

# MEMS 1xN(2≤N≤64) Switch with PCBA Package

OE photonics's 1xN MEMS Switch is based on MEMS technology, this device could be used on channel selection between input fibers and output fibers. This product is designed with compact size, high durability and reliability, and it is widely used in optical network fields such as OADM and OXC.

## Features

- Compact Size
- High Repeatability and Stability
- Meets GR-1209 and GR-1221 Standards



## Applications

- Fiber Monitoring
- Data Center
- Fiber Sensing

## Specification

Parameter	Unit	SM										MM				
		2	4	8	12	16	24	32	48	64	2	4	8	16	32	
Channels	CH	2	4	8	12	16	24	32	48	64	2	4	8	16	32	
Wavelength	nm	1310±30 or 1550±30 or 1625±30										850±30 or 1310±30				
Loss (Max)	dB	0.6	0.7	0.8	1.0	1.0	1.2	1.4	1.5	1.6	0.6	0.7	0.8	1.0	1.4	
Return Loss	dB	≥50										≥30				
Repeatability	dB	≤0.03							≤0.05			≤0.03				
Cross Talk	dB	≥50					≥45					≥30				
PDL	dB	≤0.15														
WDL	dB	≤0.3@CWL±30nm, 23°C														
TDL	dB	≤0.3														
Operation Temperature	°C	-5~70														
Storage Temperature	°C	-40~85														
Response Time	ms	≤5														
Durability	Cycle	≥1×10 <sup>9</sup>														
Drive Voltage	V	5~12V														
Power Handling	mw	≤500														
Control Type		TTL or TTL/RS232 or TTL/I2C														

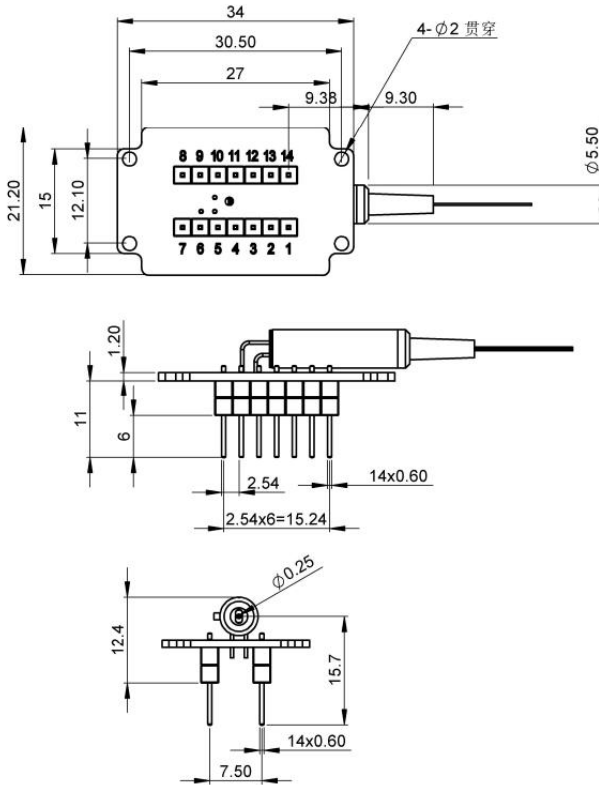
Notes:

1. The loss is based on the test results at 23°C at the central wavelength ±30nm. Multiband adds 0.2dB.
2. Repeatability is defined after 100 cycles.

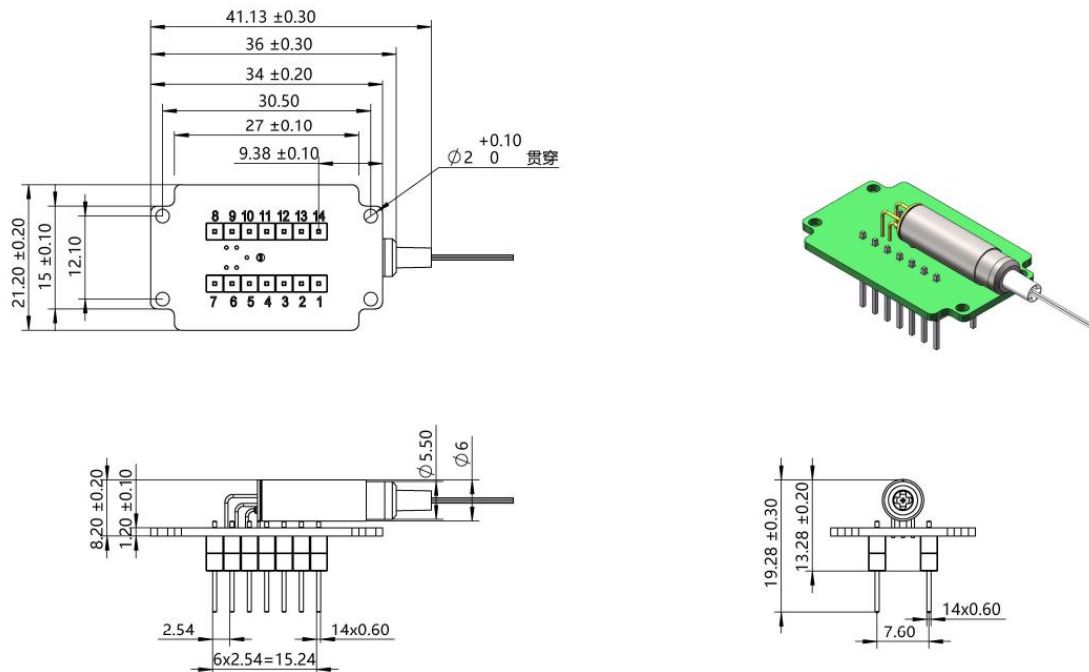
3. Excluding connector, the insertion loss of connector is increased by 0.2dB.

## Mechanical Dimension

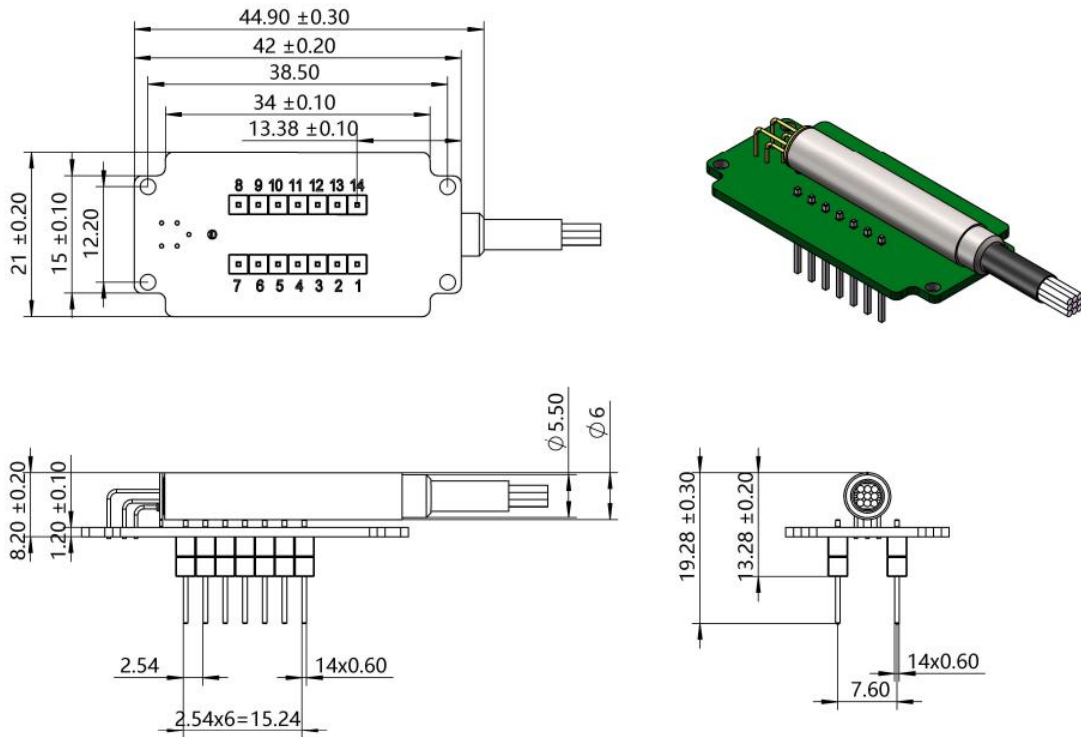
### 1x2 MEMS Switch (250um bare fiber/900um loose tube)



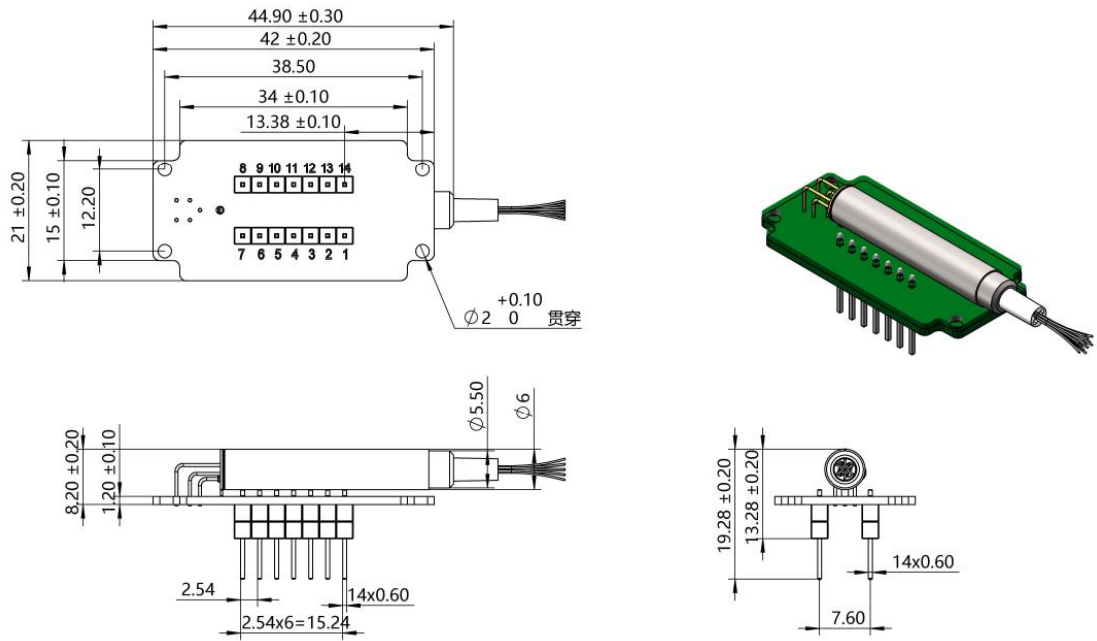
### 1x4/8 MEMS Switch (250um bare fiber)



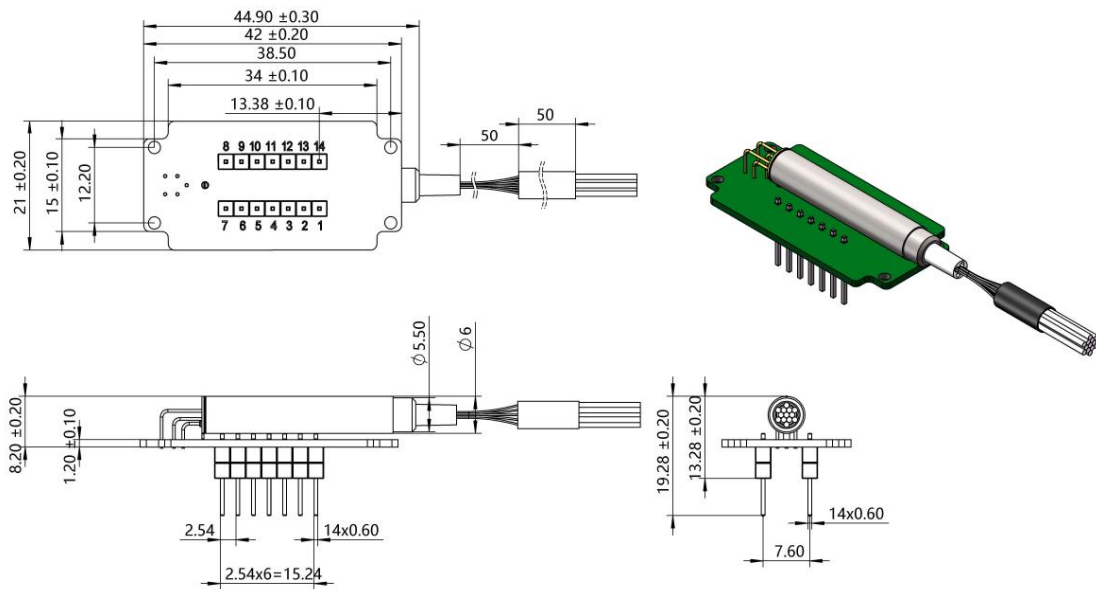
**1x4/8 MEMS Switch (900um loose tube)**



**1xN(8 < N ≤ 64) MEMS Switch (250um bare fiber)**



**1xN(8<N≤64) MEMS Switch (900um loose tube)**



**Order Information:**

OE-MS-1×N-A-B-C-D-E (MS: MEMS Optical Switch)

N	A	B	C	D	E	F
Output Number	Test Wavelength	Fiber Type	Tube Type	Fiber Length	Connector	Interface
2					OO:None	
4					FP:FC/UPC	
8	850:850nm	G657A1		05:0.5m±5cm	FA:FC/APC	TTL
12	1310:1310nm	G657A2	25:250um	10:1.0m±5cm	SP:SC/UPC	TTL/RS232
16	1550:1550nm	OM1 62.5/125	90:900um	15:1.5m±5cm	SA:SC/APC	TTL/ I2C
24	1315:1310&1550nm	OM2 50/125	Others	Others	LP:LC/UPC	UART
32	X: Others	Others			LA:LC/APC	
48					Others	
64						

Note:1. Above specifications just show the typical performance of Module.

2. Please contact our sales to discuss your specific requirements.