



# GaAs SP4T Switch 5-2000 MHz

SW-262

- Low Insertion Loss, 1.0 dB Typical
- Fast Switching Speed, 20 ns Typical
- Ultra Low DC Power Consumption, 0.3mA Typical
- Integral TTL (SW-262) or CMOS (SW-265) Driver

## Guaranteed Specifications\*

(From -55°C to +85°C)

<b>Frequency Range</b>	5-2000 MHz	
<b>Insertion Loss</b>	5-2000 MHz	2.0 dB Max
	5-1000 MHz	1.4 dB Max
	5- 500 MHz	1.2 dB Max
<b>VSWR</b>	5-2000 MHz	2.5:1 Max
	5-1000 MHz	1.5:1 Max
	5- 500 MHz	1.3:1 Max
<b>Isolation</b>	5-2000 MHz	35 dB Min
	5-1000 MHz	37 dB Min
	5- 500 MHz	42 dB Min

## Operating Characteristics

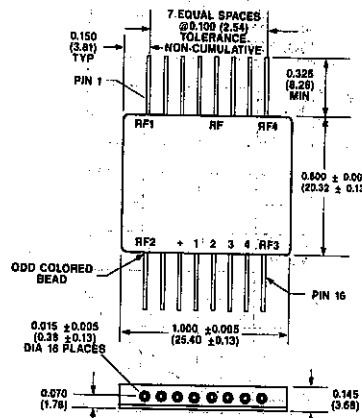
<b>Impedance</b>	50 Ohms Nominal		
<b>Switching Characteristics</b>	<b>(TTL)</b>		
t <sub>RISE</sub> , t <sub>FALL</sub>	7 ns		
t <sub>ON</sub> , t <sub>OFF</sub> (50% CTL to 90/10% RF)	20 ns		
Transients (In-Band)	80 mV		
<b>Input Power for 1 dB Compression</b>			
500-2000 MHz	+27 dBm Typ		
50 MHz	+21 dBm Typ		
<b>Intermodulation Intercept Point (for two-tone input power up to +13 dBm)</b>			
Intercept Points	IP <sub>2</sub>	IP <sub>3</sub>	
500-2000 MHz	+68	+46	dBm Typ
50 MHz	+60	+40	dBm Typ
<b>Bias Power</b>			
SW-262	+5 VDC @ 0.30 mA Typ, 1 mA Max		

### Environmental

See Appendix for MIL-STD-883 screening option.

\*All specifications apply when operated with bias voltages of +5 VDC (SW-262) and 50 ohm impedance at all RF ports

FP-17

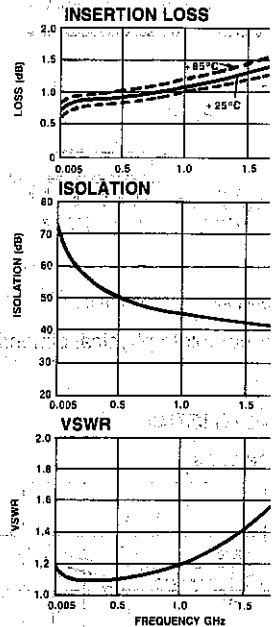


Dimensions in ( ) are in mm.

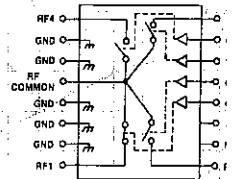
See Appendix for complete physical dimensions

## GaAs SP4T Switch

### Typical Performance



### Schematic



### Truth Table

Control Input				Condition	
*1 = Logic High				RF Common To	
TTL (SW-262)/CMOS (SW-265)					
CTL1	CTL2	CTL3	CTL4	RF1	RF2
0	0	0	0	ON	OFF
0	1	0	0	OFF	ON
0	0	1	0	OFF	OFF
0	0	0	1	OFF	OFF

## Ordering Information

<b>Model No.</b>	<b>Package</b>
SW-262 PIN	Flatpack

Specifications Subject to Change Without Notice.

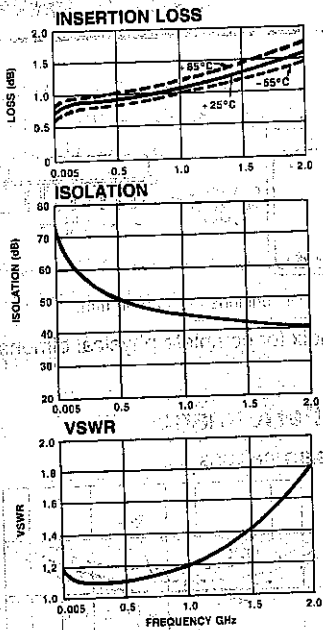
M/A-COM Inc. 1011 Pawtucket Boulevard, Lowell, MA 01853 USA

Telephone: 800-366-2280

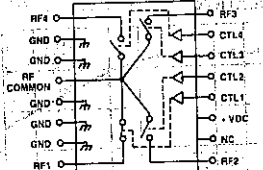
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M/A-COM Inc. 1011 Pawtucket Boulevard, Lowell, MA 01853 USA

Typical Performance



Schematic



Truth Table

Control Input				Condition of Switch			
*1 = Logic High				RF Common To Each RF Port			
CTL (SW-262)/CMOS (SW-265)				RF1	RF2	RF3	RF4
CTL1	CTL2	CTL3	CTL4				
1	0	0	0	ON	OFF	OFF	OFF
0	1	0	0	OFF	ON	OFF	OFF
0	0	1	0	OFF	OFF	ON	OFF
0	0	0	1	OFF	OFF	OFF	ON

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