



## MEMS Mini 2x2 Fiber Optical Switch

The MEMS Mini 2x2 Fiber Optical Switch uses a micro-mirror, moving-in and-out optical paths, uniquely featuring high extinction, high stability over a wide temperature range, and small size. The MEMS is insensitive to moisture and ESD and has no short and long-term drifts.

Two pin layouts and low driving voltage are available for optical paths switch.

### Features

- High Reliability
- Direct voltage driving
- Low Insertion Loss
- Ultra Small size
- ESD Insensitive

### Applications

- Phase-Array Antennas
- Instrumentation

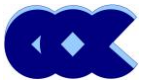
### Specifications

Parameters	Unit	MEMSTD
wavelength	nm	850,1310,1520~1580,1280~1340
Insertion Loss*	dB	Typ: 0.6 Max:1.2
Return Loss	dB	>50
Crosstalk	dB	>50
Switch Time	ms	<20
Switch Type		
Polarization Dependent Loss	dB	0.10
Repeatability	dB	±0.02
Operation Temperature	℃	-5~+70
Storage Temperature	℃	-40~+85
Weight	g	10
Dimension	mm	(L)12.0×(W)6.8×(H)5.6 (±0.2)

\*: Excluding connectors.

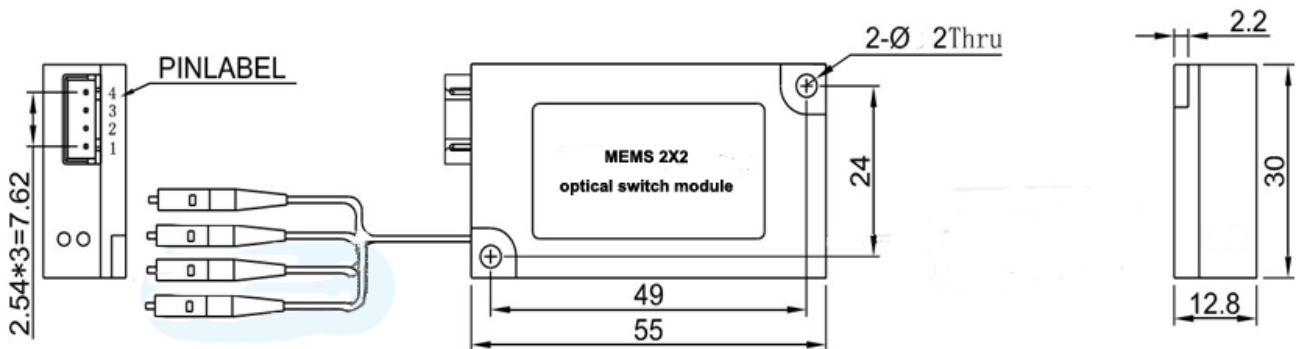
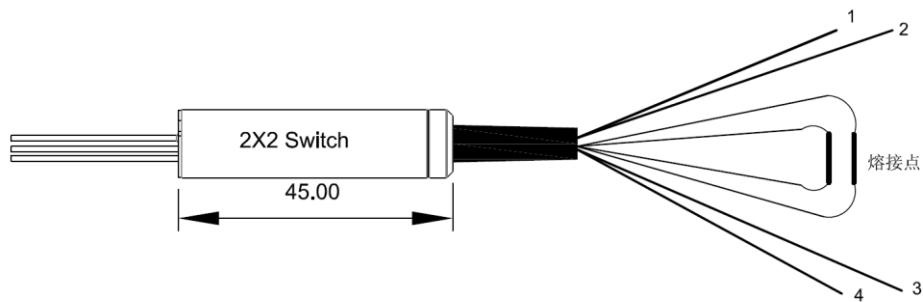
### Electrical parameters

Parameters	Min.	Typical	Max.	Unit
Switch Voltage	0		60	V
Switch Current	19	20	21	mA



1X2	Optical Path	Electric Drive			
		Pin 4	Pin 3	Pin2	Pin1
TTL	P1-P2	+5V	GND	High	-
	P1-P3	+5V	GND	Low	-

**Dimension (mm)**



**Ordering Information: MSW-A-B-C-D-E-F**

A	B	C	D	E	F	G
Mode	Wavelength	Fiber Type	Fiber Diameter	Fiber Length	Connector	
11:1X1	85:850nm	SM:SMF-28	25:250um	05:0.5m	OO:None	T:TO46
12:1X2	13: 1310nm	M5:50/125um	90:900um	10:1.0m	FP: FC/PC	M:Module
22: 2x2	15: 1550nm	M6:62.5/125um	20:2000um	15:1.5m	FA: FC/APC	
22B:2X2B		PM13:PM1310			SP: SC/PC	
D11:D 1X1		PM15:PM1550			SA: SC/APC	
D12:D 1X2					LP: LC/PC	
D22:D2X2B					LA: LC/APC	