

1x4 Mechanical PM Fibreroptic 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.

PERFORMANCE SPECIFICATIONS

Parameter	Specifications
Operating Windows	Single Dual
Operating Wavelength	1310 ± 40 or 1550 ± 40nm 1310/1550 ± 30nm
Grade	P
Insertion Loss	≤ 1.1dB
Wavelength Dependent Loss	≤ 0.20dB
Extinction Ratio	Typ.: 20, Max.: ≤ 18dB
Channel Crosstalk	≥ 55dB
Return Loss	≥ 50dB
Repeatability	± 0.02dB
Switching Speed (Typ.)	5ms
Switching Speed (Max.)	≤ 10ms
Operating Voltage	5V
Durability (Cycles)	10Million
Optical Power	≤ 500mW
Operating Temperature	0 to +70°C
Storage Temperature	- 40 to +85°C
Package Dimensions (LxWxH)	V Package: 26.0x25.5x10.3

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.

All values referenced are without connector.

FEATURES

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

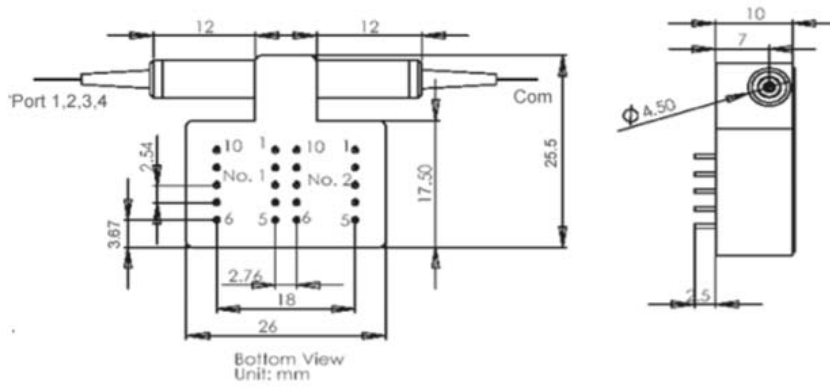
APPLICATION

- Optical Signal Routing
- Network Test Systems
- Instrumentation

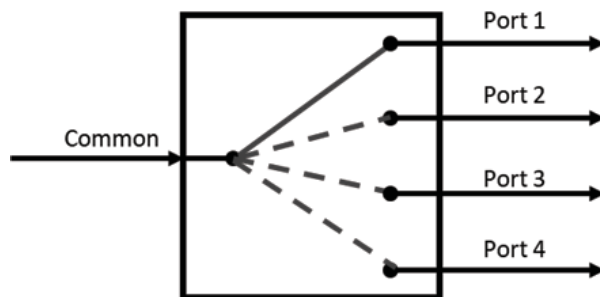
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MECHANICAL DIMENSIONS

V Package



PORT CONFIGURATIONS



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OPTICAL PATH AND RELAY STATUS

Relay No.	1	2	Switch Status
Relay Status	0	0	Com – Port 1
	0	1	Com – Port 2
	1	0	Com – Port 3
	1	1	Com – Port 4

ELECTRICAL PIN CONFIGURATIONS

Relay Status		Electrical Drive (Pin #)				Sensor Status (Pin #)			
		1	5	6	10	2-3	3-4	8-7	8-9
Latching Type	0 (Reset)	GND	GND	GND	+	Close	Open	Open	Close
	1 (set)	+	GND	GND	GND	Open	Close	Close	Open

ORDERING INFORMATION

Option	Operating Wavelength	Port	Package	Fiber Type	Pigtail Style	Fiber Length	In Connector	Out Connector	Working axis
L=Latching	31=1310nm	104=1x4	V=V Package	M=PM1310	1=Bare fiber	07=0.75m	0= None	0= None	S=Slow axis
N=Non-Latching	55=1550 nm			N=PM1550	2=900um loose tube	10=1.0m	1= FC/APC	1= FC/APC	B=Both axis
						.	2= FC/PC	2= FC/PC	F=Fast axis
						.	3= SC/APC	3= SC/APC	
						.	4= SC/PC	4= SC/PC	
							5= ST	5= ST	
							6= LC/UPC	6= LC/UPC	
							7= LC/APC	7= LC/APC	