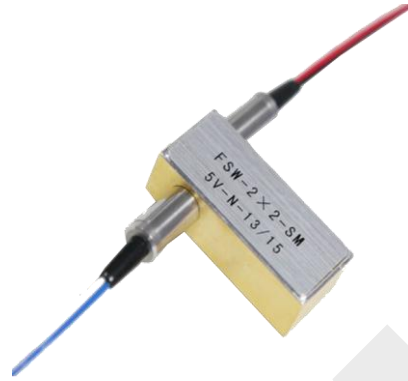


2x2 Optical Switch

Features:

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



Applications:

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

General:

OSM-2x2 Optical Switch, which is famous for its high performance, low insertion loss and compact dimension: (L)28.5x(W)12.6x(H)8.7mm (**SM**); (L)27.0x(W)12.6x(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.

Specifications: (2x2 SM)

Parameters	Unit	OSM-2x2-S
Wavelength Range	nm	1260 ~ 1650
Test Wavelength	nm	1310 / 1550
Insertion Loss ^{Note 1, 2}	dB	Typ.: 0.8 Max.: 1.0
Return Loss ^{Note 1, 2}	dB	≥ 50
Crosstalk ^{Note 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.		

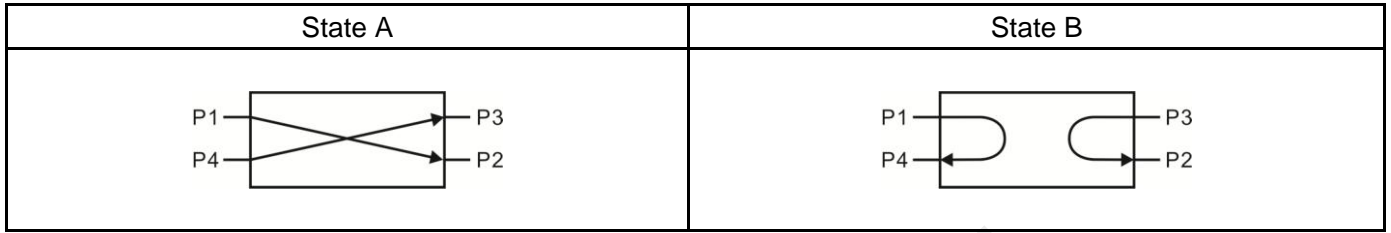
Specifications: (2x2 MM)

Parameters	Unit	OSM-2x2-M	
Wavelength Range	nm	850±40 / 1300±40	1470 ~ 1650
Test Wavelength	nm	850 / 1300	1550
Insertion Loss ^{Note 1, 2}	dB	Typ.: 0.8 Max.: 1.2	Typ.: 0.8 Max.: 1.0
Return Loss ^{Note 1, 2}	dB	≥ 30	
Crosstalk ^{Note 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	°C	-5 ~ +70	
Storage Temperature	°C	-40 ~ +85	
Relative Humidity	%	5 ~ 95	
Weight	g	14	
Dimension	mm	(L)27.0x(W)12.6x(H)8.2 ±0.2	
Note: 1, Within operating temperature and SOP. 2, Excluding connectors.			

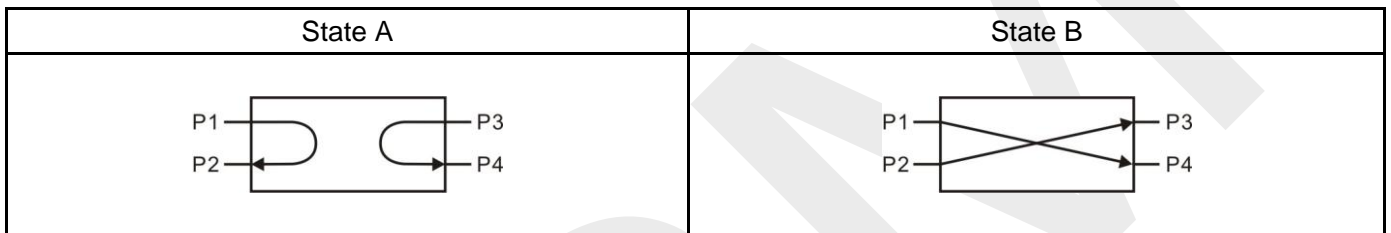
Pin Configurations:

Type	State	Optical Route	Electric Drive				Status Sensor			
			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
2x2			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

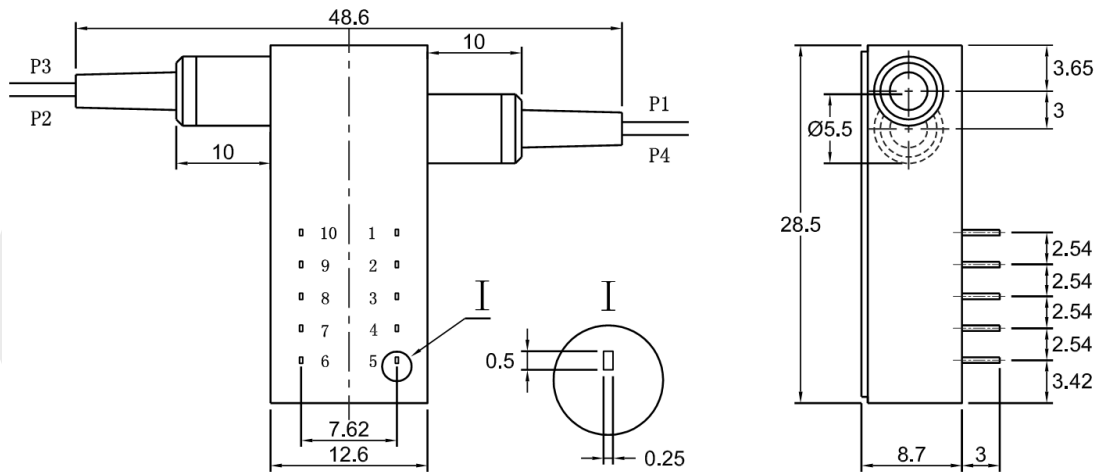
Optical Route: (2×2 SM)



Optical Route: (2×2 MM)

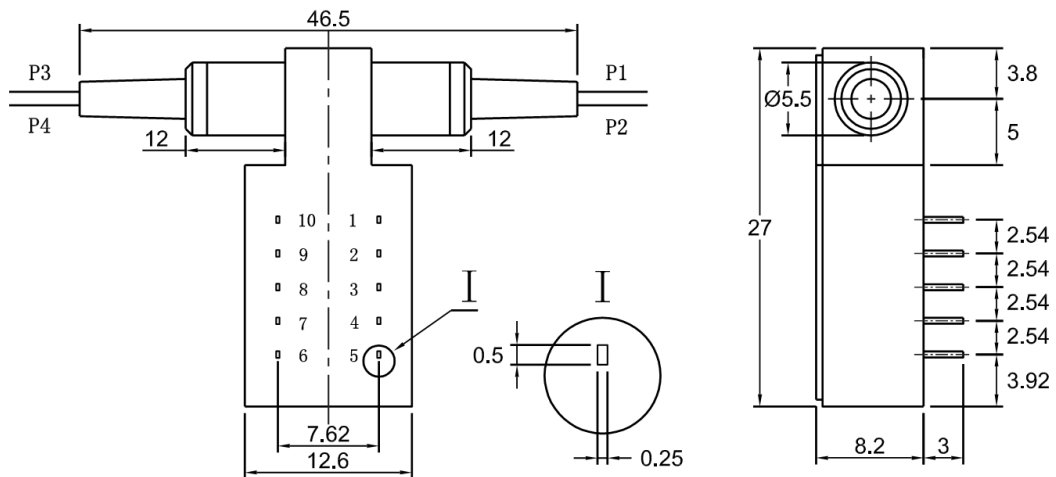


Dimension: (2×2 SM)



P1: White P2: Black P3: Red P4: Blue

Dimension: (2x2 MM)



P1: White P2: Black P3: Red P4: Blue

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

Nomenclature:

OSM-2x2-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