

## **Multimode FIBER OPTIC 1x8 SWITCH**

### **OVERVIEW**

The [sercalo](#) 1x8 switch is a very fast opto-mechanical switch working over the spectrum from 700 nm to 1700 nm. The component is designed for optical switching in multimode fiber systems and is available in 2x1, 2x2, 1x4 and 1x8 variants. The highly reliable switching mechanism uses integrated micromirrors and features fast switching time below 5 ms and below 2 dB insertion loss.

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

### **APPLICATIONS**

- Optical Reconfiguration
- Instrumentation
- Test and Measurement

### **FEATURES**

- reliable
- 0.7 –1.7 um range
- 5 ms response time
- 2 dB insertion loss
- 50 dB crosstalk
- small size
- non-latching

## TECHNICAL SPECIFICATIONS (*Multimode Variant*)

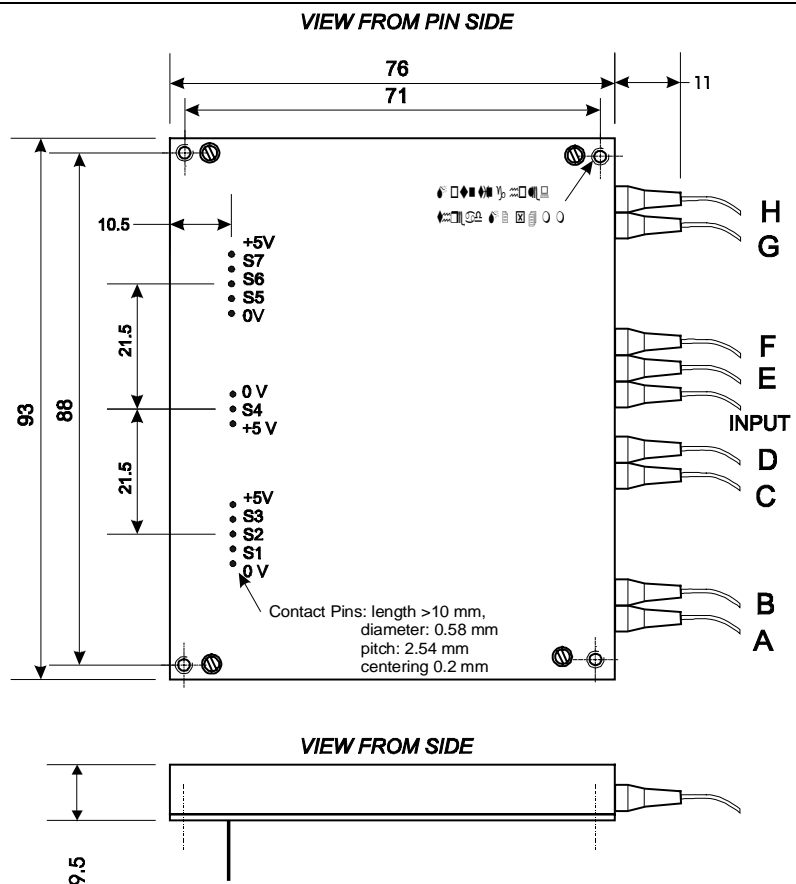
	Unit	Min	Typ	Max
<b>Switch</b>				
Wavelength Range	nm	700		1700
Insertion Loss <sup>1</sup>	dB		0.5	2.0
Crosstalk	dB		55	45
Backreflection	dB		45	35
Polarisation Dependent Loss	dB		0.07	0.20
Switching Time	ms		2	20
Switching Voltage	V			5
Fiber Pigtail	μm		50/125/900 62.5/125/900	
Durability	cycles		no wear out	
<b>Package</b>				
Power Consumption	mW		40	
Operation Temperature	°C	0		70
Storage Temperature	°C	-40		85
Size (L x W x H)	mm		76 x 93 x 9.5	

<sup>1</sup> measured at 1310 or 1550 nm. At 850 nm ILmax = 3.0 dB.

### Optical Port Selection

S1	S2	S3	S4	S5	S6	S7	Port
0	5	x	5	x	x	x	A
5	x	0	5	x	x	x	B
5	x	5	5	x	x	x	C
0	0	x	5	x	x	x	D
x	x	x	0	0	0	x	E
x	x	x	0	5	x	5	F
x	x	x	0	5	x	0	G
x	x	x	0	0	5	x	H

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



### ORDERING INFORMATION

SW1x8-62N-07-17 (62.5 μm graded index fiber)

SW1x8-50N-07-17 (50 μm graded index fiber)

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**sercalo**