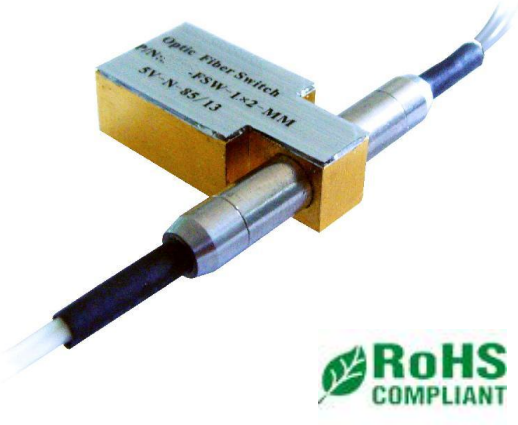
Dual 2×2 Optical Switch



Features

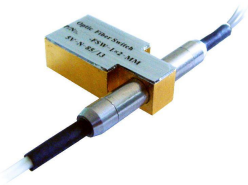
·Wide Wavelength Range
·Low Insertion Loss
·Low Back Reflection
·High Reliability、High dependability
·Epoxy Free、Patented Technology
·Latching and Non-latching Type

Applications

·Configurable OADM
·Metropolitan Area Networks
·System Monitoring
·Component Testing
·R&D in Laboratory

Acfiber-FSW-D2×2 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.

D2×2 SM Optical Switch



D2×2 MM Optical Switch

D2×2 SM Specifications

Parameters	Unit	Acfiber-FSW-D2×2-S
Wavelength Range	nm	1260 ~ 1650
Test Wavelength	nm	1310 / 1550
Insertion Loss [1, 2]	dB	Typ: 1.0 Max: 1.5
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	℃	-5 ~ +70
Storage Temperature	℃	-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.**		

D2×2 MM Specifications

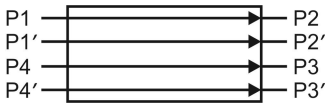
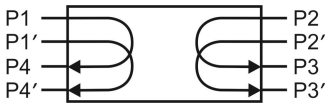
Parameters	Unit	Acfiber-FSW-D2×2-M	
Wavelength Range	nm	850±40 / 1300±40	1470 ~ 1650
Test Wavelength	nm	850 / 1300	1550
Insertion Loss [1, 2]	dB	Typ: 1.0 Max: 1.5	
Return Loss [1, 2]	dB	≥ 30	
Crosstalk [1]	dB	≥ 35	
PDL	dB	≤0.05	
WDL	dB	≤0.25	
Repeatability	dB	≤±0.02	
Operating Voltage	V	3.0 or 5.0	
Durability	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

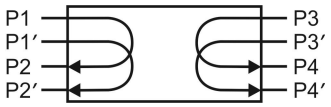
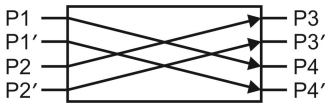
Type	State	Optical Route	Electric Drive				Status Sensor			
D2×2			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9

Latching	A	P1-P2，P3-P4 P1'-P2'，P3'-P4'	--	--	GND	V+	Close	Open	Open	Close
	B	P1-P4，P3-P2 P1'-P4'，P3'-P2'	V+	GND	--	--	Open	Close	Close	Open
Non-latching	A	P1-P2，P3-P4 P1'-P2'，P3'-P4'	--	--	--	--	Close	Open	Open	Close
	B	P1-P4，P3-P2 P1'-P4'，P3'-P2'	V+	--	--	GND	Open	Close	Close	Open

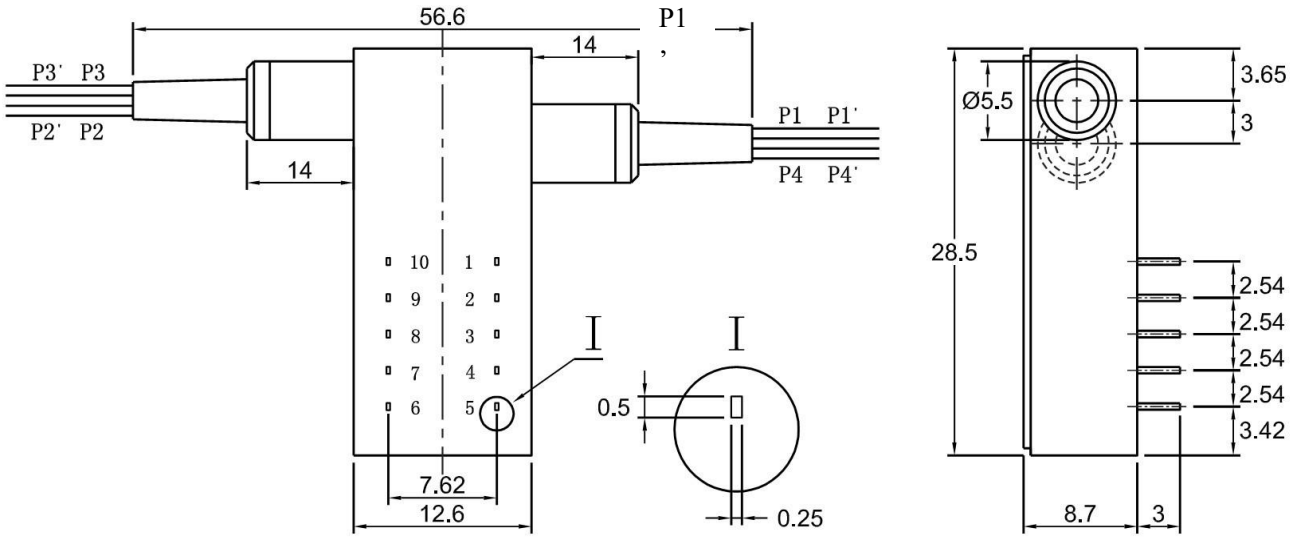
D2×2 SM Optical Route

State A	State B
	

D2×2 MM Optical Route

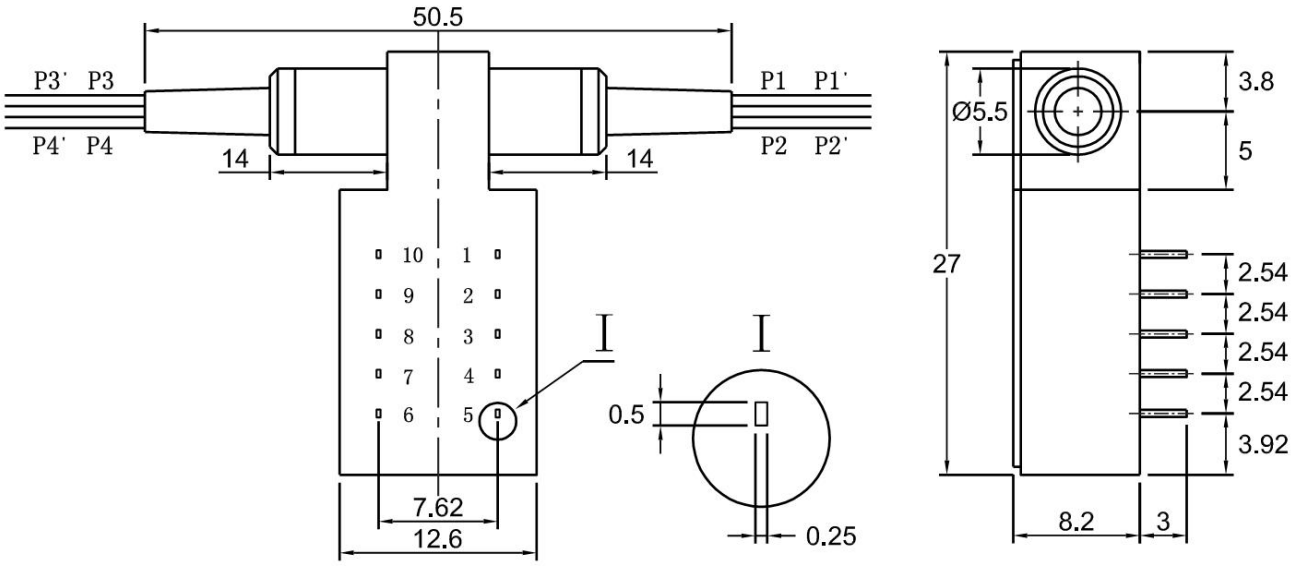
State A	State B
	

D2×2 SM Dimension



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

D2×2 MM Dimension



P1、P1'：White P2、P2'： Black P3、P3'：Red P4、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

Ordering Information: Acfiber–FSW–D2×2–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	**1**-850nm **2**-1310nm **3**-1490nm **4**-1550nm **5**-1625nm **6**-1650nm **7**-1310/1550nm **8**-850/1310nm (Specify Custom)	25:250um 90:900um X: Others	05: 0.5m±5cm 10: 1.0m±5cm 15: 1.5m±5cm (Specify Custom)	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