

1x8 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-1x8 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-1x8	
Wavelength Range	nm	850±40 / 1300±40	1260 ~ 1650
Test Wavelength	nm	850 / 1300	1310 / 1550
Insertion Loss	dB	Typ: 1.3 Max: 1.5	
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	℃	-20 ~ +70	
Storage Temperature	℃	-40 ~ +85	
Relative Humidity	%	5 ~ 95	
Dimension	mm	(L)90×(W)58×(H)14 ±0.2	

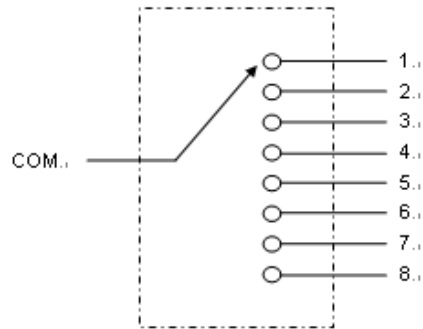
Pin Configurations

Pin No.	Signal Name	I / O	Description
1	D0	Input	Channel selection bit 0
2	D1	Input	Channel selection bit 1
3	D2	Input	Channel selection bit 2
4	NA		
5	/EN	Input	Channel Selection Enabled.
6	NA		
7	VCC	Input	5.0±5% VDC Power Supply (max 350mA).
8	GND	Input	Ground
9	NA		
10	NA		
11	NA		
12	NA		
13	S0	Output	Switch status output bit 0
14	S1	Output	Switch status output bit 1
15	S2	Output	Switch status output bit 2
16	NA		
17	NA		
18	NA		
19	NA		
20	NA		

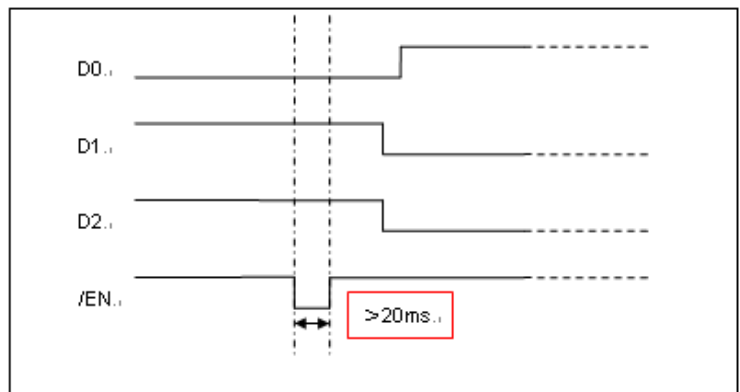
Switch Status

Input				Active Channel	Output		
/EN	D2	D1	D0		S2	S1	S0
0	0	0	0	COM → 1	0	0	0
	0	0	1	COM → 2	0	0	1
	0	1	0	COM → 3	0	1	0
	0	1	1	COM → 4	0	1	1
	1	0	0	COM → 5	1	0	0
	1	0	1	COM → 6	1	0	1
	1	1	0	COM → 7	1	1	0
	1	1	1	COM → 8	1	1	1
1	x	x	x	Hold	Hold	Hold	Hold

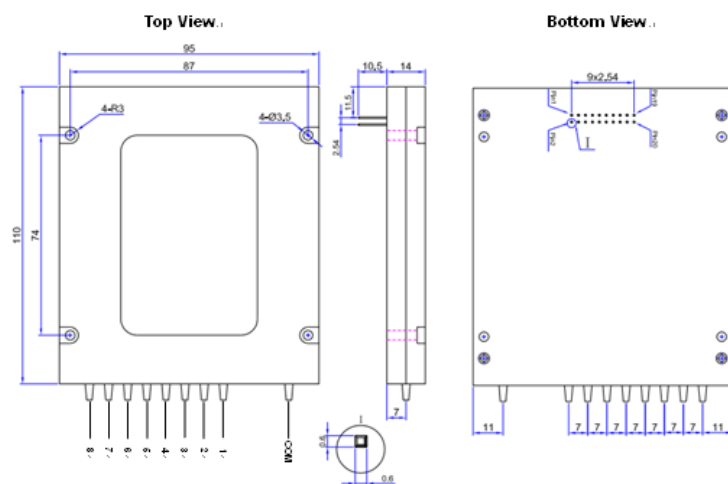
Optical Route



Timing Diagram



Dimension



Ordering Information: FSW-1×8-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	L: Latching	850: 850nm	90:900um	05: 0.5m±5cm	OO:None
M5:MM, 50/125	X: Others	1310: 1310nm	X: Others	10: 1.0m±5cm	FP: FC/PC
M6:MM, 62.5/125		1550: 1550nm		15: 1.5m±5cm	FA: FC/APC
X: Others		1310/1550:1310/1550nm		X: Others	SP: SC/PC
		X:Others			SA: SC/APC
					STP: ST/PC
					STA: ST/APC
					LP: LC/PC
					LA: LC/APC
					X: Others