



## MEMS1 × 8 Optical Switch

professional supplier of fiber optical component

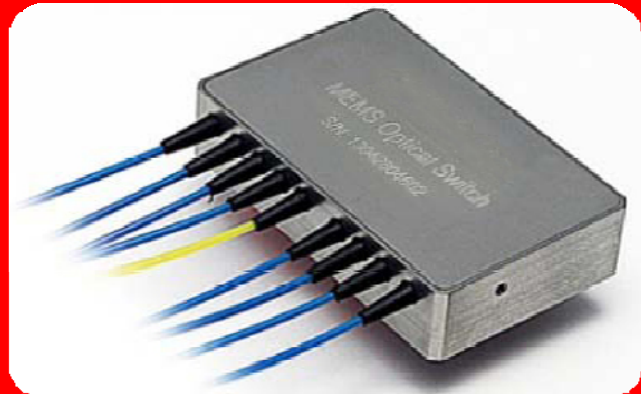
The MEMS Latch Series 1x8 Fiber optic switch connects optical channels by redirecting incoming optical signals into selected output fibers. This is achieved using a patent pending MEMS configuration and activated via an electrical control signal. It uniquely features rugged thermal activated micro-mirror movements instead of rotation, and latches to preserve the selected optical path after the drive signal has been removed. This novel design significantly reduces packaging requirement, and simplifies driving electronics, offering unprecedented high stability as well as an unmatched low cost.

### Features

- High Reliability
- Latching
- Intrinsic tolerance to ESD

### Applications

- Channel Blocking
- Configurable Add/Drop
- System Monitoring
- Instrumentation



### ◇ Performance

Parameters		MSW-1×8
Wavelength Range	nm	1260 ~ 1620
Testing Wavelength	nm	1310/1490/1550/1625/1650
Insertion Loss	dB	Typ:0.7 ,Max:1.2
Return Loss	dB	≥50
Crosstalk	dB	≥50
PDL	dB	≤0.10
WDL	dB	≤0.25
TDL	dB	≤0.20
Repeatability	dB	≤±0.05
Repeatability Rate	Hz	20
Lifetime	Cycle	≥10 <sup>9</sup>
Switch Time	ms	≤5
Transmission Power	mW	≤500
Operation Temperature	°C	-5 ~ +70
Storage Temperature	°C	-40 ~ +85
Switching type		Latching
Dimension	mm	(L)42×(W)26×(H)9.4(±0.2)

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## Electrical Driving Requirements

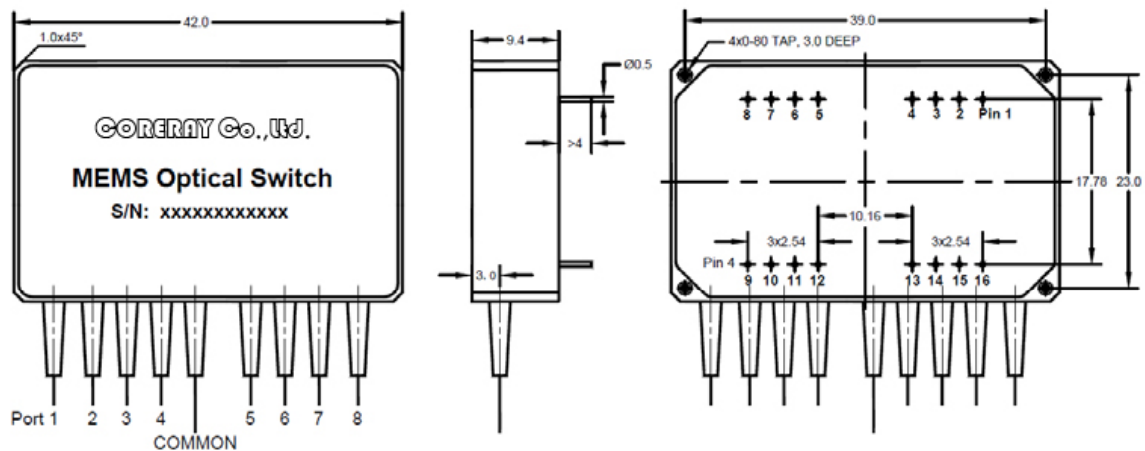
Optical Path	Pin 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
COMM↔Port 1	DP*	NC	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	GND	
COMM↔Port 2	NC	DP	DP	NC	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP		
COMM↔Port 3	NC	DP	NC	DP	DP	NC	NC	DP	NC	DP	NC	DP	NC	DP		
COMM↔Port 4	NC	DP	NC	DP	NC	DP	DP	NC	NC	DP	NC	DP	NC	DP		
COMM↔Port 5	NC	DP	NC	DP	NC	DP	NC	DP	DP	NC	NC	DP	NC	DP		
COMM↔Port 6	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	DP	NC	NC	DP		
COMM↔Port 7	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	DP	NC		
COMM↔Port 8	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP	NC	DP		

\* DP: Driving Pulse Voltage.

Driving Pulse	Min	Typical	Max	Unit
Pulse voltage	9	9.3	9.5 [4]	V
Pulse width	12	12.5	13 [4]	ms
Peak current		290		mA

[4]. Attention! Outside this range could damage the device.

## Dimensions



## Ordering Information : MSW - 1x8 - A - B - C - D - E

A	B	C	D	E
Mode	Wavelength	Fiber Diameter	Fiber Length	Connector
SM:9/125um M5: 50/125um M6: 62.5/125um	85: 850nm 13: 1310nm 14: 1490nm 15: 1550nm 162: 1625nm 165: 1650nm	25:250um 90:900um	05:0.5m 10:1.0m 15:1.5m	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC