

1550nm 1xN SM MEMS Optical Switch

1550nm 1xN SM MEMS Optical Switch is based on a micro-electro-mechanical system, which uses an optical micro-mirror or an optical micro-mirror array to change the propagation direction of the beam to switch the optical path. The optical channel can be up to 64CH, it's widely used in Fiber Optic Sensor system, Optical Testing, Fiber communication Field, PM or MM type is also available upon request.

Application:

Fiber Communication
Fiber Optic Sensor
Testing System
Lab & Research

Features:

Low Insertion Loss
High Switching Speed
RoHs Compliant
High Reliability



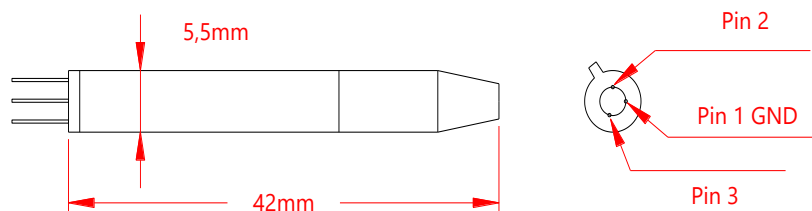
Specification:

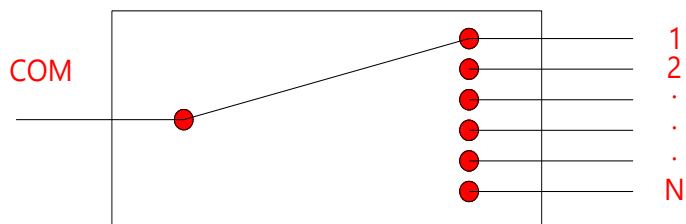
Parameter	Symbol	Value								Unit
Center Wavelength	λ	1550								nm
Bandwidth	BW	± 20								nm
Configuration		1x2	1x4	1x8	1x16	1x24	1x32	1x48	1x64	-
Max. Insertion Loss	IL	0.6	0.8	0.8	1.0	1.3	1.3	1.5	1.5	dB
Max. Polarization Dependent Loss	PDL	0.2								dB
Max. Wavelength Dependent Loss	WDL	0.3								dB
Max. Temperature Dependent Loss	TDL	0.4				0.6				dB
Min. Return Loss	RL	50								dB
Min. Cross Talk		50						45		dB
Max. Repeatability		± 0.05								dB
Power Supply		60								V
Switch Type		Non-Latching								-
Min. Life Time		10^9								Cycle
Max. Switching Time		8								ms
Max. Optical Power (CW)	P	500								mW
Max. Tensil Load		5								N
Fiber Type		SMF-28e								-
Operating Temperature	T	-20~85								°C
Storage Temperature	T	-40~85								°C
Package Dimension		$\Phi 5.5 \times 42$				$\Phi 6.0 \times 47$				mm

Notice: Above specifications are tested at center wavelength without connector in room temperature @23 $^{\circ}\text{C}$.

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

Drawing:



Optical Path:**Ordering Information (Part Number):**SMESW-**WWW**-**CC**-**J**-**LL**-**CC**

WWW	CC	J	LL	CC
Wavelength	Configuration	Fiber Jacket	Fiber Length	Connector
1310 - 1310nm	12 - 1x2	B - 250um Bare Fiber	05 - 0.5m	NE - None
1550 - 1550nm	14 - 1x4	9 - 900um Loose Tube	10 - 1.0m	FA - FC/APC
	18 - 1x8		15 - 1.5m	FU - FC/UPC
	116 - 1x16		20 - 2.0m	SA - SC/APC
	124 - 1x24		SS - Specify	SU - SU/APC
	132 - 1x32			LA - LC/APC
	148 - 1x48			LU - LC/UPC
	164 - 1x64			SS - Specify