

2×4 Optical Switch

Features

- Wide Wavelength Range
- Low Crosstalk
- High Stability, High Reliability
- Epoxy-free on Optical Path



Applications

- R&D in Laboratory
- System Monitoring
- OADM
- OXC

FSW-2×4 Optical Switch 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

Parameters	Unit	FSW-1×8	
Wavelength Range	nm	850±40 / 1300±40	1260 ~ 1650
Test Wavelength	nm	850 / 1300	1310 / 1550
Insertion Loss	dB	Typ: 2.8 Max: 3.2	
Return Loss	dB	MM ≥ 30 SM ≥ 50	
Crosstalk	dB	MM ≥ 35 SM ≥ 55	
PDL	dB	≤ 0.15	
WDL	dB	≤ 0.35	
Repeatability	dB	≤ ±0.05	
Power Supply	V	5.0 ± 5%	
Durability	Cycles	≥ 10 Million	
Switching Time	ms	≤8	
Optical Power	mW	≤500	
Operating Temperature	℃	-5 ~ +70	
Storage Temperature	℃	-40 ~ +85	
Relative Humidity	%	5 ~ 95	
Dimension	mm	(L)95×(W)76×(H)14 ±0.2	

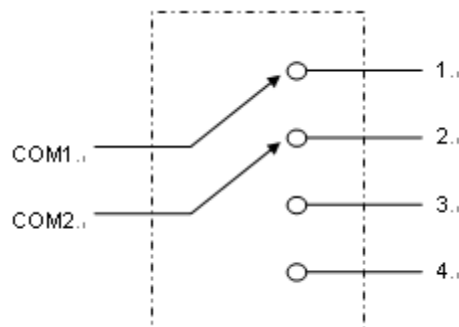
Pin Configurations

Pin No.	Signal Name	I / O	Description
1	1D0	Input	TTL, COM 1 Channel selection bit 0
2	1D1	Input	TTL, COM 1 Channel selection bit 1
3	2D0	Input	TTL, COM 2 Channel selection bit 0
4	2D1	Input	TTL, COM 2 Channel selection bit 1
5	/EN	Input	Channel Selection Enabled.
6	RST	Input	Reset
7	VCC	Input	5.0±5% VDC Power Supply (max 200mA).
8	GND	Input	Ground
9	NA		
10	NA		
11	NA		
12	NA		
13	1S0	Output	TTL, COM 1 Switch status output bit 0
14	1S1	Output	TTL, COM 1 Switch status output bit 1
15	2S0	Output	TTL, COM 2 Switch status output bit 0
16	2S1	Output	TTL, COM 2 Switch status output bit 1
17	NA		
18	NA		
19	NA		
20	NA		

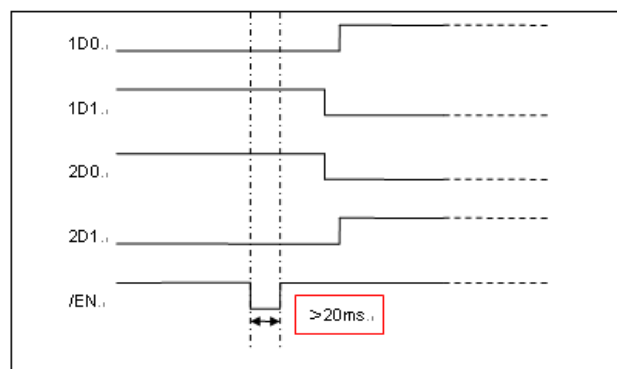
Switch Status

Input					Active Channel		Output			
/EN	1D1	1D0	2D1	2D0			1S1	1S0	2S1	2S0
0	0	0	0	1	COM 1→1	COM 2→2	0	0	0	1
	0	0	1	0		COM 2→3	0	0	1	0
	0	0	1	1		COM 2→4	0	0	1	1
	0	1	0	0	COM 1→2	COM 2→1	0	1	0	0
	0	1	1	0		COM 2→3	0	1	1	0
	0	1	1	1		COM 2→4	0	1	1	1
	1	0	0	0	COM 1→3	COM 2→1	1	0	0	0
	1	0	0	1		COM 2→2	1	0	0	1
	1	0	1	1		COM 2→4	1	0	1	1
	1	1	0	0	COM 1→4	COM 2→1	1	1	0	0
	1	1	0	1		COM 2→2	1	1	0	1
	1	1	1	0		COM 2→3	1	1	1	0
1	x	x	x	x	Hold		Hold			

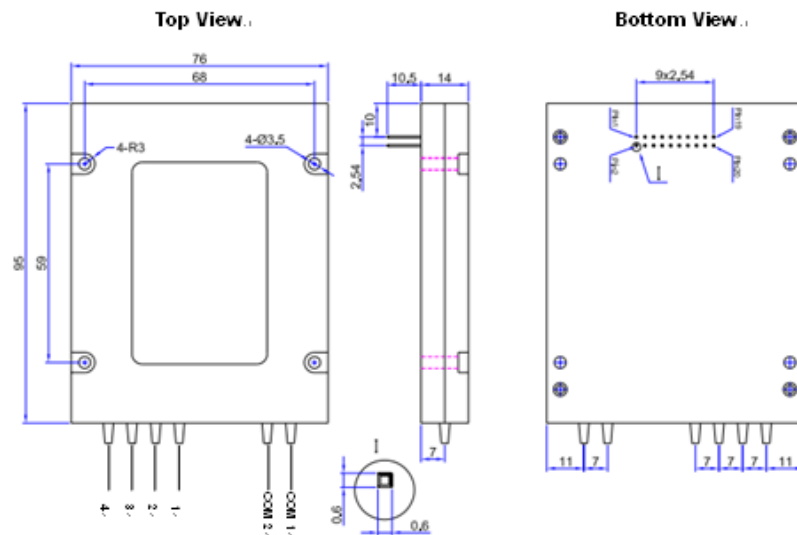
Optical Route



Timing Diagram



Dimension



Ordering Information: FSW-2×4-A-B-C-D-E-F

A	B	C	D	E	F
Fiber Type	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	L: Latching X: Others	850: 850nm 1310: 1310nm 1550: 1550nm 1310/1550:1310/1550nm X:Others	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