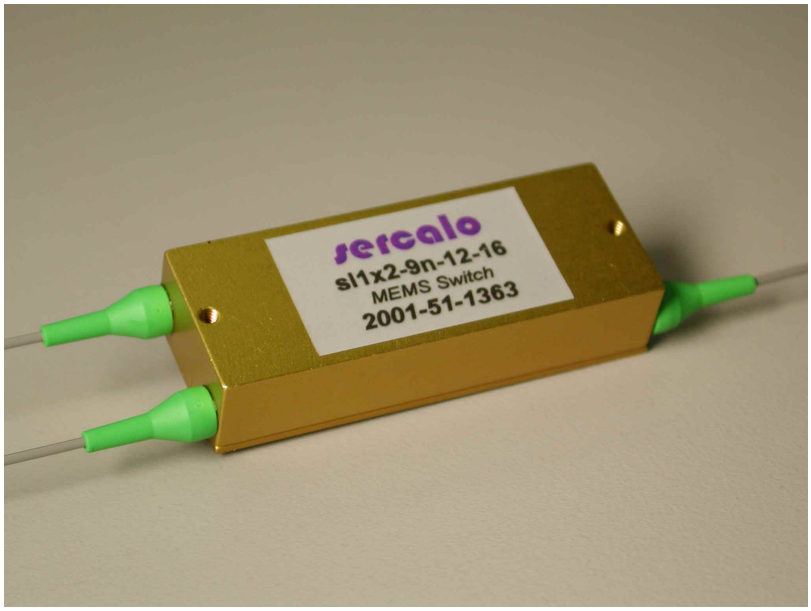


LATCHING FIBER OPTIC 2x1 SWITCH

OVERVIEW

The *sl* series are opto-mechanical latching switches for the most demanding applications in fiber optic communication networks. The switch is available in 1x1, 2x1 and 2x2 variants and offers solid state reliability, accurate precision and fast response time. The switch mechanism is latching and has a very fast response time below 1 ms and only 0.5 dB insertion loss.

The miniature package withstands rugged environments and is well suited for direct mounting on printed circuit boards. The switch is qualified according to Telcordia GR 1221.

FEATURES

- reliable
- 0.5 dB insertion loss
- 0.5 ms response time
- low PDL
- 60 dB crosstalk
- miniature size
- latching

APPLICATIONS

- Protection Switching
- Reconfiguration
- WDM

ORDERING INFORMATION

SL2x1-9n

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

DESCRIPTION

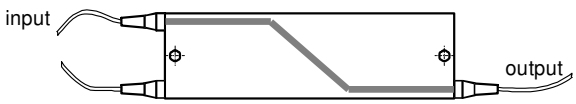
The switches are powered by a voltage between 4.0-5.25 V on the supply pin. The switch state is selected with a CMOS or TTL signal on the selector pins. A high pulse during at least 2 ms on one of the selector pins toggles the switch into either cross state or bar state. At 0 V on the selector pins or at power off, the switch remains in the last selected 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.

BAR STATE



CROSS STATE



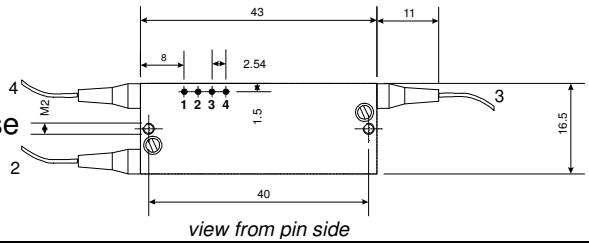
TECHNICAL SPECIFICATIONS

	Unit	Min	Typ	Max
Switch				
Wavelength Range	nm	1240		1640
Insertion Loss	dB		0.5	0.9
Crosstalk	dB		75	60
Backreflection	dB		55	50
Polarisation Dependent Loss	dB		0.03	0.07
Repeatability[1]	dB			0.002
Switching Time	ms		0.5	1
Fiber Pigtail	µm		9/125/900	
Durability	cycles		no wear out	
Package				
Voltage	V	4	5	5.25
Logic Level High	V	2.1		
Logic Level Low	V			0.5
Power Consumption	mW		5	25
Selection Pulse Width	ms	2		
Operation Temperature	℃	-5		70
Storage Temperature	℃	-40		85
Size (L x W x H)	mm		43 x 16.5 x 9.5	

[1] *value for constant temperature and polarisation*

PIN CONNECTIONS

1 5 V supply
2 bar state (port 2-4) 5 V, 2 ms pulse
3 cross state (port 2-3) 5 V, 2 ms pulse
4 ground 0 V



view from pin side

ORDERING INFORMATION

SL2x1-9n (900 um loose tube)
SL2x1-9B (250 um bare fiber)

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Information in this datasheet is believed to be correct but Sercalo reserves the right to change specifications without notice at any time. [90-1004-2]