MULTIMODE FIBER OPTIC 1x16 SWITCH

OVERVIEW

The *sw* fiber optic switch is a very fast opto-mechanical switch based on the MEMS technology. The component makes an optical connection between an optical port and either one of 16 input or output lines. The switch is available for single and multimode fibers. The switch is powered by a 5 V supply voltage. A 5 V TTL or CMOS drive signal is used to control the switching state.

The switching mechanism offers the reliability of a solid state device. The miniature package withstands rugged environments and is well suited for direct mounting on printed circuit boards.

The switch is built by cascading 1x2 switches which are qualified according to Telcordia GR1221.

FEATURES

- reliable
- 1.5 dB insertion loss
- 5 ms response time
- 50 dB crosstalk
- miniature size
- non-latching

APPLICATIONS

- Optical Reconfiguration
- Instrumentation
- Provisioning

ORDERING INFORMATION
SW1x16-62N (62.5 um core)
SW1x16-50N (50 um core)

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TECHNICAL SPECIFICATIONS *(MULTIMODE VARIANT)*

	Unit	Min	Typ	Max
Switch				
Wavelength Range	nm	600		1700
Insertion Loss	dB		1.5	2.0
Crosstalk	dB		55	45
Backreflection	dB		45	35
Polarisation Dependent Loss	dB			0.3
Switching Time	ms		2	20
Switching Voltage	V			5
Fiber Pigtail	µm		50/125/900 62.5/125/900	
Durability	cycles		no wear out	
Package				
Power Consumption	mW		75	150
Operation Temperature	°C	0		70
Storage Temperature	°C	-40		85
Size (L x W x H)	mm		175 x 105 x 10	

Optical Port Selection

S1	S2	S3	S4	S5	S6	Port
0	5	x	0	0	x	1
0	5	x	5	x	5	2
0	5	x	5	x	0	3
0	5	x	0	5	x	4
5	x	0	0	0	x	5
5	x	0	5	x	5	6
5	x	0	5	x	0	7
5	x	0	0	5	x	8
5	x	5	0	0	x	9
5	x	5	5	x	5	10
5	x	5	5	x	0	11
5	x	5	0	5	x	12
0	0	x	0	0	x	13
0	0	x	5	x	5	14
0	0	x	5	x	0	15
0	0	x	0	5	x	16

0 = 0 V (TTL or CMOS level)
5 = 5 V (TTL or CMOSlevel)
x = 0 V or 5 V

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