# **SW-124-PIN**



SP4T RF Switch, 10 - 1000 MHz

Rev. V3

### **Features**

Low Loss: 0.6 dB TypicalHigh Isolation: 60 dB Typical

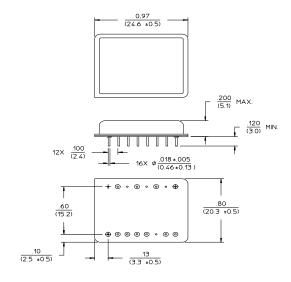
Integral TTL DriverHermetic Package

50 Ohm Nominal Impedance

• MIL-STD-883 Screening Available

## **Description**

## **Functional Block Diagram**



## **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.

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

<sup>•</sup> India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588

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## Electrical Specifications: $T_A = -55$ °C to +85°C <sup>1</sup>

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	Bias 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

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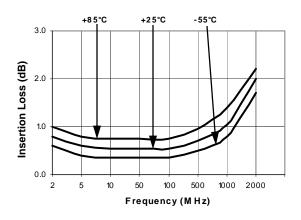


SP4T RF Switch, 10 - 1000 MHz

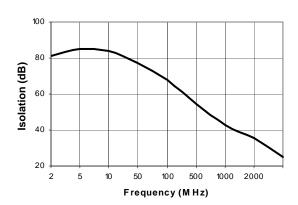
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## **Typical Performance Curves**

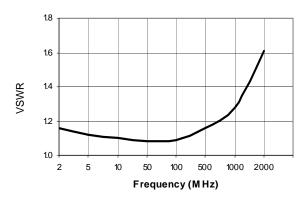
#### Insertion Loss



#### Isolation



### **VSWR**



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