

## 2x2 Mechanical Fiber Optic Switch

### 1、 Cable Drawing



### 2、 Description

(Mechanical Optical Switch) 2x2 Mechanical Bi-directional Fiber Optic Switch, connects optical channels by redirecting 2 incoming optical signals into 2 output fibers. this is achieved using a opto-mechanical configuration and activated via an electrical control signal. the switch has integrated electrical position sensors. this novel design significantly reduces moving part position sensitivity, offering unprecedented high stability as well as an unmatched low cost.

### 3、 Features

- Low Insertion loss
- Wide Wavelength Range
- Low Crosstalk, High Channel Isolation
- High Stability, High Reliability
- Epoxy-free on Optical Path
- Latching and Non-latching

### 4、 Application

- Optical Network, Network Test System
- Protection/Restoration
- Optical Singnal Routing
- Configurable Optical Add/Drop

- Transmitter and receiver protection

## 5. Specification

Item	Parameter	
Wavelength Range (nm)	850±40	1260~1650
Operating Wavelength	850	1310/1490/1550/1625/1650
Insertion Loss (dB)	Type: 0.8 Max: 1.2	Type: 0.6 Max: 0.8
Return Loss (dB)	MM≥30 SM≥50	
Crosstalk (dB)	MM≥65, SM≥70	
Polarization Dependent Loss (dB)	≤0.05	
WaveLength Dependent Loss (dB)	≤0.25	
Temperature Dependent Loss (dB)	≤0.25	
Repeatability (dB)	≤±0.02	
Power Supply (V)	3.0 or 5.0	
Lifetime (time)	≥10 <sup>7</sup>	
Switch Time (ms)	≤8	
Transmission Power (mW)	≤500	
Operating Temperature(°C)	-20~ +70	
Storage Temperature(°C)	-40~ +85	
Weight(g)	16	
Dimension (mm)	(L) 27.0× (W) 12 ×(H)8.0	

### Notes:

1. All values specified are without connectors.
2. IL will increase 0.2dB when add one connector.
3. Customized service is available.

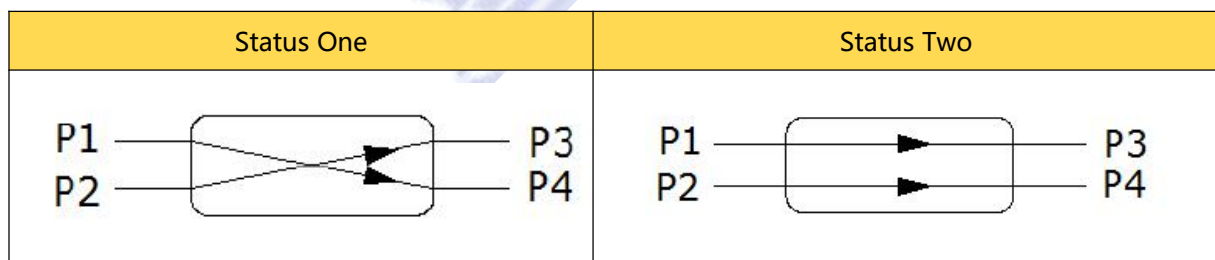
## Pins

Type	Pin	Electric Drive				Status Sensor			
2×2	Light Pin	Pin1	Pin5	Pin6	Pin10	Pin2-3	Pin3-4	Pin7-8	Pin8-9
Latching	P1-P4 P2-P3	V+	GND	--	--	Open	Close	Close	Open
	P1-P3 P2-P4	--	--	GND	V+	Close	Open	Open	Close
Non-latching	P1-P4 P2-P3	V+	--	--	GND	Open	Close	Close	Open
	P1-P3 P2-P4	--	--	--	--	Close	Open	Open	Close

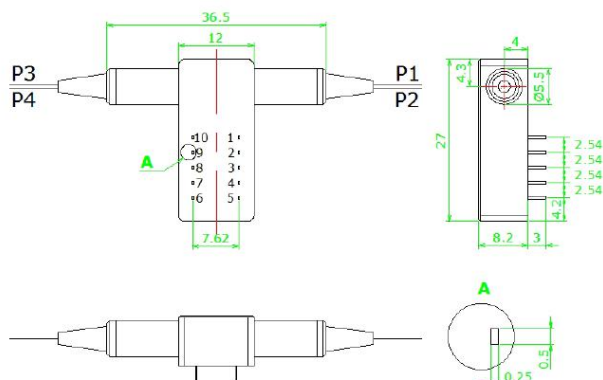
## Electric

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

## Optical Route



## 6. Dimension



Size : 27×12×8.2mm

