## 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.

## PERFORMANCE SPECIFICATIONS

## Parameter

Operating Wavelength
Insertion Loss
Wavelength Dependent Loss
Extinction Ratio
Channel Cross Talk
Return Loss
Repeatability
Switching Speed (Typ.)
Operating Voltage
Durability (Cycles)
Optical Power
Operating Temperature
Storage Temperature
Package Dimensions

## Specifications

$1310 \pm 40 \mathrm{~nm} \quad \mid \quad 1550 \pm 40 \mathrm{~nm}$
0.8dB (Typ.), 1.2 dB (Max.)
$\leq 0.20 \mathrm{~dB}$
$\geq 18 \mathrm{~dB}$ (20dB Typ.)
$\geq 60 \mathrm{~dB}$
$\geq 55 \mathrm{~dB}$
$\pm 0.02 \mathrm{~dB}$
$\leq 10 \mathrm{~ms}$ (Min.)
4.5-5V

10 Million
500 mW
0 to $+70^{\circ} \mathrm{C}$
-40 to $+85^{\circ} \mathrm{C}$
L29mm $\times \mathrm{W} 15 \mathrm{~mm} \times \mathrm{H} 1 O \mathrm{~mm}$

MECHANICAL DIMENSIONS


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

## APPLICATION

Configurable Optical Add/Drop
Optical Signal Routing
Optical Network
Protectioni/Restoration
Transmitter and Receiver Protection
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.
2. For devices with connectors, insertion loss will be 0.3 dB higher, return loss will be 5 dB lower, and extinction loss will be 2dB lower


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ELECTRICAL PIN CONFIGURATION

| Optical Path |  | Port1- Port2 |  | Port1 - Port3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Electric Drive | Non-Latching |  |  | Pin1 | Pin10 |
|  | Latching | Pin1 0 | 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 | 5 V | 4.5 V | 5.5 V |
| Switch Current | $>40 \mathrm{~mA}$ |  |  |
| Pulse Duration | $>25 \mathrm{~ms}$ |  |  |

## ORDERING INFORMATION

| PMS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Option | Operating Wavelength | Port | Grade | Pigtail Style | Fiber Length | In/Out Connector | Working axis |
| $L=$ Latching | $15=1550 \mathrm{~nm}$ | $0202=2 \times 2$ | $P=P$ Grade | 1 = Bare Fiber | $1=0.75 \mathrm{~m}$ | $\mathrm{O}=$ None | S = Slow axis |
| N = Non-Latching | $13=1310 \mathrm{~nm}$ |  |  | 2 = 900um Jacket | $2=1.0 \mathrm{~m}$ | 1 = FC/APC | working |
|  |  |  |  |  | $3=1.5 \mathrm{~m}$ | $2=F C / P C$ | F = Fast axis |
|  |  |  |  |  | S = Specify | 3 S SC/APC | working |
|  |  |  |  |  |  | 4 = SC/PC |  |
|  |  |  |  |  |  | 5 = ST |  |
|  |  |  |  |  |  | $6=$ LC/UPC |  |
|  |  |  |  |  |  | 7 = LC/APC |  |

