



MEMS 1×N Optical Switch

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■ Features

- > Compact Size
- > Fast Switching Time
- > Low IL, Good Repeatability
- > High Reliability and stability

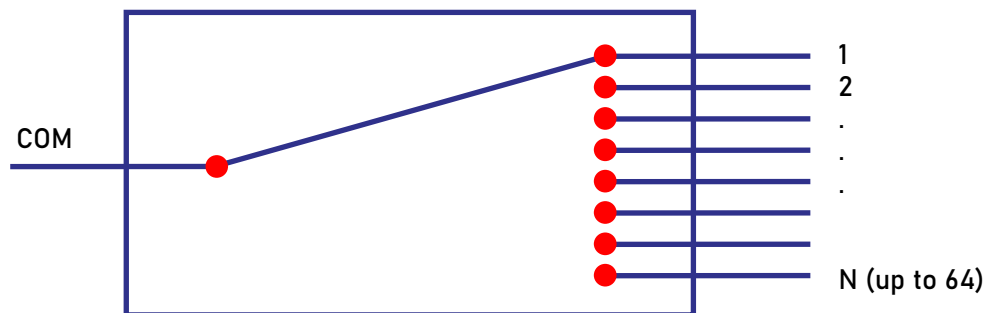
■ Application

- > MAN
- > Data Center
- > Fiber Sensing and Monitoring
- > Instrumentation

■ Compliance

- > Telcordia GR-1221
- > Telcordia GR-1073

■ Optical Route



MEMS 1×N Optical Switch

■ Specifications (Single Mode)

Parameters		Unit	MFSW 1×N (N≤64)							
Working Wavelength		nm	O band: 1290~1330 C band: 1530~1570 L band: 1570~1610 L+ band: 1625~1650							
Testing Wavelength		nm	1310/1550/1625/1650							
Insertion Loss			1×2	1×4	1×8	1×16	1×24	1×32	1×48	1×64
	@CWL Single-band	dB	0.6	0.8	1.0	1.3	1.5			
	@CWL Dual-band		0.8	1.0	1.2	1.5	1.7			
WDL		dB	≤0.3							
TDL		dB	≤0.4 (2≤N≤16), ≤0.6 (17≤N≤64)							
PDL		dB	≤0.2							
Return Loss		dB	≥50							
Crosstalk		dB	≥50 (2≤N≤32), ≥45 (33≤N≤64)							
Repeatability		dB	±0.05							
Switching Time		ms	≤8							
Durability		times	≥10 ⁹							
Operating Voltage		V	60							
Switching Mode			Non-Latching							
Input Optical Power		mW	≤500							
Operating Temp.		°C	-20 ~ +85							
Storage Temp.		°C	-40 ~ +85							
Operating humidity		%	5 ~ 95							
Dimension		mm	Φ5.5×42(±0.1) (2≤N≤16) Φ6.0×47(±0.1) (17≤N≤64)							

1. Within operating temperature and all SOP.
2. Excluding connector.
3. WDL is measured in a ±20nm range at 23°C.

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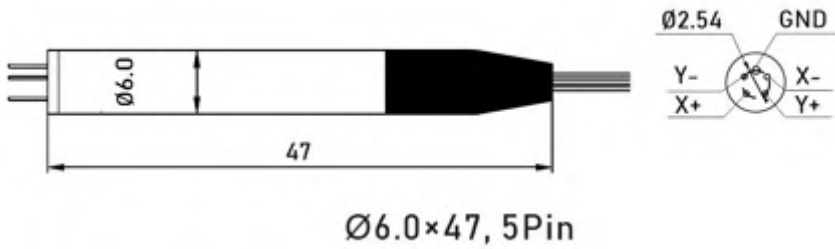
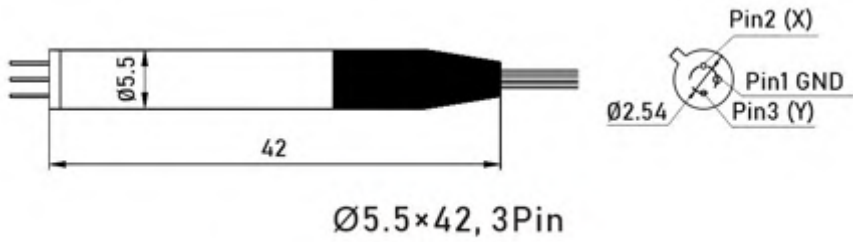
■ Specifications (Multi-Mode)

Parameters		Unit	MFSW 1×N (N≤16)			
Working Wavelength		nm	850±30, 1310±30			
Testing Wavelength		nm	850/1310			
Insertion Loss			1×4	1×8	1×12	1×16
	@850 or 1310	dB	0.8			1.0
	@850 &1310		1.0			1.2
WDL		dB	≤0.3			
TDL		dB	≤0.4			
PDL		dB	≤0.2			
Return Loss		dB	≥30			
Crosstalk		dB	≥30			
Repeatability		dB	≤±0.05			
Switching Time		ms	≤8			
Durability		times	≥10 ⁹			
Operating Voltage		V	60			
Switching Mode			Non-Latching			
Input Optical Power		mW	≤500			
Operating Temp.		°C	-20 ~ +85			
Storage Temp.		°C	-40 ~ +85			
Operating humidity		%	5 ~ 95			
Dimension		mm	Φ5.5×42(±0.1) (2≤N<8) Φ6.0×47(±0.1) (8≤N≤16)			

1. Within operating temperature and all SOP.
2. Excluding connector.
3. WDL is measured in a ±20nm range at 23°C.

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■ Dimension



■ Ordering Information: MFSW 1×N-A-B-C-D

A	
Code	Wavelength
C	C Band
L	L Band
O	O Band
O&C	O&C Band
C&L	C&L Band
X	other

B	
Code	Fiber Type
SM	Single Mode
M1	Multi-Mode 50/125
M2	Multi-Mode 62.5/125
X	other

C	
Code	Fiber Dimension
25	Φ0.25mm
X	other

D	
Code	Fiber Length
05	0.5m
10	1.0m
15	1.5m
X	other