

## PM Fiber 2x1(1x1,2x2) MEMS Optical Switch

### Features

- Compact Size
- Fast Response Time
- TTL or CMOS Logic

### Applications

- Protection Switching
- Reconfiguration
- Optical Subsystems
- Array Integration

### Specifications

Parameters	Unit	Single Mode
Operation Wavelength	nm	1310, 1550
Insertion Loss	dB	≤1.0 (Typ 0.4)
Polarization Extinction Ratio	dB	≥ 20
Return Loss	dB	≥ 50 (Typ 55)
Cross Talk	dB	≥ 60 (Typ 75)
Switch Speed	ms	≤1 (Typ 0.5)
Repeatability	dB	≤0.002
Durability	cycles	No wear out
Fiber Type		PM1550
Operating Temperature	°C	0 ~ +70
Storage Temperature	°C	-40 ~ +85
Dimensions (LxWxH)	mm	23.2 x 10.1 x 5.9

### Integrated Drive

Supply Voltage Vcc (PIN 1)	V	3.20 ~ 5.25 (Typ. 3.3 or 5.0)
Current Consumption Lcc (PIN 1)	mA	≤10 (Typ. 1)
Logic Level Low(PINS 3,4)	V	≤0.3
Logic Level High(PINS 3,4)	V	≥3.0
Selection Pulse Width	ms	≥2 Typ 10

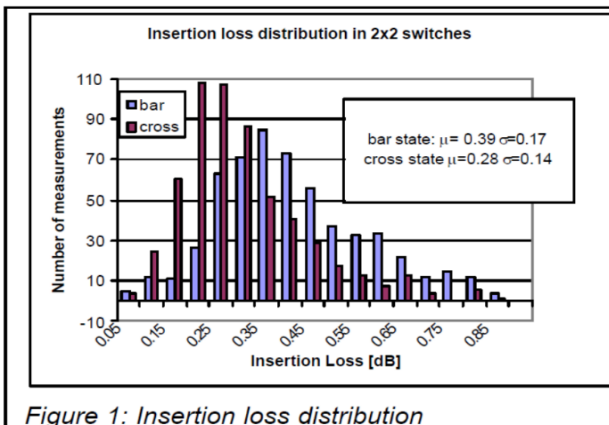
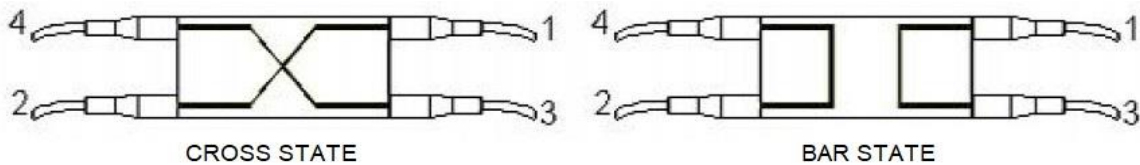


Figure 1: Insertion loss distribution

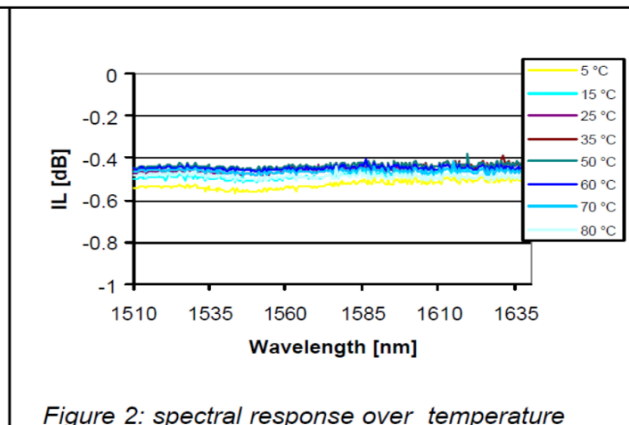


Figure 2: spectral response over temperature

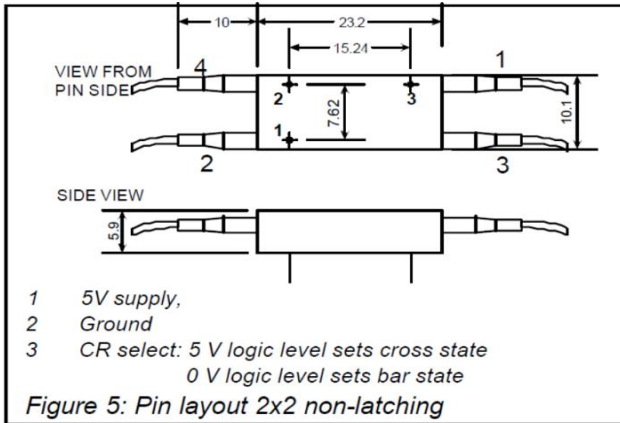


Figure 5: Pin layout 2x2 non-latching

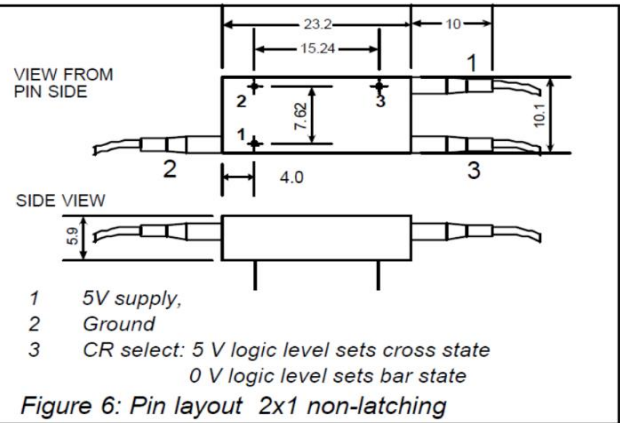


Figure 6: Pin layout 2x1 non-latching

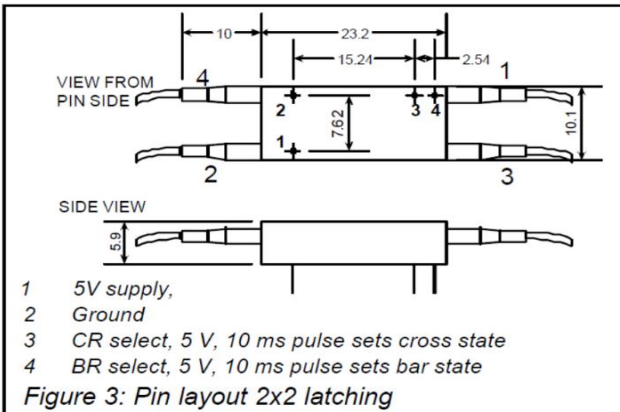


Figure 3: Pin layout 2x2 latching

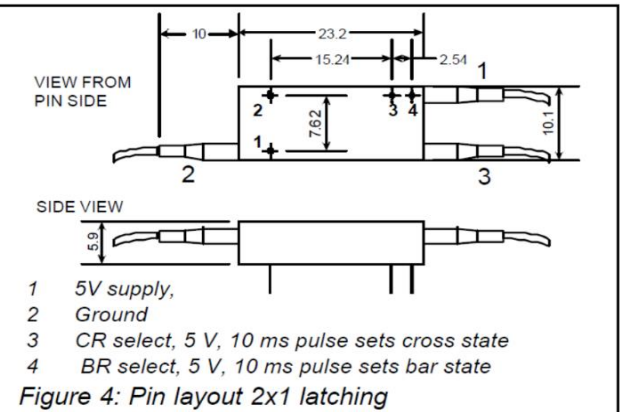


Figure 4: Pin layout 2x1 latching

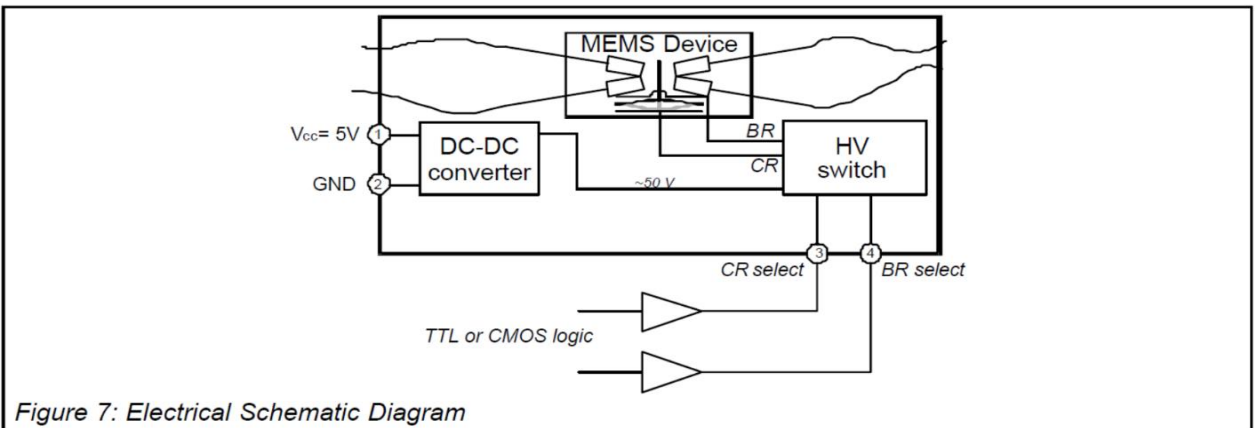


Figure 7: Electrical Schematic Diagram

\*Contact Pin: length >10mm; diameter: 0.58mm; pitch: 2.54mm; centering 0.2mm

Ordering Information

MSW- ①①①-②②②-③-④④④-⑤-⑥-⑦⑦

①	Port Type	2x1; 1x1; 2x2;
②	Wavelength	1310; 1550; 1310/1550;
③	Mode	L=Latching; N=Non-Latching;
④	Pigtail Type	250=250µm Fiber; 900=900µm Loose Tube;
⑤	Fiber Type	5=PM1550;
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;