

1×N MEMS Optical Switch device

Features

- Ultra Compact Structure
- Fast Switching Time
- Low Insertion Loss
- High Reliability

Application

- PON Network
- Protection
- Instrumentation
- Network Monitoring



Performance

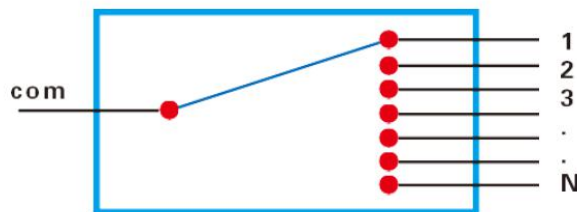
Single mode

Parameters	Unit	MEMS-D-1×N (N≤64) Single Mode	
Operating Wavelength	nm	O band: 1290~1330 C band: 1530~1570 L band: 1570~1610 L+ band: 1625~1650	
Insertion Loss	dB	N=2	≤0.8
		23≤N≤8	≤1.0
		9≤N≤16	≤1.2
		17≤N≤32	≤1.5
		33≤N≤64	≤1.7
WDL	dB	≤ 0.3	
TDL	dB	≤ 0.3	
PDL	dB	≤ 0.1	
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 billion	
Control Voltage	V	≤ 60	
Switching Mode		Non-latching	
Optical Power	mW	≤ 500	
Operating Temperature	°C	-20 ~ +85	
Storage Temperature	°C	-40 ~ +85	
Operating Humidity	%	5 ~ 95	
Dimension	mm	N≤7	Φ5.5×42
		8≤N≤64	Φ6.0×47

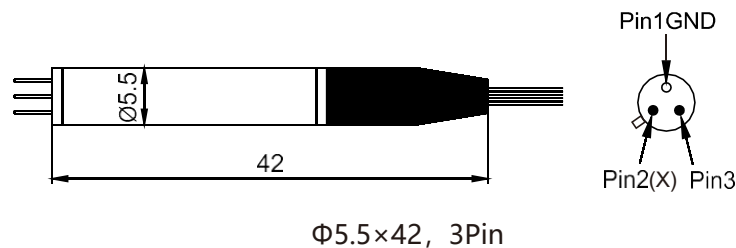
Multi mode

Parameters	Unit	MEMS-D-1×N (N≤16)	
		Multi Mode	
Operating Wavelength	nm	850±30, 1310±30	
Insertion Loss	dB	N≤12	≤1.0
		13≤N≤16	≤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 billion	
Control Voltage	V	≤ 60	
Switching Mode		Non-latching	
Optical Power	mW	≤ 500	
Operating Temperature	°C	-20 ~ +85	
Storage Temperature	°C	-40 ~ +85	
Operating Humidity	%	5 ~ 95	
Dimension	mm	N≤7	Φ5.5×42
		8≤N≤16	Φ6.0×47

Optical Route



Dimension



Ordering Information:

Type	Channel	Wavelength	Fiber Type	Fiber Diameter	Fiber Length	Connector
MEMS-D	02=1x2	85=850nm	5=50/125	25=250um	05=0.5m	00=None
	04=1x4	13=1310nm	6=62.5/125	X=Others	10=1.0m	FP=FC/PC
	08=1x8	14=1490nm	9=9/125		X=Others	FA=FC/APC
	16=1x16	15=1550nm	X=Others			SP=SC/PC
	1625=1625nm				SA=SC/APC
		1650=1650nm				LP=LC/PC
		13/15=1310/1550			LA=LC/APC	