

Latching FIBER OPTIC 1x8 SWITCH

*with capacitive state
monitor*

OVERVIEW

The *slts1x8* switch is an opto-mechanical latching switch. At power off it stays in the last selected state. The switch offers solid state reliability, accurate precision and fast response time. The switch mechanism is latching and has a very fast response time below 10 ms and below 1.6 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 small package withstands rugged environments and is well suited for direct mounting on printed circuit boards.

The switch state is read out using a capacitive position sensor.

FEATURES

- reliable
- 1.6 dB insertion loss
- 10 ms response time
- 60 dB crosstalk
- latching

APPLICATIONS

- Optical Reconfiguration
- Instrumentation
- Provisioning

ORDERING INFORMATION

SLTS 1x8-9N single mode with state monitor

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Description

The desired optical state is continuously applied on the selection pins D1, D2 and D3. When the active low STR (strobe) pin receives a logic low, the optical state is set. Roughly 10-30 ms after the optical state is settled the STAT pin goes high, indicating that the mechanical position of the switch complies with the selection of D1, D2 and D3. The pins M1, M2 and M3 give the read out of the current switch position.

TECHNICAL SPECIFICATIONS

	Unit	Min	Typ	Max
Switch				
Wavelength Range	nm	1240		1640
Insertion Loss	dB		1.0	1.6
Crosstalk	dB		75	60
Backreflection	dB		55	45
Polarisation Dependent Loss	dB			0.12
Optical Switching Time	ms		2	10
STR pulse length	ms	20		
Logic Level Low	V			0.5
Logic Level High	V	3.0		
Response Time State Sensor	ms			30
Supply Voltage	V			5
Fiber Pigtail	um		9/125/900	
Durability	cycles		no wear out	
Package				
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 11.5	

Optical Port Selection

Optical Port	Port Selection, Truth Table			Monitor Pins : Output		
	D1	D2	D3	M1	M2	M3
1	1	1	0	1	1	0
2	1	0	1	1	0	1
3	1	0	0	1	0	0
4	1	1	1	1	1	1
5	0	1	1	0	1	1
6	0	0	0	0	0	0
7	0	0	1	0	0	1
8	0	1	0	0	1	0

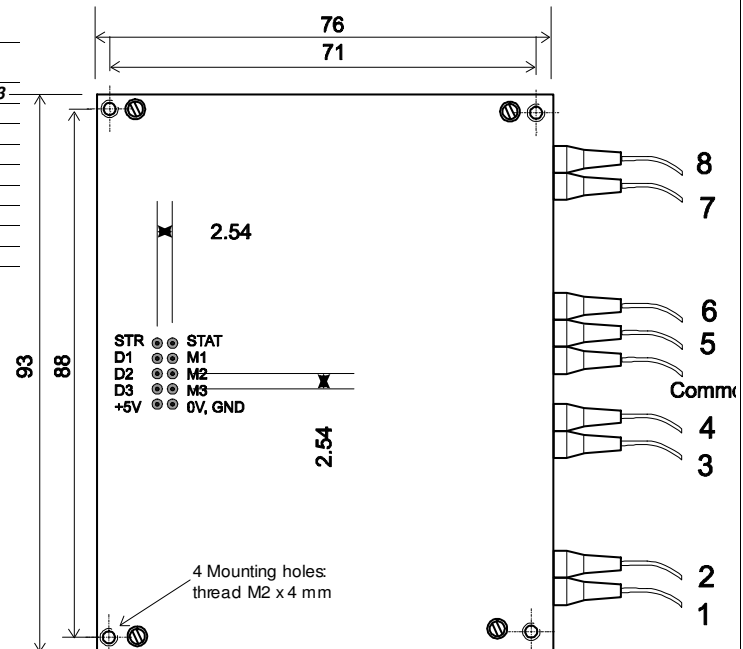
0 = 0 V (TTL or CMOS level)

1 = 5 V (TTL or CMOS level)

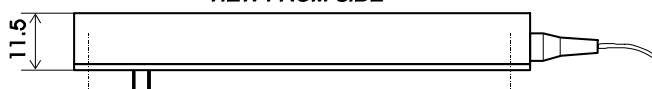
Contact Pin:

length: 4 ± 0.5 mm
 diameter: 0.59 mm
 pitch: 2.54 mm
 centering: 0.2 mm
 rubber insulation: \varnothing 1.7 mm

VIEW FROM PIN SIDE



VIEW FROM SIDE



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