

SP4T RF Switch 10 - 2000 MHz

SW-114

V2.00

Features

- Ultra Broadband
- High Isolation – 60 dB Typical
- Integral TTL Driver
- Hermetic Package

Guaranteed Specifications* (From –55°C to +85°C)

Frequency Range		10-2000 MHz
Insertion Loss	10-2000 MHz	2.8 dB Max
	10-1000 MHz	2.1 dB Max
	10-500 MHz	1.8 dB Max
VSWR	10-2000 MHz	1.8:1 Max
	10-1000 MHz	1.2:1 Max
Isolation	10-2000 MHz	35 dB Min
	10-500 MHz	45 dB Min
	10-100 MHz	60 dB Min

Opening Characteristics

Impedance	50 Ohms Nominal
Switching Characteristics	
t _{ON}	2.0 μS Typ
t _{OFF}	1.0 μS Typ
Transients (In-Band)	40 mV Typ
Input Power for 1 dB Compression	+13 dBm Typ
Intermodulation Intercept Point (for two-tone input power up to +5 dBm)	
Second Order	+60 dBm Typ
Third Order	+30 dBm Typ
Bias Power	+9 to +15 VDC @ 50 mA Max –5 VDC ±5% @ 25 mA Max (550 mW Typical)

Environmental

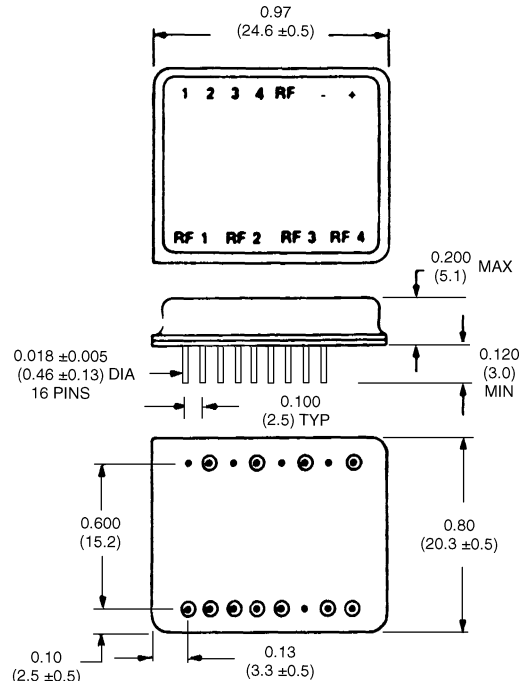
MIL-STD-883 screening available.

*All specifications apply when operated with bias voltages of +12 VDC and -5 VDC (±5%) and 50 ohm impedance at all RF ports.

Ordering Information

Model No.	Package
SW-114 PIN	Dual Inline

DI-2



Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)
.xx = ±0.02 (.x = ±0.5)
WEIGHT (APPROX): 0.28 OUNCES 8 GRAMS

Truth Table

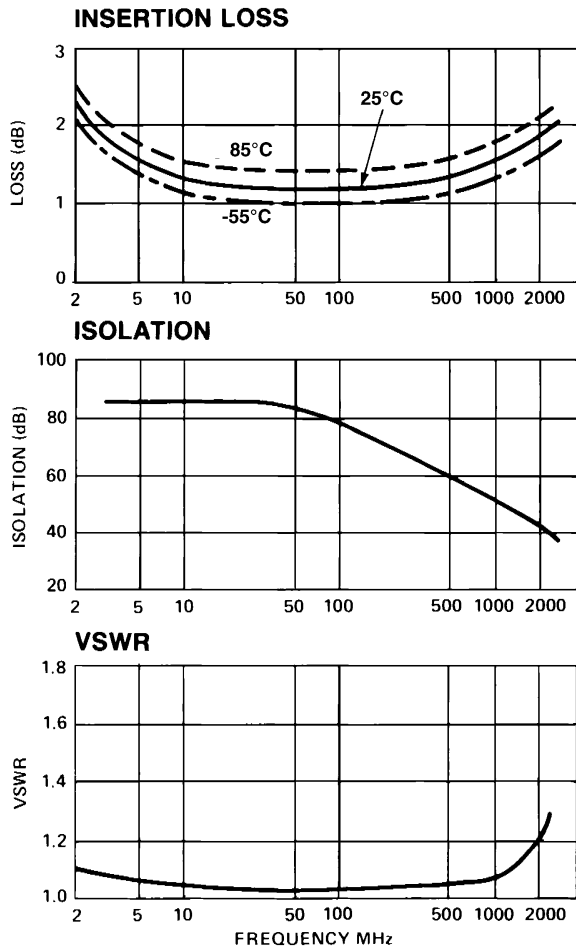
TTL CONTROL INPUTS				CONDITION OF SWITCH			
"1" = TTL LOGIC HIGH				RF COMMON TO EACH RF PORT			
1	2	3	4	RF1	RF2	RF3	RF4
1	0	0	0	ON	OFF	OFF	OFF
0	1	0	0	OFF	ON	OFF	OFF
0	0	1	0	OFF	OFF	ON	OFF
0	0	0	1	OFF	OFF	OFF	ON

Specifications Subject to Change Without Notice.

M/A-COM, Inc.

North America: Tel. (800) 366-2266 ■ Asia/Pacific: Tel. +81 (03) 3226-1671 ■ Europe: Tel. +44 (1344) 869 595
Fax (800) 618-8883 Fax +81 (03) 3226-1451 Fax +44 (1344) 300 020

Typical Performance



Specifications Subject to Change Without Notice.