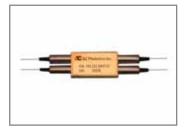


phone: 408.986.9838 email: sales@acphotonics.com website: www.acphotonics.com

2x2 Mechanical PM Fiberoptic Switch (Lantching or Non-Lantching)



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

- Unmatched Low Cost
- Low Insertion Loss
- High Channel Isolation
- High Stability and Reliability
- Epoxy Free Optical Path
- Latching or Non-Latching

Applications

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

Performance Specifications

| Parameter | Specifications | | | |
|---------------------------|-----------------------------|-------------|--|--|
| Channel Wavelength | 1310 ± 40nm | 1550 ± 40nm | | |
| Insertion Loss | 0.8dB (Typ.), 1.2 dB (Max.) | | | |
| Wavelength Dependent Loss | ≤ 0.20dB | | | |
| Extinction Ratio | ≥ 18dB (20dB Typ.) | | | |
| Channel Cross Talk | ≥ 60dB | | | |
| Return Loss | ≥ 55dB | | | |
| Repeatability | ± 0.02dB | | | |
| Switching Speed (Typ.) | <u><</u> 10ms (Min.) | | | |
| Operating Voltage | 4.5 - 5V | | | |
| Durability (Cycles) | 10 Million | | | |
| Optical Power | 500mW | | | |
| Operating Temperature | 0 to +70°C | | | |
| Storage Temperature | -40 to +85°C | | | |
| Package Dimensions | L29mm x W15mm x H10mm | | | |

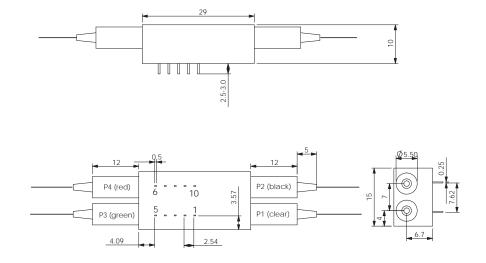
Note:

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.

Mechanical Dimensions





Electrical Pin Configuration

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

| Parameter | Typical | Minmum | Maxmum |
|----------------|---------|--------|--------|
| Switch Voltage | 5V | 4.5V | 5.5V |
| Switch Current | > 40mA | | |
| Pulse Duration | > 25ms | | |

Ordering Information

| PMS | | | | | | | |
|----------------------------------|----------------------------|------------|-------------|------------------------------------|--|--|--|
| Option | Operating Wavelength | Port | Grade | Pigtail Style | Fiber Length | In/Out Connector | Working axis |
| L = Latching N = Non-Latching | 15 = 1550nm 13 = 1310nm | 0202 = 2x2 | 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 F = Fast axis working |