

Polarization Maintaining Mechanical Switch

OE photonics's Polarization Maintaining Mechanical Switch is an industry proven fiber optic switch with excellent durability and reliability. It allows channel selection between input fibers and output fibers. It is widely used in optical network fields such as OLP and switch module.

Features

- Low Insert Loss
- High Repeatability and Stability
- Latching and Non-latching
- Meets GR-1073, GR-1209 and GR-1221 standard



Application

- OADM Fiber Monitoring
- Optical Network Protection
- Measurement Equipment

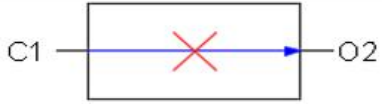




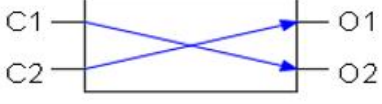
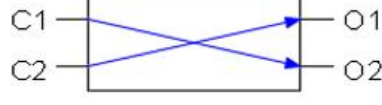


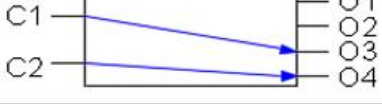

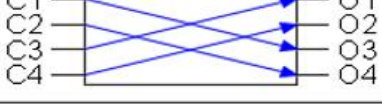
Specification

Parameters	Unit	Specification					
Wavelength	nm	1310±30/1550±30					
Insertion Loss(Max)	dB	1x1	1x2	2x2B	2x2F	D1X2	D2X2B
		≤0.5	≤0.6	≤0.7	≤0.7	≤0.8	≤0.8
Return Loss	dB	≥50					
Repeatability	dB	≤0.02					
Crosstalk	dB	≥50					
Extinction Ratio	dB	≥18					
TDL	dB	≤ 0.3					
Operation Temperature	℃	-5~70					
Storage Temperature	℃	-40~85					
Switch Time	ms	≤5					
Durability	Cycle	≥10 ⁷					
Optical Power	mw	≤500					
Control Voltage	V	3 or 5					
Fiber Type		TBD					
Fiber Length		TBD					
Connector Type		TBD					

Notes:

1. The loss is based on the test results at 23℃ at the central wavelength ±30nm.
2. Repeatability is defined after 100 cycles.
3. Excluding connector, the insertion loss of connector is increased by 0.2dB.

Pin Definition:

Type	Status A	Status B
1x1		
1x2		
2x2B		
2X2F		
D1X2		
D2X2B		

Type	Status	Optical Path	Electric Drive				Status Sensor			
1x2			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	A	C1→O2	--	--	GND	V+	Close	Open	Open	Close
	B	C1→O1	V+	GND	--	--	Open	Close	Close	Open
Non-Latching	A	C1→O2	--	--	--	--	Close	Open	Open	Close
	B	C1→O1	V+	--	--	GND	Open	Close	Close	Open

Type	Status	Optical Path	Electric Drive				Status Sensor			
2x2B			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	A	C1→O1	--	--	GND	V+	Close	Open	Open	Close
	B	C1→O2, C2→O1	V+	GND	--	--	Open	Close	Close	Open
Non-Latching	A	C1→O1	--	--	--	--	Close	Open	Open	Close
	B	C1→O2, C2→O1	V+	--	--	GND	Open	Close	Close	Open

Type	Status	Optical Path	Electric Drive				Status Sensor			
D1x2			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	A	C1→O1, C2→O2	--	--	GND	V+	Close	Open	Open	Close
	B	C1→O3, C2→O4	V+	GND	--	--	Open	Close	Close	Open
Non-Latching	A	C1→O1, C2→O2	--	--	--	--	Close	Open	Open	Close
	B	C1→O3, C2→O4	V+	--	--	GND	Open	Close	Close	Open

Type	Status	Optical Path	Electric Drive				Status Sensor			
D2x2B			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	A	C1→O1, C2→O2	--	--	GND	V+	Close	Open	Open	Close
	B	C1→O3, C2→O4 C3→O1, C4→O2	V+	GND	--	--	Open	Close	Close	Open
Non-Latching	A	C1→O1, C2→O2	--	--	--	--	Close	Open	Open	Close
	B	C1→O3, C2→O4 C3→O1, C4→O2	V+	--	--	GND	Open	Close	Close	Open

Type	Status	Optical Path	Electric Drive				Status Sensor			
2x2F			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	A	C1→O2, C2→O1	--	--	GND	V+	Close	Open	Open	Close
	B	C1→O1, C2→O2	V+	GND	--	--	Open	Close	Close	Open
Non-Latching	A	C1→O2, C2→O1	--	--	--	--	Close	Open	Open	Close
	B	C1→O1, C2→O2	V+	--	--	GND	Open	Close	Close	Open

Parameters for current and resistance:

	Specification	Voltage	Current	Resistance
5V	Latching	4.5~5.5V	36~44mA	125Ω
5V	Non-Latching	4.5~5.5V	26~32mA	175Ω
3V	Latching	2.7~3.3V	54~66mA	50Ω
3V	Non-Latching	2.7~3.3V	39~47mA	70Ω

Order Information:

OE-MOS-A-B-C-D-E-F-G-H (MOS: Mechanical Optical Switch)

A	B	C	D	E	F	G	H
Port type	Fiber Type	Control Voltage	Test Wavelength	Switch Type	Tube Type	Fiber Length	Connector
1×1 1×2 2×2B 2×2F D1×2 D2×2B	PM1310 PM1550 Others	3:3V 5:5V	1310:1310nm 1550:1550nm	L: Latching N: Non-Latching	25:250um 90:900um Others	05:0.5m±5cm 10:1.0m±5cm 15:1.5m±5cm Others	OO: None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC X: Others

Notes:

1. Above specifications just show the typical performance of module.
2. Please contact our sales to discuss your specific requirements.