

## SPDT RF Switch, 20 - 2000 MHz

SW-112-PIN

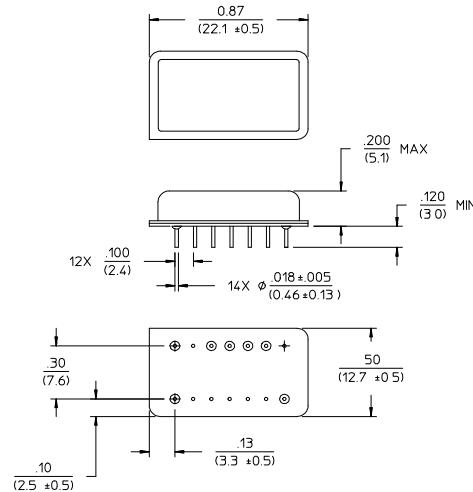
V3

### Features

- Ultra Broadband
- High Isolation: 70 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): 0.14 OUNCES 4 GRAMS

### Ordering Information

Part Number	Package
SW-112-PIN	DI-1

Note: Reference Application Note M513 for reel size information.

Note: Die quantity varies.

### Truth Table

TTL Control Input "1" = TTL Logic High	Condition of Switch RF Common to Each RF Port	
	RF1	RF2
0	On	Off
1	Off	On

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

1

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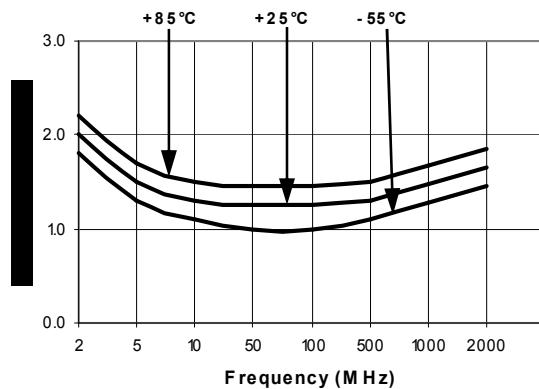
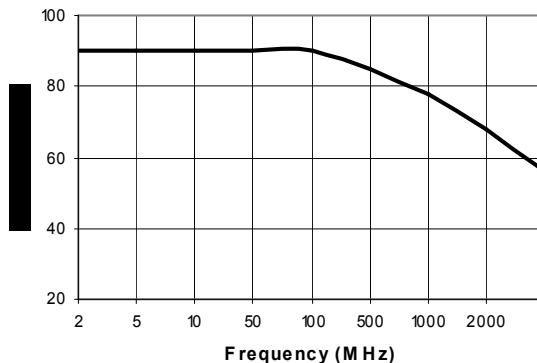
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**SW-112-PIN****V3**
**Electrical Specifications:  $T_A = -55^\circ\text{C}$  to  $+85^\circ\text{C}$ <sup>1</sup>**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	—	20 - 2000 MHz 20 - 1000 MHz 20 - 500 MHz	dB dB dB	— — —	— — —	2.2 2.0 1.8
VSWR	—	20 - 2000 MHz 20 - 1000 MHz	Ratio Ratio	— —	— —	1.5:1 1.2:1
Isolation	—	20 - 2000 MHz 20 - 1000 MHz 20 - 500 MHz	dB dB dB	50 60 70	— — —	— — —
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	+9 to +15 VDC @ 35 mA Max -5 VDC ± 5% @ 35 mA Max	—	mW	—	500	—

1. 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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**Typical Performance Curves**
***Insertion Loss******Isolation*****VSWR**