SW-224-PIN / SW-225-PIN



GaAs SPDT Switch, DC - 2 GHz

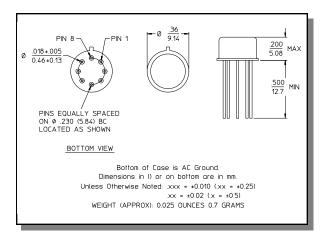
Rev. V3

Features

- Low Insertion Loss, 0.5 dB Typical
- Integral TTL Driver
- Low DC Power Consumption
- 50 Ohm Nominal Impedance
- MIL-STD-883 screening available

Description

TO-5-3 (SW-224)



Ordering Information

Part Number	Package
SW-224-PIN	TO-5-3
SW-225-PIN	FP-13

Note: Reference Application Note M513 for reel size

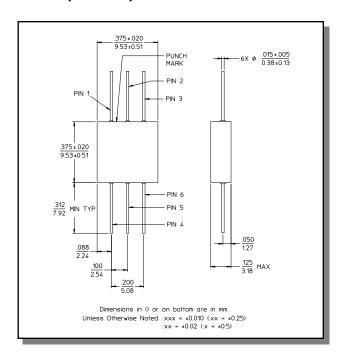
information.

Note: Die quantity varies.

Truth Table

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

FP-13 (SW-225)



^{*} 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.

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SW-224-PIN / SW-225-PIN



GaAs SPDT Switch, DC - 2 GHz

Rev. V3

Electrical Specifications: $T_A = -55$ °C to +85°C ¹

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss		DC - 2 GHz DC - 1 GHz DC - 0.5 GHz	dB dB dB	0.8 0.7 0.7		
VSWR	_	DC - 2 GHz DC - 1 GHz DC - 0.5 GHz	Ratio Ratio Ratio	_ _ _	_ _ _	1.5:1 1.25:1 1.15:1
Isolation	_	DC - 2 GHz DC - 1 GHz DC - 0.5 GHz	dB dB dB	30 35 40		_ _ _
IP ₂	For two tone input power up to +13 dBm	0.5 - 2 GHz 0.05 GHz	dBm dBm	_	+68 +62	_
IP ₃	For two tone input power up to +13 dBm	0.5 - 2 GHz 0.05 GHz	dBm dBm	_	+46 +40	_
Trise, Tfall Ton, Toff Transients	50% CTL to 90/10% RF In-band		nS nS mV	_ _ _	10 150 15	
1 dB Compression	Input Power	0.5 - 2 GHz 0.05 GHz	dBm dBm		+27 +21	
Bias Power	+5 VDC -5 VDC		mA mA	_	_	1

^{1.} All specifications apply when operated with bias voltages of +5VDC and -5VDC and 50 ohm impedance at all RF ports.

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SW-224-PIN / SW-225-PIN

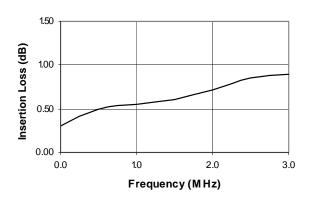


GaAs SPDT Switch, DC - 2 GHz

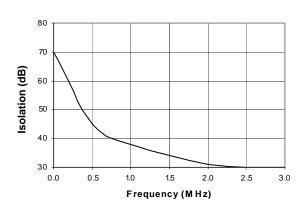
Rev. V3

Typical Performance Curves

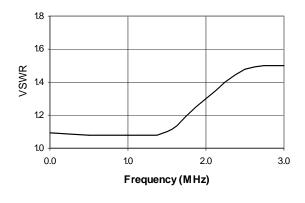
Insertion Loss



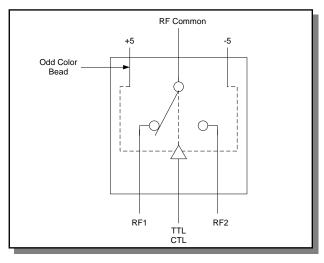
Isolation



VSWR



Pin Configuration



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