

# $1\times N$ MEMS Multimode Optical Switch (MEMS MMOS)

## **Description**

The MEMS Multimode OS 1×N optical switch is a type of optical switch based on MEMS (Micro-Electro-Mechanical Systems) technology, allowing channel selection between a single input optical signal and N output optical signals. It features a compact size, long lifespan, and stable reliability, making it widely used in optical network fields such as OADM (Optical Add-Drop Multiplexer), OXC (Optical Cross-Connect), and OPM (Optical Power Monitor).

# **Key Features**

- Mini Size
- Fast Switching Time
- Low Insertion Loss
- Enhanced Reliability and Exceptional Stability

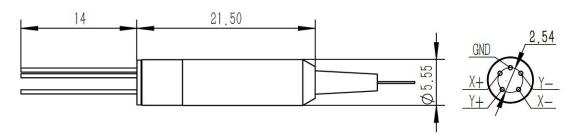
## **Applications**

- Metropolitan Area Network
- Data Center
- Fiber Optic Sensing and Monitoring
- Instruments

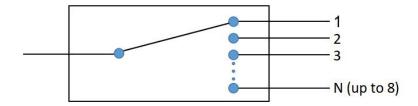
#### **Follow the Standards**

- Telcordia GR-1221
- Telcordia GR-1073

#### **Mechanical Dimension**



#### **Optical Path Diagram**





# **Specifications**

Type Parameter	Unit	1×N (N≤8) MEMS MMOS
Center Wavelength	nm	850/1310
Insertion Loss	dB	≤0.8
Wavelength Dependent Loss	dB	≤0.3
Temperature Dependent Loss	dB	≤0.4
Return Loss	dB	≥30
Cross Talk	dB	≥30
Repeatability	dB	≤0.05
Response Time	ms	≤8
Switching Mode	1	Non-Latching
Handling Power	mW	≤500
Drive Voltage	V	≤60
Fiber Type	1	MMF
Operating Temperature	$^{\circ}$	-5~+70
Storage Temperature	$^{\circ}$	-40~+85
Operating Humidity	%	5~95
Dimensions	mm	Ф5.55×21.5

- 1. Specifications are without connectors.IL is 0.2dB higher and RL is 5dB lower for each connector added.
- 2. IL is measured at CWL, 23°C.
- 3. IL is for single-band. Dual-band adds 0.1dB.
- 4. Power off isolation is same as crosstalk.
- 5. WDL is measured in a +/- 20nm range at 23°C.
- 6. Repeatability is defined after 100 cycles.

# **Ordering Information**

