MEMS Optical Switch Spec

Features

- ❖ Tubular small package
- ❖ Fast Switching Time
- ❖ Low IL, Good Repeatability
- ❖ High reliability and stability



Application

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

Compliance Standard

- ❖ Telcordia GR-1221
- ❖ Telcordia GR-1073

Performance Specifications(Single Mode)

Parameters		Unit	MFSW 1×N (N≤64)							
Working Wavelength		nm	O/C/L/L+ band							
Testing Wavelength		nm	1310/1550/1625/1650							
Insertion Loss		dB	1x2	1x4	1x8	1x16	1x24	1x32	1x48	1x64
	@CWL Single-band		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	$\geq 10^9$							
Switching mode			Non-Latching							
Input Optical Power		mW	≤500							
Operating Voltage		V	60							
Operating Temp.		°C	-20 ~ +85							
Storage Temp.		°C	-40 ~ +85							

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MEMS Optical Switch Spec

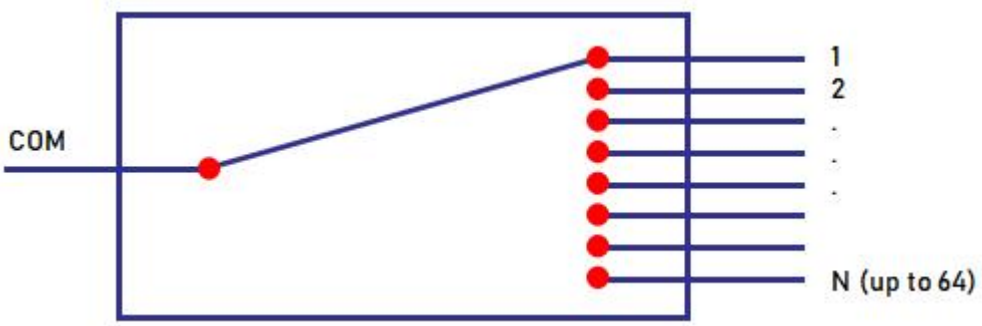
Operating humidity	%	5 ~ 95
Dimension (L×W×H)	mm	Φ5.5×42(±0.1) (2≤N≤16) Φ6.0×47(±0.1) (17≤N≤64)
1.Within operating temperature and all SOP. 2.Excluding connector. 3.WDL is measured in a ±20nm range at 23°C。		

Performance Specifications(Multi-Mode)

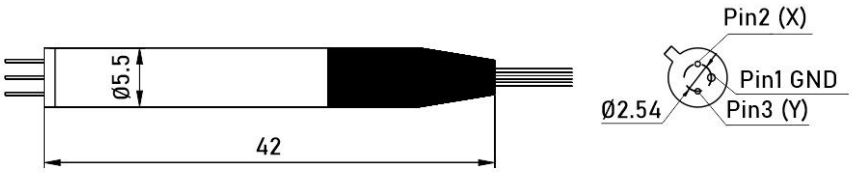
Parameters		Unit	MFSW 1×N (N≤16)			
Working Wavelength		nm	850±30, 1310±30			
Testing Wavelength		nm	850/1310			
Insertion Loss		dB	1x4	1x8	1x12	1x16
	@850 or 1310		0.8			1.0
	@850&1310		1.0			1.2
WDL		dB	≤0.3			
TDL		dB	≤0.4			
PDL		dB	≤0.2			
Return Loss		dB	≥30			
Crosstalk		dB	≥30			
Repeatability		dB	≤±0.05			
Switching Time		ms	≤8			
Durability		times	$\geq 10^9$			
Switching mode			Non-Latching			
Input Optical Power		mW	≤500			
Operating Voltage		V	60			
Operating Temp.		°C	-20 ~ +85			
Storage Temp.		°C	-40 ~ +85			
Operating humidity		%	5 ~ 95			
Dimension (L×W×H)		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。						

Optical Route

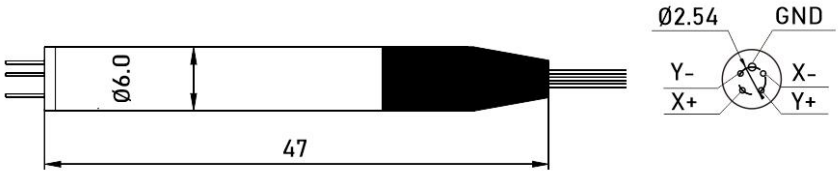
MEMS Optical Switch Spec



Dimensions Diagram(Unit:mm)



Ø5.5×42, 3Pin



Ø6.0×47, 5Pin

Ordering information:

OSW（Optical Switch）PN：OSW-XXXXXXX-XX （OSW+7 Code+2 Serial Number）

OSW	XX		XX		X		X		X		XX
	Type		Wavelength		Fiber Jacket		Fiber Length		Connector		
	01	1X1	13	1310	0	250um Bare Fiber	0	0.5m	0	none	
	02	1X2	15	1550	1	0.9mm Loose Tube	1	1.0m	1	SC/UPC	
	03	1X3	35	1310/1550	S	Special	2	1.5m	2	SC/APC	S
	04	1X4	0S	Special			3	2.0m	3	FC/UPC	N
	05	1X5					4	2.5m	4	FC/APC	
	06	1X6					5	3.0m	5	LC/UPC	
	…	…					6	3.5m	6	LC/APC	
	48	1X48					7	0.7m	7	ST/UPC	
	0S	Special					8	1.2m	8	E2000	
							9	2.7m	S	Special	
							S	Special			

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