SW-121-PIN

SPST RF Switch, 10 - 1000 MHz

Features

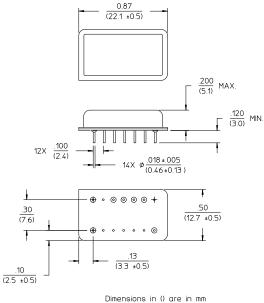
- Low Loss: 0.5 dB Typical
- High Isolation: 60 dB Typical
- Integral TTL Driver
- Hermetic Package
- 50 Ohm Nominal Impedance
- MIL-STD-883 Screening Available

Description



Rev. V3

Functional Block Diagram



Dimensions in 0 are in mm Unless Otherwise Note: .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-121-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		
	RF1 to RF2		
0	Off		
1	On		

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

1

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Rev. V3

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	_	_	1.0 0.8
VSWR	_	10 - 1000 MHz 10 - 500 MHz	Ratio Ratio	_	_	1.25:1 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 ₂	For two tone input power up to +5 dBm	_	dBm		+60	_
IP ₃	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	—	450	_

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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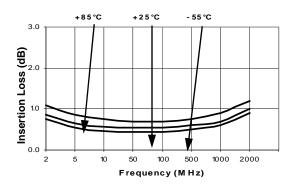
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Rev. V3

Typical Performance Curves

Insertion Loss

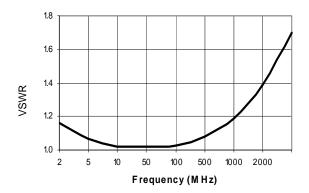


100 80 Isolation (dB) 60 40 20 5 100 2 10 50 500 1000 2000

Frequency (MHz)

Isolation

VSWR



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