

FAST FIBER OPTIC 1x4 SWITCH

OVERVIEW

The **sercalo** 1x4 switch is a very fast opto-mechanical switch working over both telecom wavelength windows from 1240 nm to 1600 nm. The highly reliable switching mechanism is based on micromechanical mirrors and features below 1 ms switching time and only 1.0 dB insertion loss.

The miniature package withstands rugged environments and is well suited for direct mounting on printed circuit boards.

FEATURES

- reliable
- 1.0 dB insertion loss
- 1 ms response time
- 60 dB crosstalk
- non-latching

APPLICATIONS

- Source Selection
- Protection Switching
- Monitoring
- Wavelength provisioning

ORDERING INFORMATION
SW1x4-9N12-16

Contact:

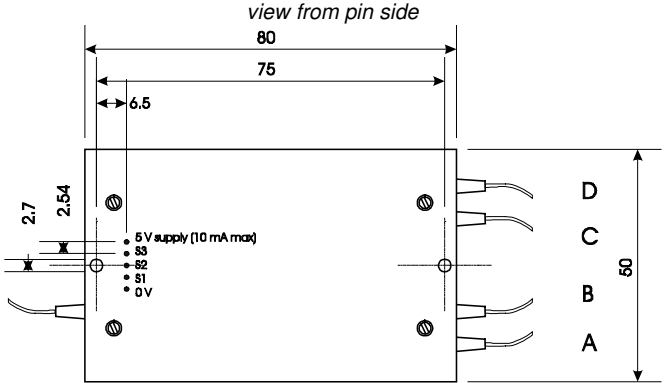
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DESCRIPTION

The **sercalo** non-latching 1x4 switch modules are fast and reliable switches designed for single mode fiber instrumentation and communication equipment. The device is based on the latest silicon MEMS technology and uses micro-mechanical mirrors to redirect the light. The absence of fatigue and wear-out allows to achieve a constant switching quality even after billions of actuation cycles. The switch features fast switching below 1 ms and high crosstalk attenuation above 60 dB. Repeatability is better than 0.01 dB. 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.

TECHNICAL SPECIFICATIONS				
	Unit	Min	Typ	Max
Switch				
Wavelength Range	nm	1240		1640
Insertion Loss	dB		1.0	1.5
Crosstalk	dB		75	60
Backreflection	dB		55	50
Polarisation Dependent Loss	dB			0.12
Switching Time	ms		0.5	1
Switching Voltage	V			5
Fiber Pigtail	µm		9/125/900	
Durability	cycles		no wear out	
Package				
Power Consumption	mW		10	50
Operation Temperature	°C	0		70
Storage Temperature	°C	-40		85
Size (L x W x H)	mm		80 x 50 x 9.5	

ELECTRICAL SPECIFICATIONS			
Supply: 4.5 - 5.5 V, 10 mA max			
S1 – S3: CMOS or TTL levels, 0 mA			
Optical Port Selection			
S1	S2	S3	Port
0V	0V	x	A
5V	x	5V	B
5V	x	0V	C
0V	5V	x	D



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