

# Matched GaAs SP4T Switch

## 5 - 2000 MHz

SW-261

V2.00

### Features

- Low Insertion Loss, 1.0 dB Typical
- Fast Switching Speed, 20 ns Typical
- Ultra Low DC Power Consumption, 0.3 mA Typical
- Integral TTL

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

Frequency Range	5-2000 MHz	
Insertion Loss	5-2000 MHz	2.1 dB Max
	5-1000 MHz	1.6 dB Max
	5- 500 MHz	1.4 dB Max
VSWR	5-2000 MHz	2.5:1 Max
	5-1000 MHz	1.8:1 Max
	5- 500 MHz	1.4:1 Max
Isolation	5-2000 MHz	35 dB Min
	5-1000 MHz	36 dB Min
	5- 500 MHz	42 dB Min

### Operating Characteristics

Impedance 50 Ohms Nominal

#### Switching Characteristics

	(TTL)
Trise, Tfall	7 ns Typ
Ton, T off (50% CTL to 90/10%RF)	20 ns Typ
Transients (In-Band)	80 mV Typ

#### Input Power for 1 dB Compression

500-2000 MHz	+27dBm Typ
50 MHz	+21dBm Typ

#### Intermodulation Intercept Point

(for two-tone input power up to +13 dBm)

Intercept Points	IP2	IP3	
500-2000 MHz	+68	+46	dBm Typ
50MHz	+60	+40	dBm Typ

#### Bias Power

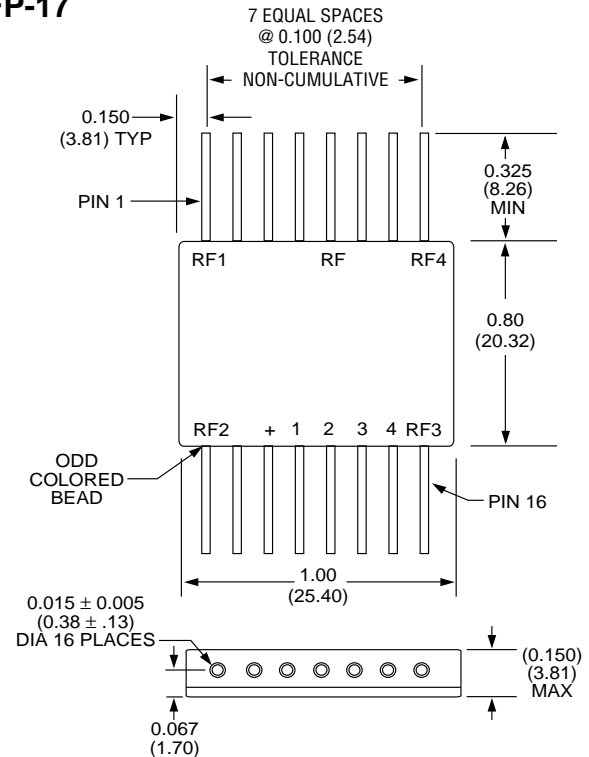
+5 VDC @ 0.30 mA Typ, 1 mA Max

#### Environmental

MIL-STD-883 screening available.

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

### FP-17



Dimensions in ( ) are in mm.  
 Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)  
 .xx = ±0.02 (.x = ±0.5)  
 WEIGHT (APPROX.): 0.21 OUNCES 6 GRAMS

### Ordering Information

Model No.

SW-261 PIN

Package

Flatpack

Specifications Subject to Change Without Notice.

M/A-COM, Inc.

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

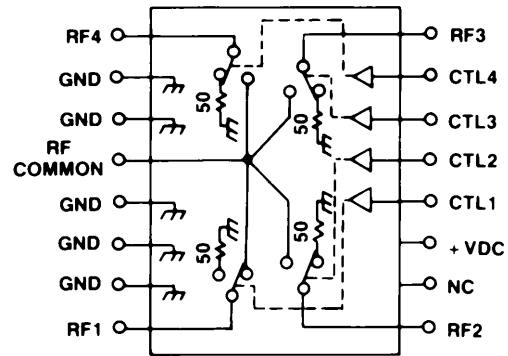
■ Asia/Pacific: Tel. +81 (03) 3226-1671  
 Fax +81 (03) 3226-1451

■ Europe: Tel. +44 (1344) 869 595  
 Fax +44 (1344) 300 020

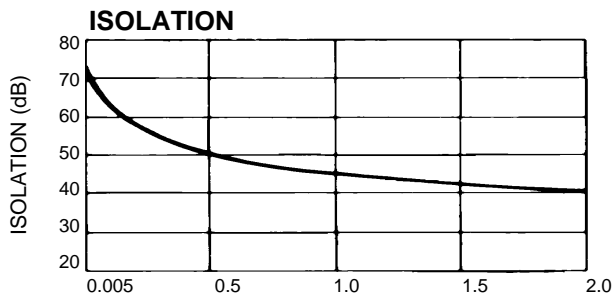
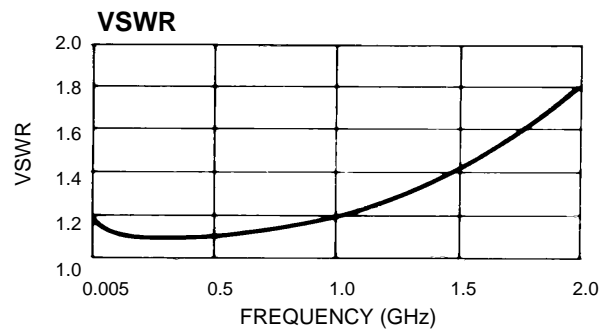
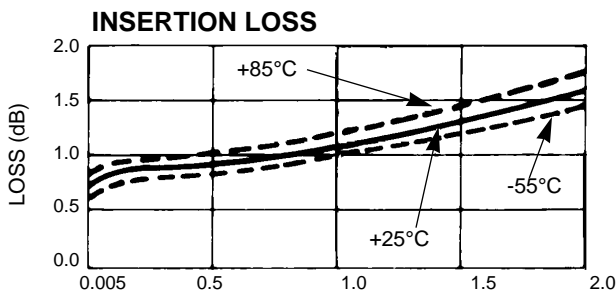
Truth Table

Control Input				Condition of Switch			
"1" = Logic High				RF Common To Each RF PORT			
CTL1	CTL2	CTL3	CTL4	RF1	RF2	RF3	RF4
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

Schematic



Typical Performance



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