

# 1x4 MEMS Optical Switch

## Features

- Low insertion loss
- High Crosstalk
- Fast response time
- Mini Size

## Applications

- Source Selection
- Protection Switching
- Monitoring
- Wavelength Provisioning

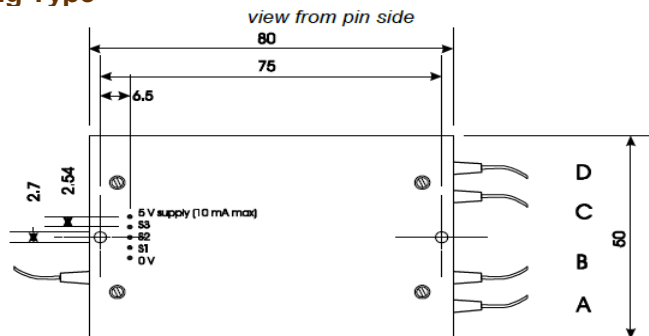
## Specifications

Parameters	Unit	Single Mode	Multimode
Operation Wavelength	nm	1240~1640	600~1700
Insertion Loss	dB	≤1.0 (Typ 0.5)	≤1.5 (Typ 1.0)
Polarization Dependent Loss	dB	≤0.10	≤0.15
Return Loss	dB	≥ 50, (Typ 55)	≥ 35, (Typ 45)
Cross Talk	dB	≥ 60, (Typ 75)	≥ 45, (Typ 55)
Switch Speed	ms	≤1, (Typ 0.5)	≤20, (Typ 2)
Operating Voltage	V	<5	<5
Power Consumption	mW	≤ 50, (Typ 10)	≤ 50, (Typ 10)
Durability	cycles	No wear out	No wear out
Fiber Type		SMF-28e	50/125, 62.5/125 MM
Section Pulse Width (for Latching Type)	ms	≥ 2	
Contact Pins	Non-Latching	φ0.59x5±0.5(L); Pitch: 2.54; Centering: 0.2;	
	Latching	φ0.59x8±0.5(L); Pitch: 2.54; Centering: 0.2;	
Operating Temperature	°C	0 ~ +70	
Storage Temperature	°C	-40 ~ +85	
Dimensions (LxWxH)	mm	80x50x9.5 (non-latching type), 70x50x9.5(latching type)	

## PIN Connection and Drawing for Non-Latching Type

Supply: 4.5~5.5 V, 10mA max;  
 S1~S3: CMOS or TTL levels, 0mA;  
 X: either 0 or 5V;

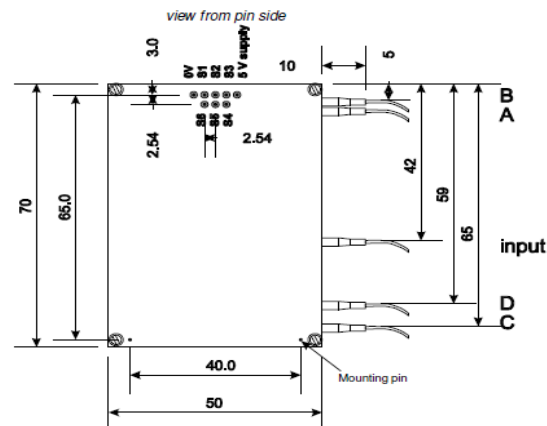
Port	A	B	C	D
S1	0V	5V	5V	0V
S2	0V	X	X	5V
S3	X	5V	0V	X



## PIN Connection and Drawing for Latching Type

1: 2ms pulse high CMOS / TTL;  
 0: low CMOS / TTL;  
 X: either 0 or 5V;

Port	A	B	C	D
S1	0	1	1	0
S2	0	X	X	1
S3	X	1	0	X
S4	X	0	1	X
S5	1	X	X	0
S6	1	0	0	1



**Ordering Information**

**MSW- ①①①-②②②②②②②②②-③-④④④-⑤-⑥-⑦⑦**

①	Port Type	1x4;
②	Wavelength	1240~1640; 600~1700;
③	Mode	L=Latching; N=Non-Latching;
④	Pigtail Type	900=900µm Loose Tube;
⑤	Fiber Type	1=SMF-28e; 2=50/125; 3=62.5/125;
⑥	Fiber Length	1= 1m;
⑦	Connector	NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;