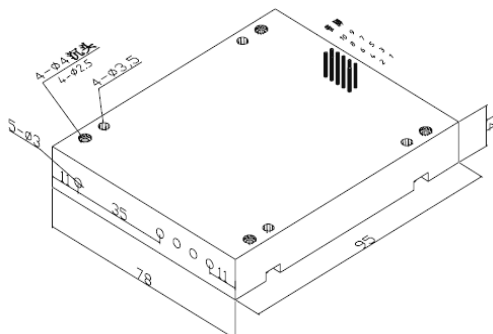


## 2×4 micro mechanical Optical switch



### Features:

- wide wavelength range
- low channel crosstalk
- high stability, redundant reliability
- sole possession of the patented technology
- the path of rays not to have the rubber
- simply controls

The path of rays cut, the system monitor, the laboratory research and development, the dynamic disposition minute inserts the multiplying,

### Applications:

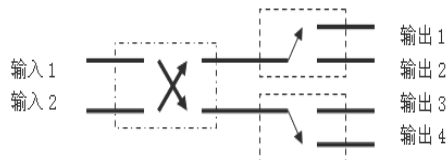
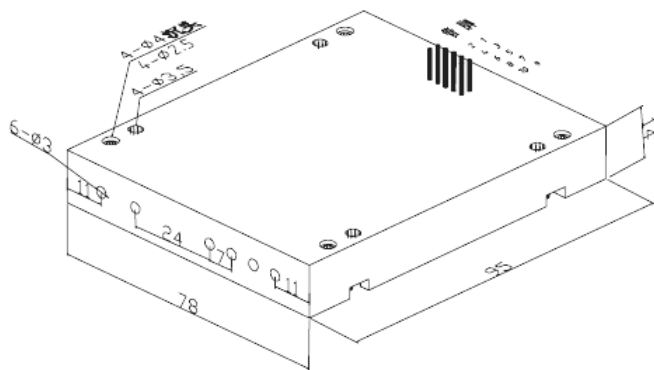
- The path of rays cut
- the system monitor
- the laboratory research and development
- the dynamic disposition OADM

FSW2×4 the micro mechanical light switch, because of its tenuous volume, the reliable performance, the simple control mode, causes it to become the dynamic disposition to divide inserts multiplexer OADM, overlapping coupling OXC, the system monitor and the error protection ideal component. The small seal causes this light switch easy to integrate the high density in the optical communication system.

### Specifications :

Type	FSW2×4A、2×4B、2×4C						
Wavelength	Range	1310 or 1550(SM)		1310 & 1550(SM)		850 or 1310(MM)	
Insertion Loss	(2x4A)	Typ:1.5	Max:1.8	Typ:1.8	Max:2.0	Typ:1.8	Max:2.0
Insertion Loss	(2x4B)	Typ:0.3	Max:0.5	Typ:0.5	Max:0.8	Typ:0.5	Max:0.8
Insertion Loss	(2x4C)	Typ:1.5	Max:1.8	Typ:1.8	Max:2.0	Typ:1.8	Max:2.0
PDL	dB	≤0.05					
Return Loss	dB	SM≥55、MM≥30					
Wavelength	Relative	≤0.25					
Cross-Talk	dB	≤-60					
Repeatability	dB	≤±0.02					
Power	v	5.0					
Operating	life	≥10 <sup>7</sup>					
SwitchingTime	ms	≤8					
TransmissionPower	w	≤500					
Operation	Temp °C	-5~+50					
Storage Temp	°C	-20~+85					

**2×4A(dynamic) switch contour dimensional drawing (unit: mm)**



2x4 光路 (动态)

**2×4A(dynamic) switch**

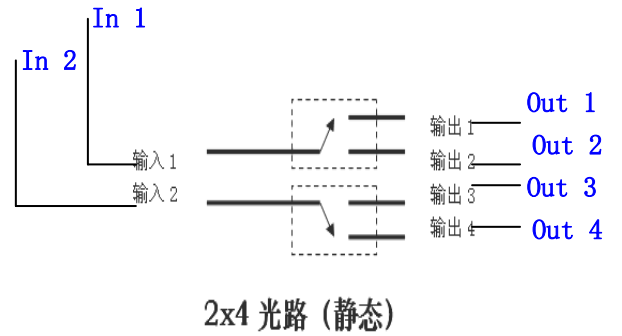
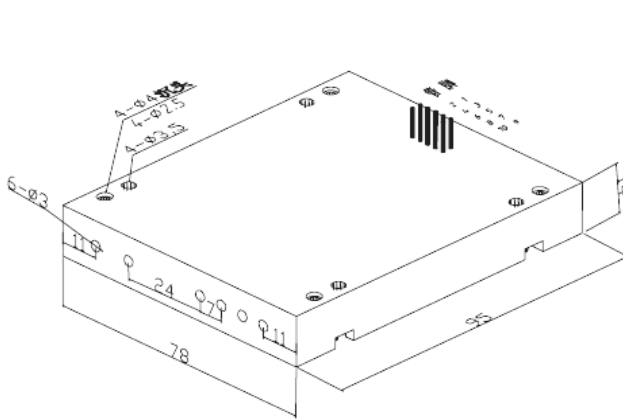
**2×4A (dynamic) Base pin definition**

Pin Number	Name	Input or Output	Function
1	D0	Input	Port Selection Pin 1 (TTL signals)
2	D1	Input	Port Selection Pin 2 (TTL signals)
3	D2	Input	Port Selection Pin 3 (TTL signals)
4	NC		No Connect
5	NC		No Connect
6	NC		No Connect
7	VCC	Input	+5.0V Power Supply (TTL Power)
8	GND	Input	Power Ground
9	VDD	Input	+5.0V Power Supply (FSW Power)
10	GND	Input	Power Ground

**2×4A (dynamic) switch hand-off control**

Input Signals			The Selected Path
D2	D1	D0	
0	0	0	Input 1 → Output 1 ; Input 2 → Output 3
0	0	1	Input 1 → Output 2 ; Input 2 → Output 3
0	1	0	Input 1 → Output 1 ; Input 2 → Output 4
0	1	1	Input 1 → Output 2 ; Input 2 → Output 4
1	0	0	Input 1 → Output 3 ; Input 2 → Output 1
1	0	1	Input 1 → Output 3 ; Input 2 → Output 2
1	1	0	Input 1 → Output 4 ; Input 2 → Output 4
1	1	1	Input 1 → Output 4 ; Input 2 → Output 2
Default :			Input 1 → Output 4 ; Input 2 → Output 2

**2×4B (static) switch contour dimensional drawing (unit: mm)**



**2×4B (static) switch**

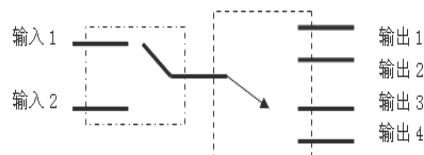
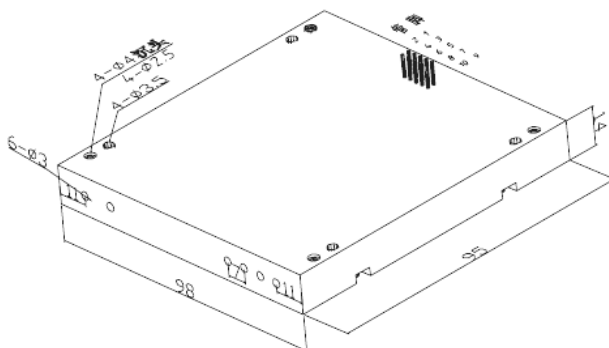
**2×4B (static) Base pin definition**

Pin Number	Name	Input or Output	Function
1	D0	Input	Port Selection Pin 1 (TTL signals)
2	D1	Input	Port Selection Pin 2 (TTL signals)
3	NC		No Connect
4	NC		No Connect
5	NC		No Connect
6	NC		No Connect
7	VCC	Input	+5.0V Power Supply (TTL Power)
8	GND	Input	Power Ground
9	VDD	Input	+5.0V Power Supply (FSW Power)
10	GND	Input	Power Ground

**2×4B (static) switch hand-off control**

Input Signals		The Selected Path
D1	D0	
X	0	Input 1 → Output 1
X	1	Input 1 → Output 2
0	X	Input 2 → Output 3
1	X	Input 2 → Output 4
Default : Input 1 → Output 2 ; Input 2 → Output 4		

**2X4C (monostability) switch contour dimensional drawing (unit: mm)**



2x4 光路(单稳态)

**2×4A(dynamic) switch**

**2X4C (monostability) Base pin definition**

Pin Number	Name	Input or Output	Function
1	D0	Input	Port Selection Pin 1 (TTL signals)
2	D1	Input	Port Selection Pin 2 (TTL signals)
3	D2	Input	Port Selection Pin 3 (TTL signals)
4	NC		No Connect
5	NC		No Connect
6	NC		No Connect
7	VCC	Input	+5.0V Power Supply (TTL Power)
8	GND	Input	Power Ground
9	VDD	Input	+5.0V Power Supply (FSW Power)
10	GND	Input	Power Ground

**2X4C (monostability) switch hand-off control**

Input Signals			The Selected Path
D2	D1	D0	
0	0	0	Input 2 → Output 1
0	0	1	Input 2 → Output 2
0	1	0	Input 2 → Output 3
0	1	1	Input 2 → Output 4
1	0	0	Input 1 → Output 1
1	0	1	Input 1 → Output 2
1	1	0	Input 1 → Output 3
1	1	1	Input 1 → Output 4
Default :			Input 1 → Output 4