



SP4T RF Switch

10 - 1000 MHz

SW-124

V2.00

Features

- Low Loss – 0.6 dB Typical
- High Isolation – 60 dB Typical
- Integral TTL Driver
- Hermetic Package
- MIL-STD-883 Screening Available

Guaranteed Specifications*

(From – 55°C to + 85°C)

Frequency Range	10-1000 MHz	
Insertion Loss	10-1000 MHz	1.4 dB Max
	10-500 MHz	1.0 dB Max
VSWR	10-1000 MHz	1.5:1 Max
	10-500 MHz	1.2:1 Max
Isolation	10-1000 MHz	40 dB Min
	10-500 MHz	50 dB Min
	10-100 MHz	60 dB Min

Operating Characteristics

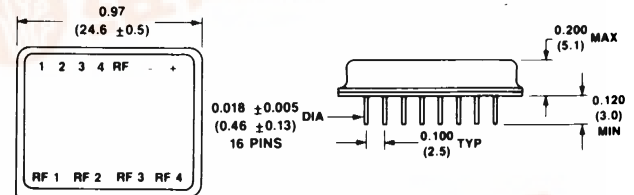
Impedance	50 Ohms Nominal
Switching Characteristics	
t _{ON}	2.0 μS Typ
t _{OFF}	1.0 μS Typ
Transients (In-Band)	40 mV Typ
Input Power for 1 dB Compression	+ 13 dBm Typ
Intermodulation Intercept Point (for two-tone input power up to + 5 dBm)	
Second Order	+ 60 dBm Typ
Third Order	+ 30 dBm Typ
Bias Power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

*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

Part Number	Package
SW-124 PIN	Dual Inline

DI-2



Dimensions in () are in mm.

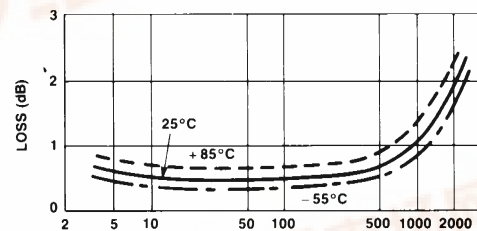
Unless otherwise noted: ..xxx = ±0.010 (.xx = ±0.25)

.xx = ±0.02 (.x = ±0.5)

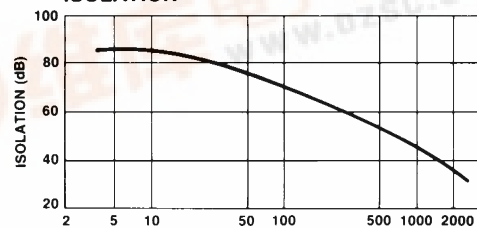
WEIGHT (APPROX.) 0.28 OUNCES 8 GRAMS

Typical Performance

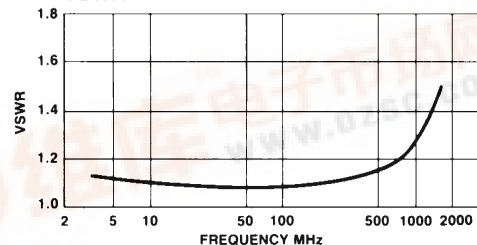
INSERTION LOSS



ISOLATION



VSWR



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.