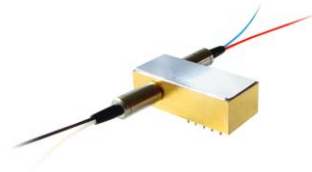


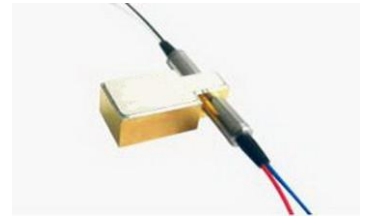
2×2 Optical Switch

Features

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



2×2 SM Optical Switch



2×2 MM Optical Switch

Applications

- R&D in Laboratory
- System Monitoring
- OADM
- MAN (Metropolitan Area Network)

FSW-2×2 Optical Switch, which is famous for its high performance, low insertion loss and compact dimension: (L)28.5×(W)12.6×(H)8.7mm (SM); (L)27.0×(W)12.6×(H)8.2mm (MM). It is an ideal component for OADM, OXC, system monitoring and protection. With compact package, it can be easy to integrate into a high density optical communication system.

2×2 SM Specifications

Parameters	Unit	FSW-2×2-S
Wavelength Range	nm	1260 ~ 1650
Test Wavelength	nm	1310 / 1550
Insertion Loss 1, 2	dB	Typ: 0.8 Max: 1.0
Return Loss 1, 2	dB	≥ 50
Crosstalk 1	dB	≥ 55
PDL	dB	≤0.05
WDL	dB	≤0.25
Repeatability	dB	≤±0.02
Operating Voltage	V	3.0 or 5.0
Durability	Cycles	≥ 10 Million
Switching Time	ms	≤8
Optical Power	mW	≤500
Operating Temperature	°C	-5 ~ +70
Storage Temperature	°C	-40 ~ +85
Relative Humidity	%	5 ~ 95
Weight	g	16
Dimension	mm	(L)28.5×(W)12.6×(H)8.7 ±0.2
Note: 1 Within operating temperature and SOP.		
2 Excluding Connectors.		

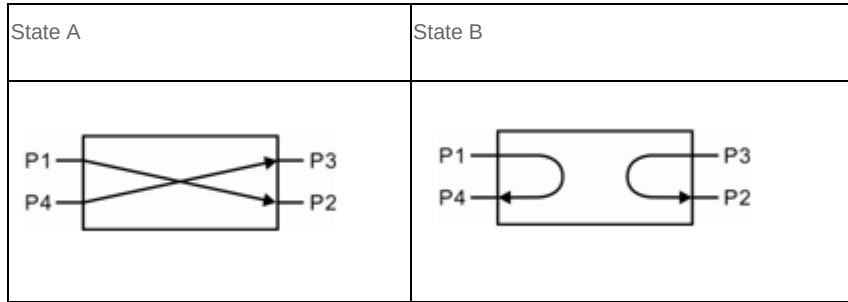
2×2 MM Specifications

Parameters	Unit	FSW-2×2-M	
Wavelength Range	nm	850±40 / 1300±40	1470 ~ 1650
Test Wavelength	nm	850 / 1300	1550
Insertion Loss 1, 2	dB	Typ: 0.8 Max: 1.2	Typ: 0.8 Max: 1.0
Return Loss 1, 2	dB	≥ 30	
Crosstalk 1	dB	≥ 35	
PDL	dB	≤0.05	
WDL	dB	≤0.25	
Repeatability	dB	≤±0.02	
Operating Voltage	V	3.0 or 5.0	
Durability	Cycles	≥ 10 Million	
Switching Time	ms	≤8	
Optical Power	mW	≤500	
Operating Temperature	℃	-5 ~ +70	
Storage Temperature	℃	-40 ~ +85	
Relative Humidity	%	5 ~ 95	
Weight	g	14	
Dimension	mm	(L)27.0×(W)12.6×(H)8.2 ±0.2	
Note:1.Within operating temperature and SOP.			
2.Excluding Connectors.			

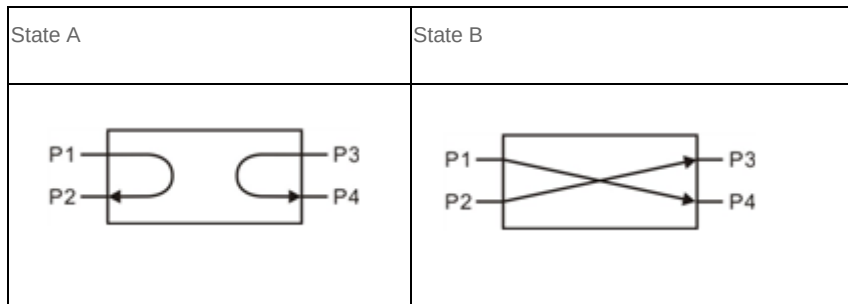
Pin Configurations

Type	State	Optical Route	Electric Drive				Status Sensor			
2×2			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	A	P1-P2 , P3-P4	--	--	GND	V+	Close	Open	Open	Close
	B	P1-P4 , P3-P2	V+	GND	--	--	Open	Close	Close	Open
Non-latching	A	P1-P2 , P3-P4	--	--	--	--	Close	Open	Open	Close
	B	P1-P4 , P3-P2	V+	--	--	GND	Open	Close	Close	Open

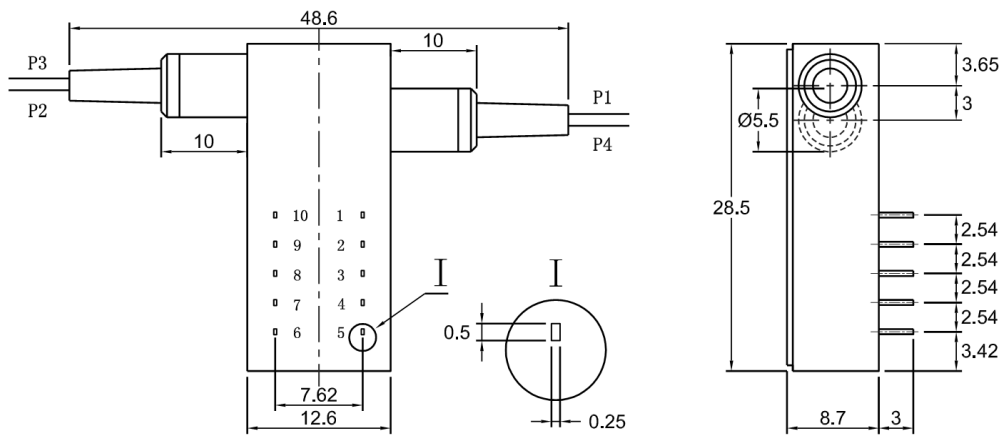
2x2 SM Optical Route



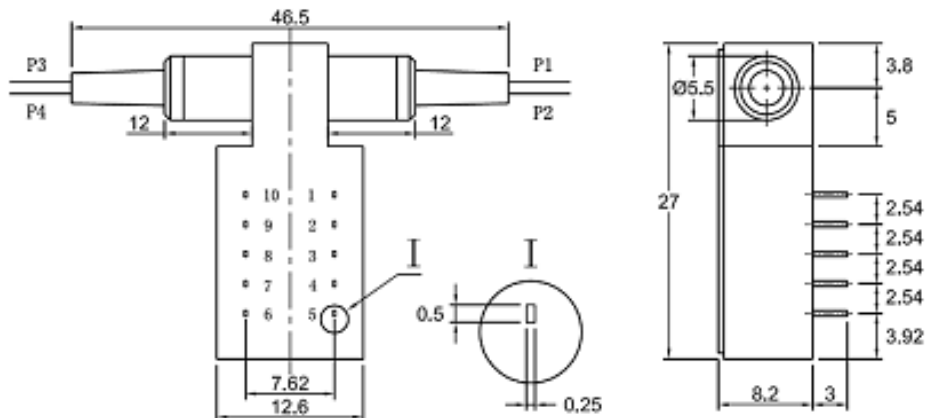
2x2 MM Optical Route



2x2 SM Dimension



2x2 MM Dimension



Electrical Specification

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

Ordering Information: FSW-2×2-A-B-C-D-E-F-G

A	B	C	D	E	F	G
Fiber Type	Operating Voltage	Switch Type	Test Wavelength	Tube Type	Fiber Length (Include connector)	Connector
SM: SM, 9/125 M5:MM, 50/125 M6:MM, 62.5/125 X: Others	3: 3V 5: 5V	L:Latching N:Non-latching	850:850nm 1310: 1310nm 1550: 1550nm 1310/1550:1310/1550nm X:Others	25:250um 90:900um X: Others	05: 0.5m±5cm 10: 1.0m±5cm 15: 1.5m±5cm X: Others	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC STP: ST/PC STA: ST/APC LP: LC/PC LA: LC/APC X: Others