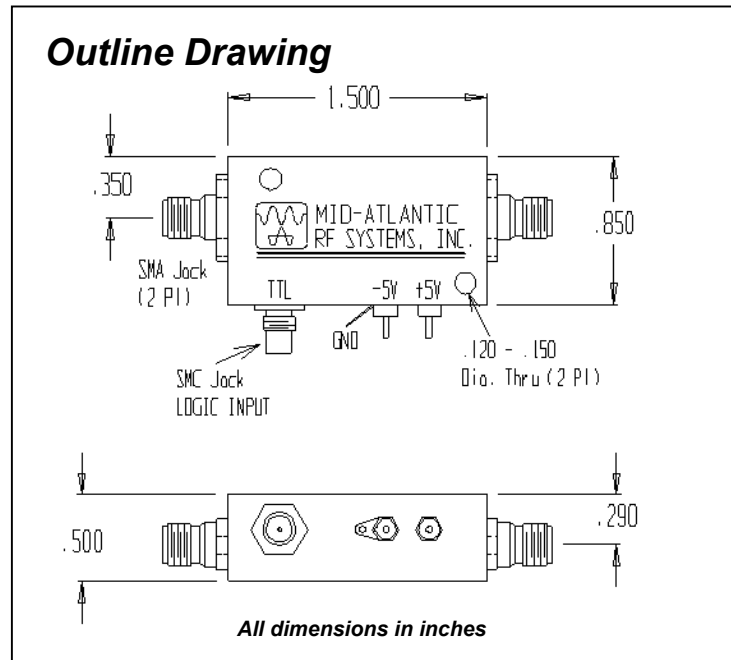


SPS02F SPST RF Switch

Overview

Mid-Atlantic RF Systems offers an absorptive single pole, high isolation and fast switching single throw RF switch. The model SPS02F offers high speed performance over a wide frequency range. Both ports are matched in either state and the switch is controlled by an integral TTL compatible driver. Connectors are standard SMA for the RF ports and SMC for the logic input. The unit is powered by +5 VDC and -5 VDC.

Outline Drawing



Electrical Specifications:

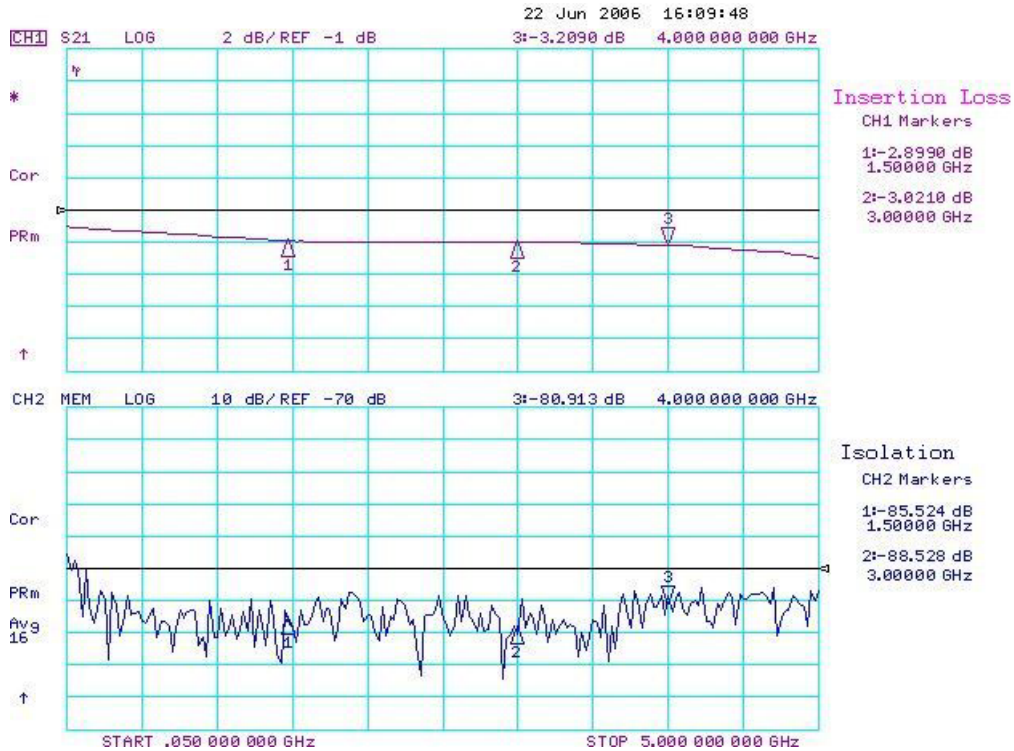
Frequency Range:	10 MHz to 4.0 GHz Usable to 12.0 GHz
Insertion Loss:	3.3 dB max. @ 4.0 GHz
Isolation:	70 dB min. 80 dB typ.
VSWR:	< 1.5:1
Input Power (P1 dB):	24.0 dBm min. 27.0 dBm typ.
Switching Speed:	6 ns max. (10% TTL to 90% RF)
Switch Drive:	TTL, Logic 1 = Port 1 on Input ≤ 0.8 TTL Loads
Video Leakage:	20mV p-p max., 50 Ohm Load
Power Requirements:	+5 VDC 25 mA, -5 VDC 20 mA

Mechanical Specifications:

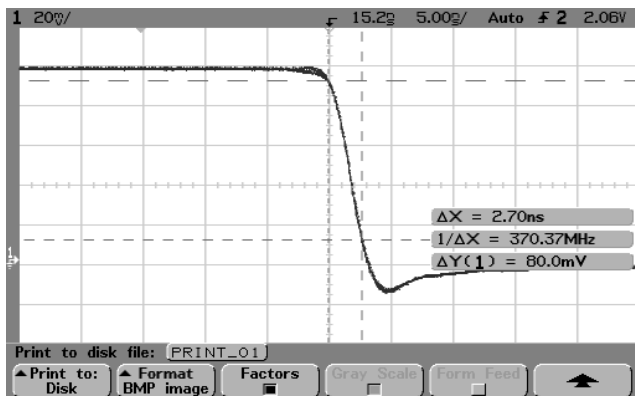
Dimensions:	1.5" x 0.85" x 0.5"
Connectors:	SMA (f) x2, SMC (f)
Vibration:	Sine: 10g peak, 20 Hz – 2 kHz, 3-axes Random: 0.065g ² /Hz 20 Hz – 2 Hz
Constant Acceleration:	100g 3-axes

Environmental Specifications:

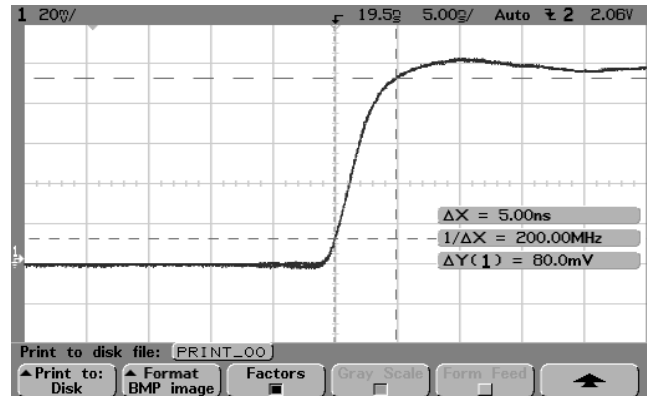
Storage Temperature:	-55°C to +85°C
Operating Temperature:	-40°C to +55°C
Altitude:	Unlimited
Humidity:	100% R/H



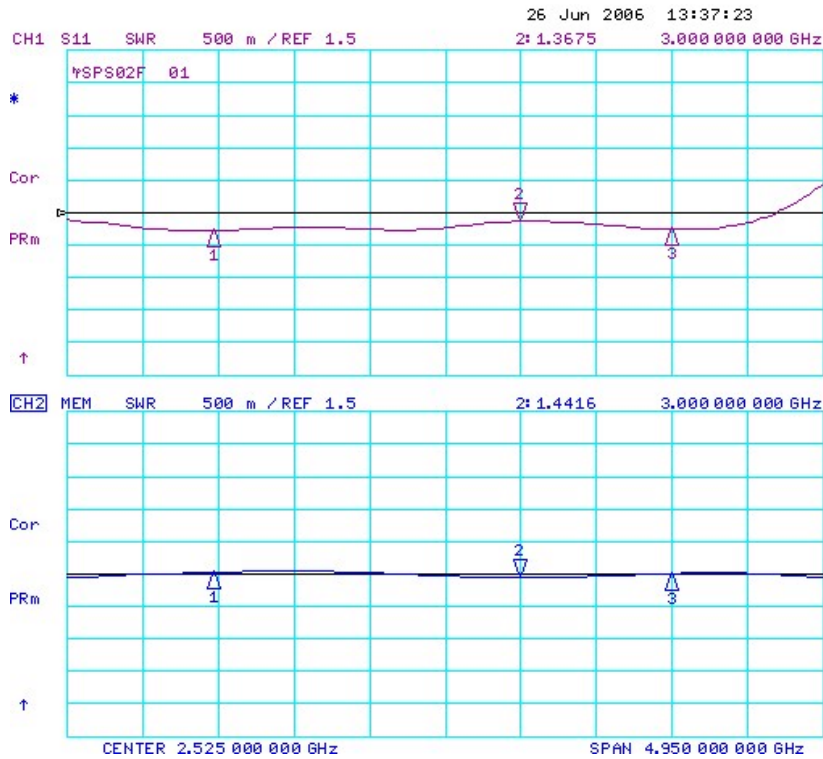
Insertion Loss and Isolation



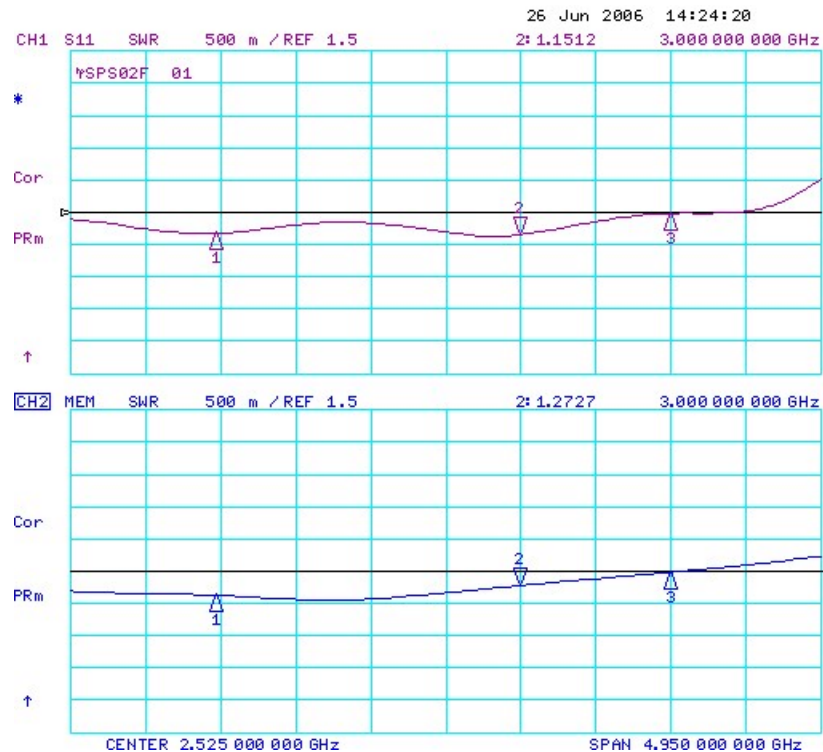
Switching Speed – Falling Edge



Switching Speed – Rising Edge



VSWR – J1 On and Off



VSWR – J2 On and Off