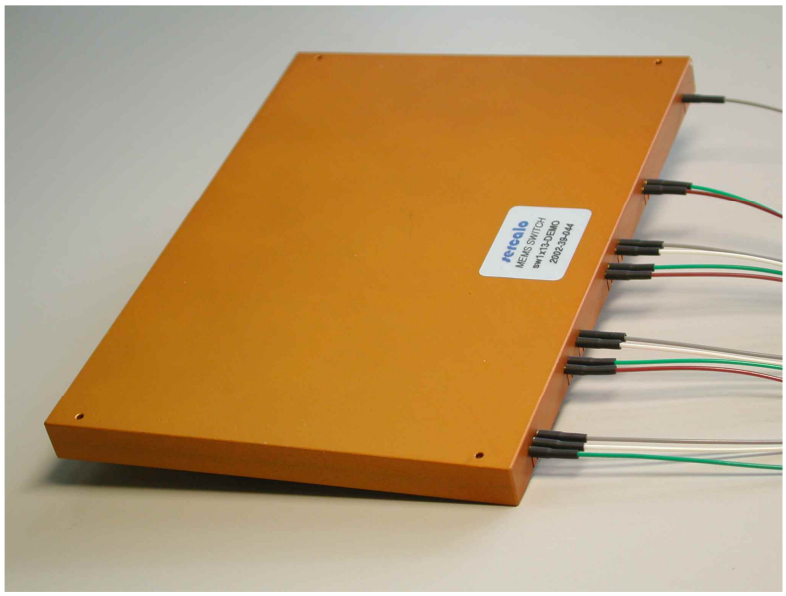

FAST
FIBER OPTIC
1x24 SWITCH

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 24 input or output lines. The highly reliable switching mechanism use integrated micromirrors and features below 1 ms switching time and below 2.0 dB insertion loss. 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; it neither wears out nor degrades over time. Even after billions of cycles the switching quality stays constant. The small package withstands rugged environments and is well suited for direct mounting on printed circuit boards.

FEATURES

- reliable
- 1.5 dB insertion loss
- 1 ms response time
- 60 dB crosstalk
- miniature size
- non-latching

APPLICATIONS

- Optical Reconfiguration
- Instrumentation
- Provisioning

ORDERING INFORMATION

SW1x24-9N (smf 28, single mode fiber)
SW1x24-50N (50 um core, graded index)
SW1x24-62N (62.5 um core, graded index)

Ordering Information:

XSoptix
800 Village Walk #316
Guilford, CT 06437
Ph: 203-401-8093
Email orders to: sales@xsoptix.com
Fax orders to: 800-878-7282

Contact:
Sercalo microtechnology ltd
Landstrasse 151, 9494 Schaan
Principality of Liechtenstein
Tel. +423 237 57 97 Fax. +423 237 57 48
www.sercalo.com e-mail:info@sercalo.com

TECHNICAL SPECIFICATIONS *(Single Mode Variant)*

	Unit	Min	Typ	Max
Switch				
Wavelength Range	nm	1250		1650
Insertion Loss	dB		1.4	2.0
Crosstalk	dB		60	50
Backreflection	dB		55	45
Polarisation Dependent Loss	dB			0.25
Repeatability[1]	dB			0.002
Switching Time	ms		0.5	1
Switching Voltage	V			5
Fiber Pigtail	µm		SMF28 or 50/125/900 62/125/900	
Durability	cycles		no wear out	
Package				
Power Consumption	mW		200	
Operation Temperature	℃	0		70
Storage Temperature	℃	-40		85
Size (L x W x H)	mm		206 x 105 x 10	

[1] *value for constant temperature and polarisation*

ELECTRICAL CONNECTION

Optical port selection table

1	2	3	4	5	Port
0	x	5	0	5	1
0	x	5	5	0	2
0	x	5	5	5	3
0	x	5	0	0	4
5	0	5	0	5	5
5	0	5	5	0	6
5	0	5	5	5	7
5	0	5	0	0	8
5	5	0	0	5	9
5	5	0	5	0	10
5	5	0	5	5	11
5	5	0	0	0	12
5	5	5	0	0	13
5	5	5	5	5	14
5	5	5	5	0	15
5	5	5	0	5	16
5	0	0	0	0	17
5	0	0	5	5	18
5	0	0	5	0	19
5	0	0	0	5	20
0	x	0	0	0	21
0	x	0	5	5	22
0	x	0	5	0	23
0	x	0	0	5	24

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

MECHANICAL OUTLINE