



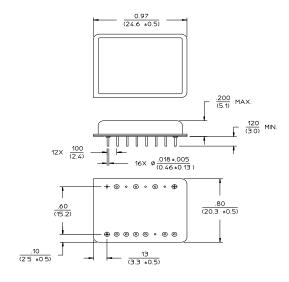
SP4T RF Switch, 10 - 1000 MHz SW-124-PIN V3

### **Features**

- Low Loss: 0.6 dB TypicalHigh Isolation: 60 dB Typical
- Integral TTL Driver
- Hermetic Package
- 50 Ohm Nominal Impedance
- MIL-STD-883 Screening Available

## **Description**

## **Functional Block Diagram**



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

## **Ordering Information**

Part Number	Package
SW-124-PIN	DI-2

Note: Reference Application Note M513 for reel size

information.

Note: Die quantity varies.

### **Truth Table**

TTL Control Inputs "1" = TTL Logic High			Condition of Switch 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

<sup>\*</sup> Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

<sup>•</sup> North America Tel: 800.366.2266 / Fax: 978.366.2266

<sup>•</sup> Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300

Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298





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Electrical Specifications:  $T_A = -55^{\circ}C$  to  $+85^{\circ}C^{1}$ 

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss	_	10 - 1000 MHz 10 - 500 MHz	dB dB	_	_	1.4 1.0
VSWR	_	10 - 1000 MHz 10 - 500 MHz	Ratio Ratio	_	_	1.5:1 1.2:1
Isolation	_	10 - 1000 MHz 10 - 500 MHz 10 - 100 mhZ	dB dB dB	40 50 60		
Ton Toff Transients	In-band		μS μS mV		2.0 1.0 40	
1 dB Compression	Input Power	_	dBm	_	+13	_
IP <sub>2</sub>	For two tone input power up to +5 dBm	_	dBm	_	+60	_
IP <sub>3</sub>	For two tone input power up to +5 dBm	_	dBm	_	+30	_
Bias Power	Power +9 to +15 VDC @ 50 mA Max -5 VDC ± 5% @ 25 mA Max		mW	_	450	_

<sup>1.</sup> All specifications apply when operated with bias voltages of +12 VDC and -5 VDC (± 5%) and 50 ohm impedance at all RF ports.

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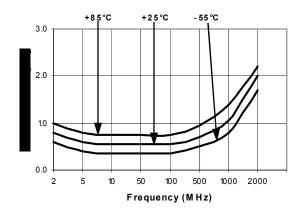




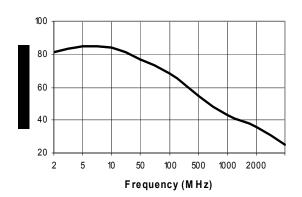
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# **Typical Performance Curves**

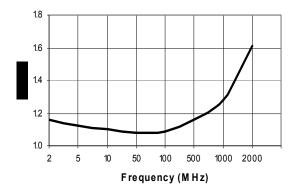
#### **Insertion Loss**



#### Isolation



### **VSWR**



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