

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	Multimode
Operation Wavelength	nm	1240~1640	600~1700
Insertion Loss	dB	≤1.0 (Typ 0.4)	≤1.2 (Typ 0.4)
Polarization Dependent Loss	dB	≤0.07	≤0.15
Return Loss	dB	≥ 50 (Typ 55)	≥ 30 (Typ 40)
Cross Talk	dB	≥ 60 (Typ 75)	≥ 40 (Typ 60)
Switch Speed	ms	≤1, (Typ 0.5)	≤20, (Typ 2)
Repeatability	dB	≤0.002	≤0.005
Durability	cycles	No wear out	No wear out
Fiber Type		SMF-28e	50/125, 62.5/125 MM
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	3.2 ~ 5.25 (Typ. 3.3 or 5.)
Current Consumption Lcc (PIN 1)	mA	≤45, (Typ. 1)
Logic Level Low(PINS 3,4)	V	0.3
Logic Level High(PINS 3,4)	V	3
Selection Pulse Width	ms	≥2. Typ 10.

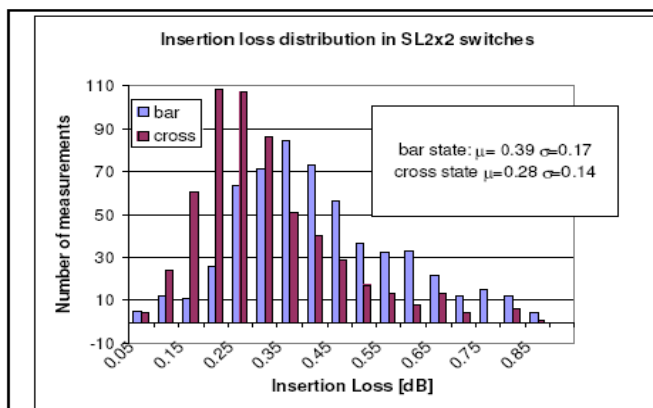


Figure 1: Insertion loss distribution

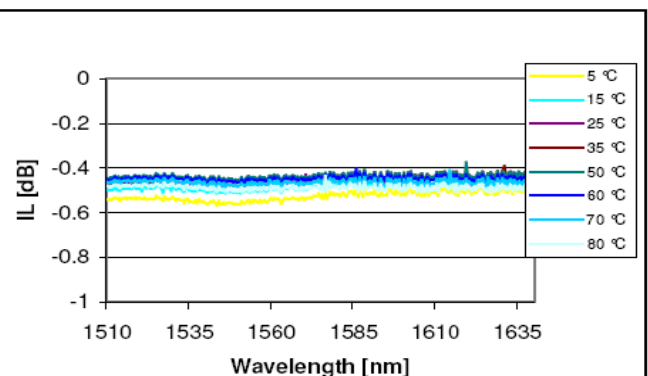
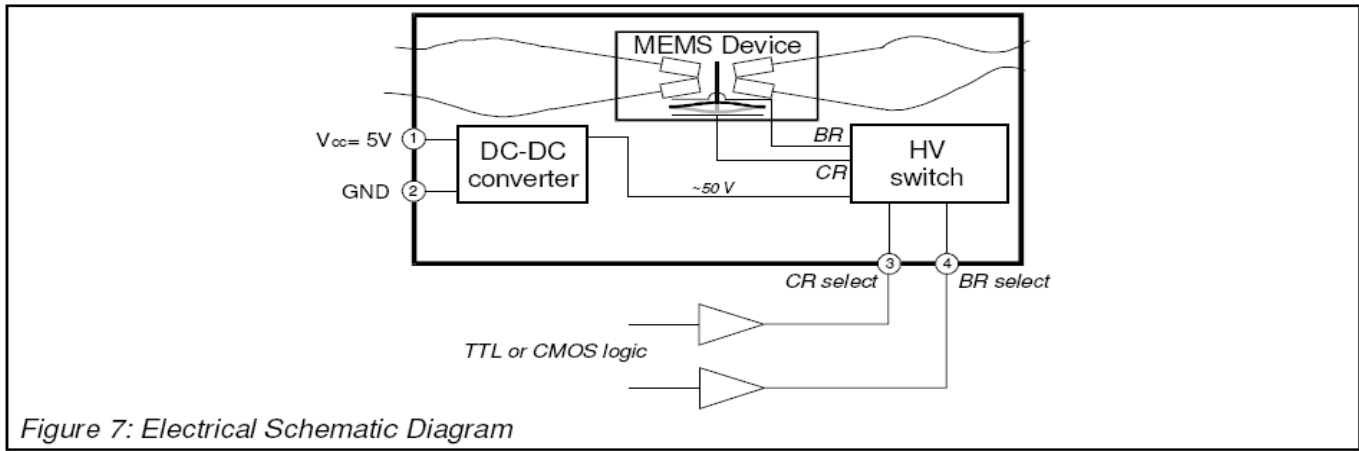
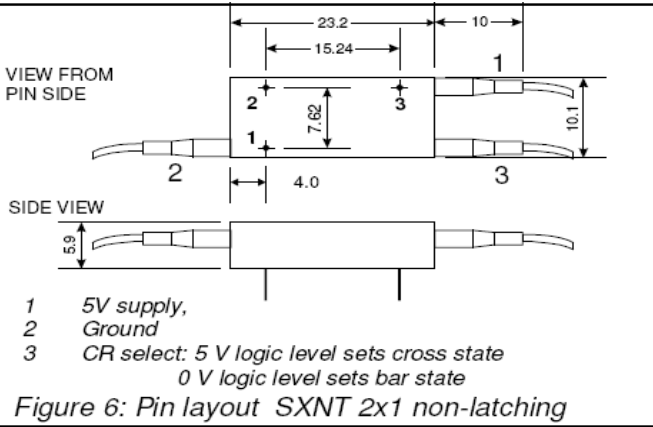
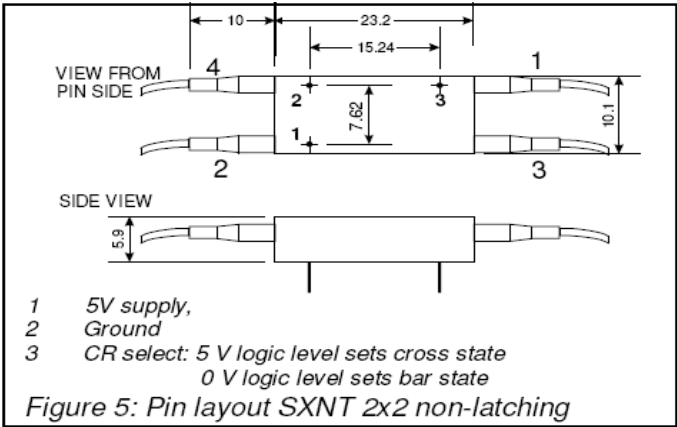
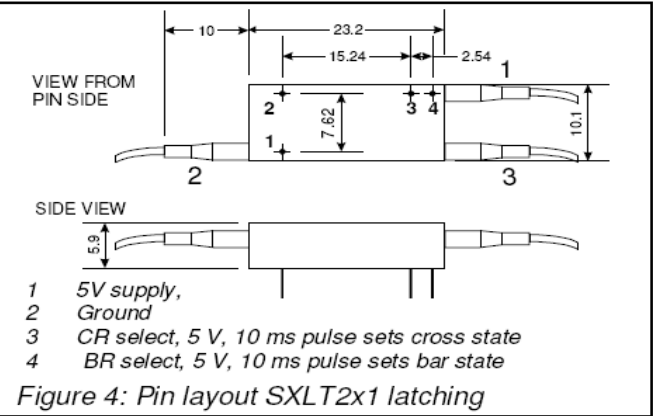
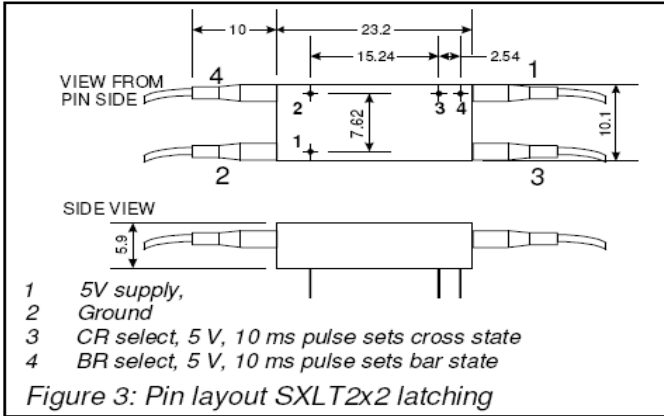


Figure 2: spectral response over temperature



Ordering Information

MSW- ①①①①-②②②②②②②②②②-③-④④④④-⑤-⑥-⑦⑦

①	Port Type	2x1; 1x1; 2x2;
②	Wavelength	1240~1640; 600~1700;
③	Mode	N=Non-Latching;L=Latching;
④	Pigtail Type	250=250um Fiber; 900=900um Loose Tube;
⑤	Fiber Type	1=SMF-28; 2=MMF50/125; 3=MMF62.5/125; X=Other;
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;

*2x1 (no port 4); 1x1 (no ports 4, 2)