

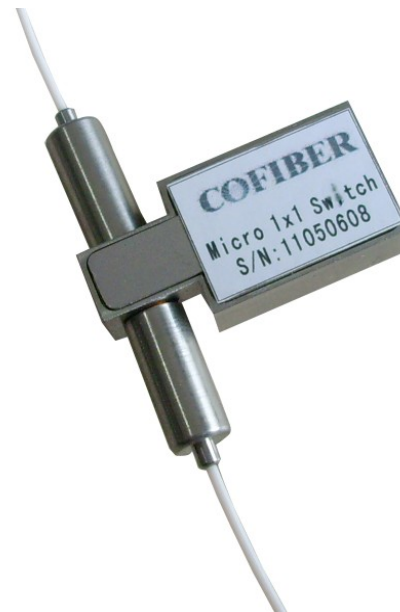
# 1x1 Relay Micro-Mechanical Optic Switch

## Applications:

- Metropolitan area network
- Laboratory research
- System monitoring
- Dynamic configuration points inserted multiplexing

## Features:

- Low insertion loss
- Wide wavelength range
- Low cross talk
- High stability, reliability
- Exclusive patent technology
- Optical path without glue
- Latching or non-latching



1×1 micro switch which is famous for its great performance, low insertion loss. Its insertion loss is very low (typical $\leq 0.5$ dB , maximum $\leq 0.8$ dB) , small volume: (L)14.2×(W)9.28×(H)6.0 is an ideal Component for OADM, OXC, system monitoring and protection. With compact package, it could be easy to integrate into a high density optical communication system.

## Technical parameters

Parameters	1×1			
Wavelength range nm	532~980 (SM/MM)	670~980 (SM/MM)	1260~1620 (MM)	1260~1620 (SM)
Testing wavelength nm	532/785/850/ 980	670/785/850/980	1310/1490/1550/1625	1310/1490/ 1550/1625
Insertion loss dB	Typ:0.8 Max:1.2	Typ:0.6 Max:0.8	Typ:0.5 Max:0.8	Typ:0.5 Max:0.8
Return loss dB	SM $\geq 50$ 、MM $\geq 30$			
Cross talk dB	SM $\geq 55$ 、MM $\geq 35$			
Polarization dependant loss dB	$\leq 0.05$			
Wavelength dependant loss dB	$\leq 0.25$			
Temperature dependant loss dB	$\leq 0.25$			
Repeatability dB	$\leq \pm 0.02$			
Working voltage V	3.0 or 5.0			
Lifetime times	$\geq 10^7$			

Switching time ms	Bar→Cross≤3      Cross→Bar≤5
Transmission power mW	≤500
Operating temperature °C	-20~+70
Storage temperature °C	-40~+85
Weight g	10
Dimension mm	(L)14.2×(W)9.28×(H)6.0

### Pin definition

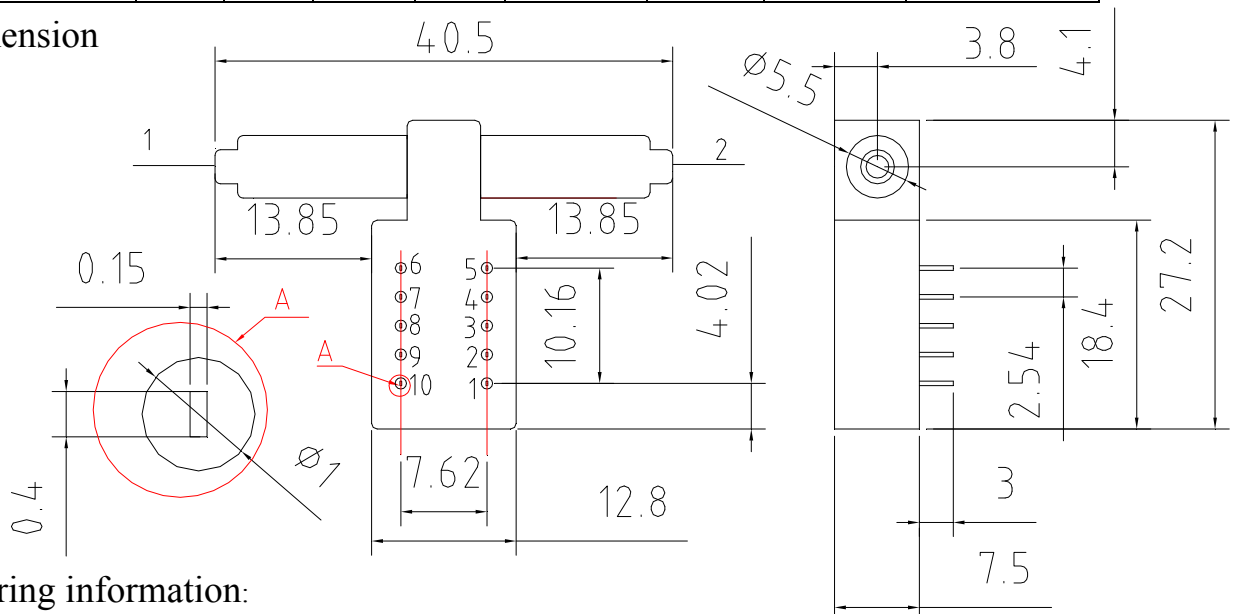
#### Non-latching

Optical path	Condition					
	PIN1	PIN10	PIN3-2	PIN3-4	PIN8-9	PIN8-7
-	GND	+5v	OPEN	CLOSE	OPEN	CLOSE
1---2	N/A	N/A	CLOSE	OPEN	CLOSE	OPEN

#### Latching

Optical path	Circuit driver				Condition			
	PIN1	PIN5	PIN10	PIN6	PIN3-2	PIN3-4	PIN8-9	PIN8-7
-	N/A	N/A	+5v	GND	OPEN	CLOSE	OPEN	CLOSE
1---2	+5v	GND	N/A	N/A	CLOSE	OPEN	CLOSE	OPEN

#### Dimension



#### Ordering information:

Type	State	Operating wavelength	Port	Grade	Fiber type	Fiber length	Input output connector type
SMS	1=non-latching	15=1550±40nm	0101=1x1	1=P grade	1=bare fiber	1=1 Meter	1=None
	2=latching	13=1310±40nm	0104=1x4	2=A grade	2=900um Jacket	2=2 Meter	2=FC/APC
		35=1310/1550nm	0108=1x8				3=FC/PC
			01016=1x16				4=SC/APC
			01032=1x32				5=SC/PC
			01064=1x64				6=ST
			0100=others				7=LC