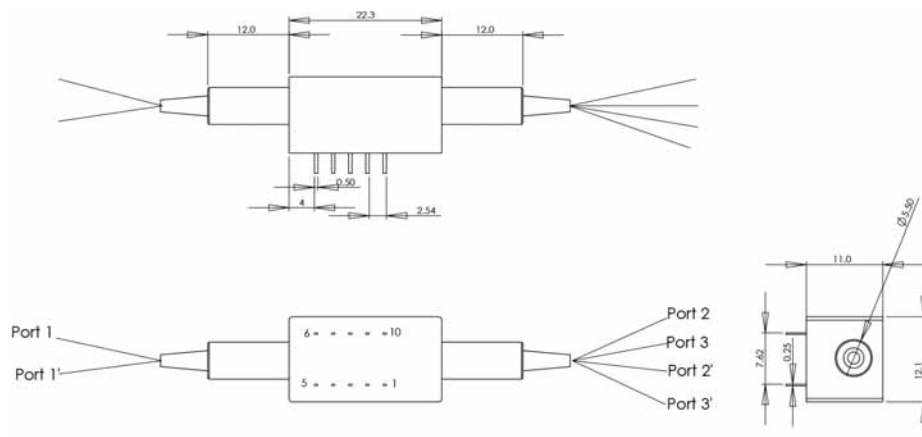
### Applications

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

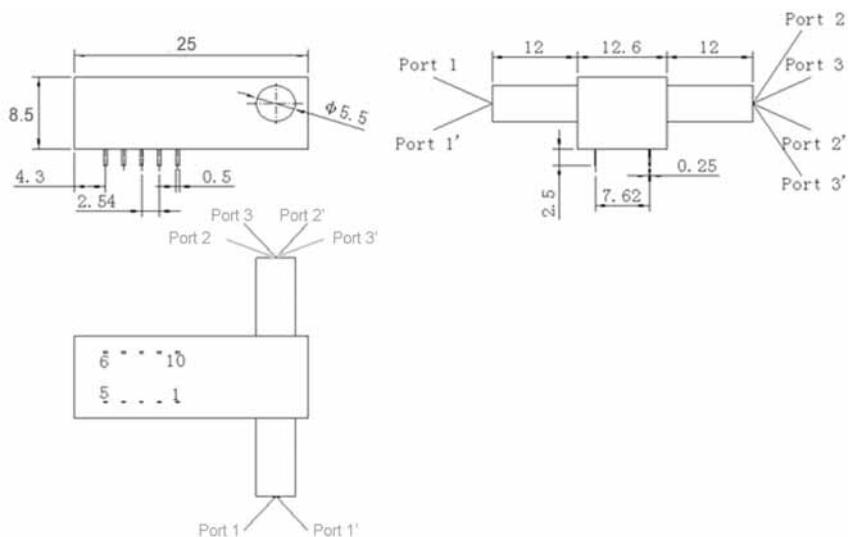
### Performance Specifications

| Parameter                   | Specifications                         |          |                        |          |
|-----------------------------|--|----------|------------------------|----------|
|                             | 1260nm to 1360nm or 1510nm to 1610nm   |          | 1310nm / 1550nm ± 40nm |          |
| Insertion Loss              | P Grade                                | A Grade  | P Grade                | A Grade  |
|                             | ≤ 0.5dB                                | ≤ 0.8dB  | ≤ 0.7dB                | ≤ 1.0dB  |
| Temperature Dependent Loss  | ≤ 0.15dB                               | ≤ 0.20dB | ≤ 0.15dB               | ≤ 0.20dB |
| 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.)      | 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          | 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 -Port2, Port1' - Port2' |       | Port1 -Port3, Port1' - Port3' |       |
|----------------|---------------------------|-------------------------------|-------|-------------------------------|-------|
| 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                              | <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<br>N = Non-Latching | 15 = 1510 to 1610nm<br>13 = 1260 to 1360nm<br>35 = 1310 to 1550nm | 0102 = 1x2  | P = P Grade<br>A = A Grade  | 1 = Bare Fiber<br>2 = 900um Jacket | 1 = 1.0m<br>2 = 2.0m     | 0 = None<br>1 = FC/APC<br>2 = FC/PC<br>3 = SC/APC<br>4 = SC/PC<br>5 = ST<br>6 = LC/UPC<br>7 = LC/APC | H = H Package<br>V = V Package                    |                          |