1X1/1X2 /2X2B MEMS Optical Switch

1. DESCRIPTION

MEMS OSW is based on micro-electro-mechanical system (MEMS) technology, which achieved low insertion loss and highly repeatability by rotating the mirror of MEMS chip.

MEMS OSW is mainly used in optical cross and connection (OXC) system, optical add/drop system, measure instrument system and optical signal monitoring system.

The products are Telcordia GR-1073-CORE qualified, and RoHS ompliant.

2.OPTIC SPECIFICATION

No.	Parameters	Unit	Value
1	Wavelength	nm	1260-1650
2	Insertion Loss	dB	Typ≤0.8,Max≤1.2
3	Return Loss	dB	≥50
4	Repeatability	dB	≤0.1
5	Crosstalk	dB	≥55
6	Polarization Dependence Loss	dB	≤0.15
7	Wavelength Dependence Loss	dB	≤0.3
8	Temperature Dependence Loss	dB	≤0.3
9	Switch Time	ms	≤5
10	Durability	cycle	$\geq 1x10^9$
11	Maximum optical Power	mW	≤500
12	Switch Mode		Non-latching
13	Power Voltage	V	0~15
14	Power Consumption	mW	≤500

3. OPERATION/STORAGE TEMPERATURE/HUMIDITY

NO	PARAMETER	SPECIFICATION	UNITS	NOTE
3.1	Operation Temperature	-5~65	°C	
3.2	Storage Temperature	-40~85	°C	
3.3	Operation Humidity	5~95	%RH	
3.4	Storage Humidity	5~95	%RH	

4. PIGTAIL AND CONNECTOR

NO	PARAMETER	SPECIFICATION	UNITS
4.1	Fiber Type	SMF-28e（G657A3）	
4.2	Fiber Pigtail(All Ports)	250um	
4.3	Fiber Length(All Ports)	1±0.05	m
4.4	Optical Connector (All port)	None	
4.5	Dimension	5.5X22.5	mm

5. MECHANICAL DRAWINGS

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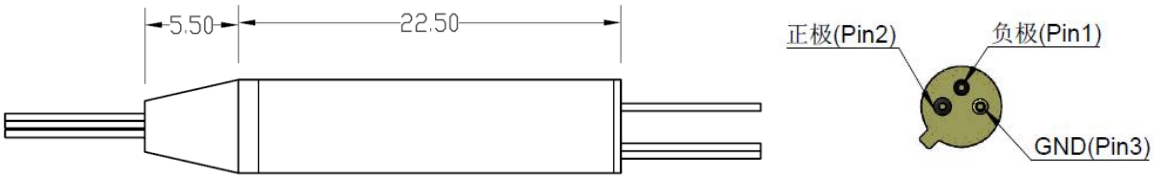
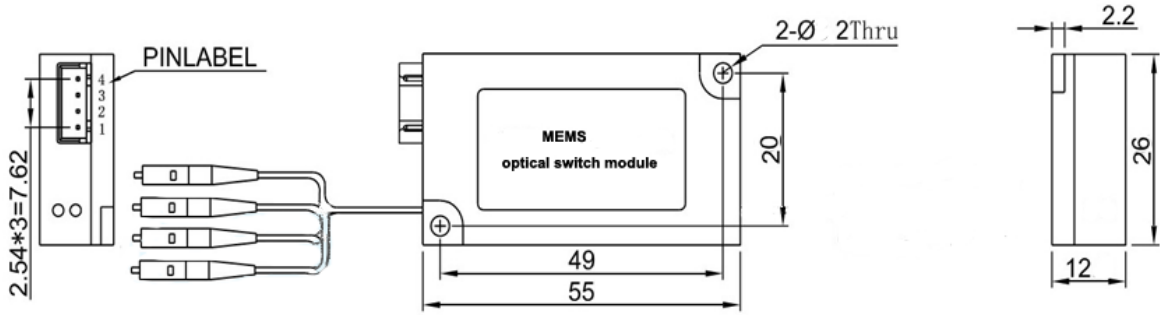


Module （55X26X12mm）



1X2	Optical Path	Electric Drive			
		Pin 1	Pin 2	Pin3	Pin4
TTL	P1-P2	+5V	GND	Hight	-
	P1-P3	+5V	GND	Low	-

6.Ordering Information： MSW - 1×N - A - B - C - D - E –F -G

N	A	B	C	D	E	F
Port	Mode	Wavelength	Fiber Diameter	Fiber Length	Connector	Shell
1X1 1X2 2X2B	SM:9/125um M5:50/125 M6:62.5/125 PM：PMfiber	13: 1310nm 15: 1550nm 16: 1610nm	25:250um 90:900um	05:0.5m 10:1.0m 15:1.5m	OO:None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC LP: LC/PC LA: LC/APC	T:TO46 M: Modular