

## 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 $1 \times 1,2 \times 1$ and $2 \times 2$ 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.

## APPLICATIONS

- Protection Switching
- Reconfiguration
- WDM
$\square$

| ORDERING INFORMATION |
| :--- |
| SL2 $2 \times 1-9 \mathrm{n}$ |

## Contact:

Sercalo microtechnology Itd
Principality of Liechtenstein

## FEATURES

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

Ordering Information:
800 Village Walk \#316
Guilford, CT 06437
Ph: 203-401-8093
Email orders to: sales@xsoptix.com
Fax orders to: 800-878-7282 Landstrasse 151, 9494 Schaan

Tel. +4232375797 Fax. +423 2375748
www.sercalo.com e-mail: info@sercalo.com

## DESCRIPTION

The switches are powered by a voltage between $4.0-5.25 \mathrm{~V}$ 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.


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 | $\mu \mathrm{m}$ |  | 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 | ${ }^{\circ} \mathrm{C}$ | -5 |  | 70 |
| Storage Temperature | ${ }^{\circ} \mathrm{C}$ | -40 |  | 85 |
| Size (L×W x H) <br> ${ }^{1}$ value for constant temperature and polarisation | mm |  | $43 \times 16.5 \times 9.5$ |  |



| ORDERING INFORMATION |  |
| :--- | :--- |
| SL2x1-9n | (900 um loose tube) |
| SL2x1-9B | (250 um bare fiber) |

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