

GaAs SPDT Switch

5 - 2000 MHz

SW-217

V2.00

Features

- Low Insertion Loss, 1.0 dB Typical
- Fast Switching Speed, 20 ns Typical
- Ultra Low DC Power Consumption
0.12mA Typical
- Integral TTL Driver
- MIL-STD-883 Screening Available

Guaranteed Specifications* (From -55°C to +85°C)

Frequency Range	5-2000 MHz	
Insertion Loss	5-2000 MHz	1.5 dB Max
	5-1000 MHz	1.2 dB Max
	5-500 MHz	1.1 dB Max
VSWR	5-2000 MHz	1.8:1 dB Max
	5-1000 MHz	1.4:1 dB Max
	5-500 MHz	1.25:1 dB Max
Isolation	5-2000 MHz	40 dB Min
	5-1000 MHz	45 dB Min
	5-500 MHz	53 dB Min

Operating Characteristics

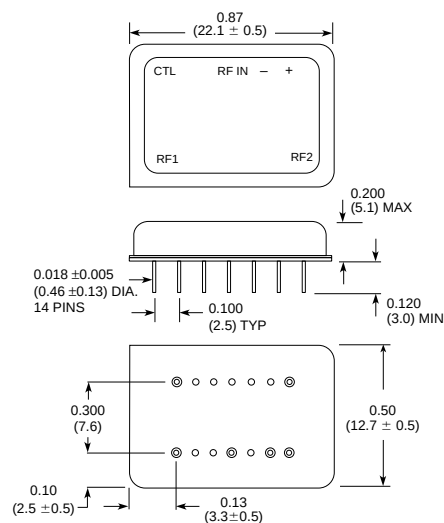
Impedance	50 Ohms Nominal		
Switching Characteristics	(TTL)		
'RISE, 'FALL	7 ns		
'ON, 'OFF (50% CTL to 90/10% RF)	20 ns		
Transients (In-Band)	100 mV		
Input Power for 1 dB Compression			
500-2000 MHz	+27 dBm Typ		
50 MHz	+21 dBm Typ		
Intermodulation Intercept Point (for two-tone input power up to +13 dBm)			
Intercept Points	IP ₂	IP ₃	
500-2000 MHz	+68	+46	dBm Typ
50 MHz	+60	+40	dBm Typ
Bias Power	+5 VDC @ 0.12 mA Typ, 1 mA Max		

* All specifications apply when operated with bias voltages of +5 VDC and 50 ohm impedance at all RF ports.

Ordering Information

Part No.	Package
SW-217 PIN	Dual Inline

DI-1



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

Specifications Subject to Change Without Notice.

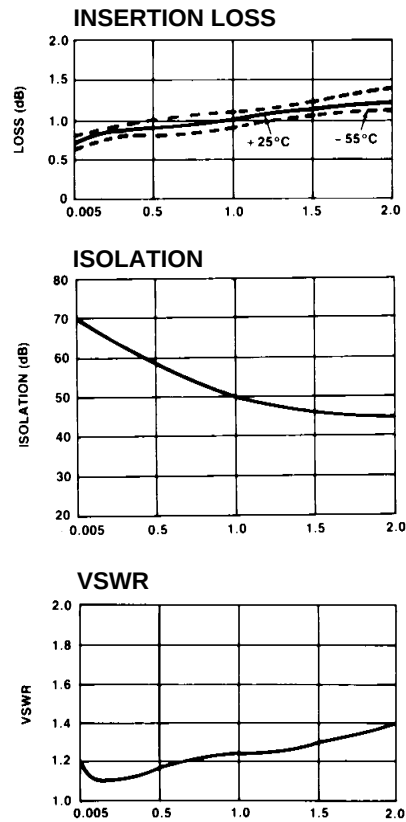
M/A-COM, Inc.

North America: Tel. (800) 366-2266
Fax (800) 618-8883

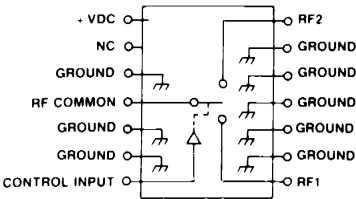
■ Asia/Pacific: Tel. +81 (03) 3226-1671
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■ Europe: Tel. +44 (1344) 869 595
Fax +44 (1344) 300 020

Typical Performance @ +25°C



Schematic



Truth Table

Control Input	Condition of Switch	
"1" = Logic High TTL (SW-217)/CMOS (SW-218)	RF Common To Each RF Port	
	RF1	RF2
1	ON	OFF
2	OFF	ON