

# 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

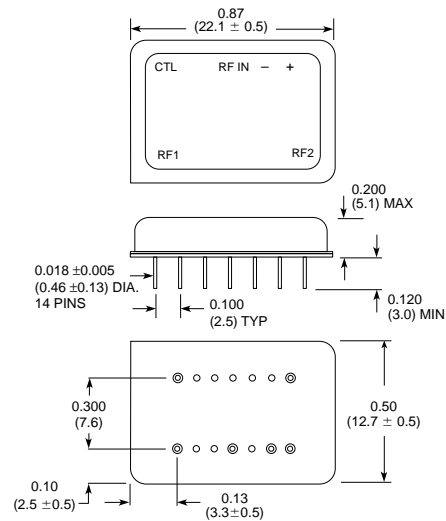
Impedance	50 Ohms Nominal	
Switching Characteristics	(TTL)	
'RISE, 'FALL	7 ns	
'ON, 'OFF (50% CTL to 90/10% RF)	20 ns	
Transients (In-Band)	100 mV	
Input Power for 1 dB Compression		
500-2000 MHz	+27 dBm Typ	
50 MHz	+21 dBm Typ	
Intermodulation Intercept Point (for two-tone input power up to +13 dBm)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

<b>Part No.</b>	<b>Package</b>
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

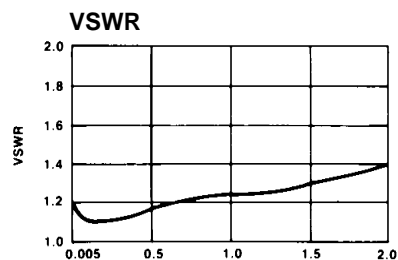
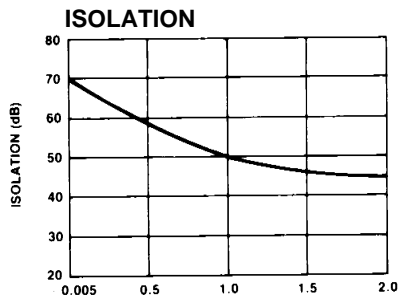
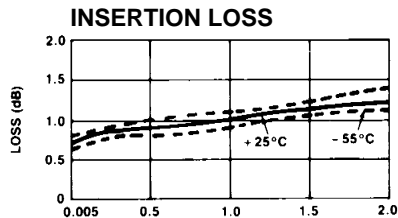
Specifications Subject to Change Without Notice.

**M/A-COM, Inc.**

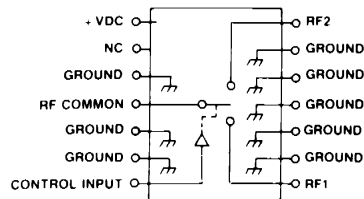
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Typical Performance @ +25°C



Schematic



Truth Table

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

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