

1x8 MEMS Optical Switch

OPNETI 1x8 MEMS switch is based on MEMS technology . The component makes an optical connection between an optical port and either one of 8 input or output line. The highly reliable switching mechanism use integrated micromirrors and feautre below 1ms switching time and only 1.4dB insertion loss. The switch is powered by a 5V supply voltage. A 5 V TTL or CMOS drive signal is used to control the swithcing state

Features

Low insertion loss
High Crosstalk
Fast response time
Mini Size

Applications

Optical Reconfiguration
Instrumentation
Provisioning

Specifications

Parameter	Single mode	Multimode
Wavelength range (nm)	1240~1640	700~1700
Insertion loss (dB)	≤2.0 (Typ 1.2)	≤2.0 (Typ 1.5)
Polarization dependent loss (dB)	≤0.12	≤0.20
Return Loss (dB)	≥ 44 (Typ 55)	≥ 35 (Typ 45)
Cross talk (dB)	≥ 60 (Typ 75)	≥ 45 (Typ 55)
Switch speed (ms)	≤1, (Typ 0.5)	≤20, (Typ 2)
Durability (cycles)	no wear out	no wear out
Fiber type	SMF-28e	50/125, 62.5/125 MM
Operating Voltage (V)	<5	<5
Power Consumption (mW)	Typ 40	Typ 40
Operation temperature()	0~70 C	0~70 C
Storage temperature ()	-40~85	-40~85
Package Size (L x W x H) (mm)	76 x 93 x 9.5	76 x 93 x 9.5

PIN Connection

S1	S2	S3	S4	S5	S6	S7	Port
0	5	x	5	x	x	x	A
5	x	0	5	x	x	x	B
5	x	5	5	x	x	x	C
0	0	x	5	x	x	x	D
x	x	x	0	0	0	x	E
x	x	x	0	5	x	5	F
x	x	x	0	5	x	0	G
x	x	x	0	0	5	x	H

0 = 0 V (TTL or CMOS level)

5 = 5 V (TTL or CMOS level)

x = 0 V or 5 V

