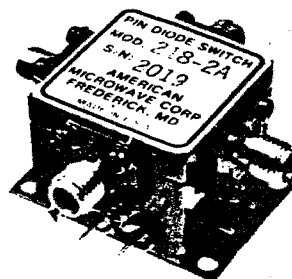


**AMERICAN Microwave  
corporation**

## 2 - 18 GHz SP3T SWITCHES WITH DRIVERS



### FEATURES

- 10 MHz to 18 GHz
- Low Insertion Loss
- High Isolation
- Small Size

### DESCRIPTION

SP3T PIN diode switches that cover the frequency range from 2 to 18 GHz are available in octave to multi-decade bandwidths.

All feature rugged, bonded diode chip and micro-strip construction that meet MIL-STD-202C environmental requirements. TTL drivers feature ultra reliable discrete component construction. Drivers, in addition, will withstand up to 300% overload and reverse polarity connection for up to 30 seconds without damage.

Optional control port connectors, power supply voltages, male RF connectors and truth tables are available.

10/89

7311G GROVE ROAD, FREDERICK, MARYLAND 21701 (301) 662-4700

# SPECIFICATIONS

MODEL NUMBER	SWITCH TYPE	FREQUENCY RANGE (GHz)	MAXIMUM INSERTION LOSS (dB)	MINIMUM ISOLATION (dB)	MAXIMUM VSWR
SW-2040-3A	SP3T	2-4	1.6	45	1.5
SW-4080-3A	SP3T	4-8	1.7	40	1.6
SW-8012-3A	SP3T	8-12	1.8	35	1.7
SW-1218-3A	SP3T	12-18	2.6	30	1.9
SW-218-3A	SP3T	2-18	2.8	30	2.5

RISE/FALL TIME: (10% RF to 90% RF) 50 ns, Max  
 (90% RF to 10% RF) 50 ns, Max

POWER HANDLING: +23 dBm, Max

TTL DELAY: 50 ns, typical

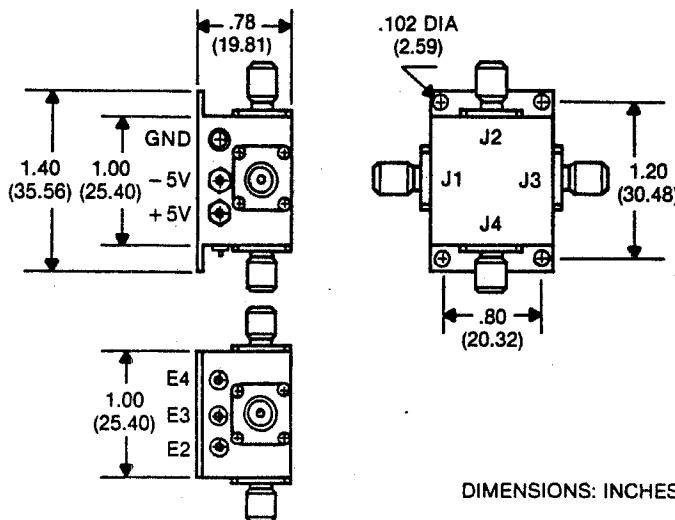
POWER SUPPLY: +5VDC @100 mA, Max  
 -5VDC @ 50 mA, Max

- OPTIONS:
- 001 - 55 dB, Min Isolation
  - 002 Independent Controls (SPDT)
  - 003 SMA Male Connectors
  - 004 Solder Pin Control Terminal
  - 005 Reverse Logic
  - 006 - 15V Supply
  - 007 - 12V Supply

## ENVIRONMENTAL RATINGS

- Operating Temperature - 65° C to 110° C
- Non-Operating Temperature - 65° C to 125° C
- Humidity MIL-STD-202F, METHOD 103B
- Shock MIL-STD-202F, METHOD 213B
- Vibration MIL-STD-202F, METHOD 204D
- Altitude MIL-STD-202F, METHOD 105C
- Temp Cycling MIL-STD-202F, METHOD 107D

## MECHANICAL DATA



STANDARD LOGIC TABLE	
LOGIC-H	RF-ON
E2	J1-J2
E3	J1-J3
E4	J1-J4

INVERTED LOGIC	
LOGIC-L	RF-ON
E2	J1-J2
E3	J1-J3
E4	J1-J4

DIMENSIONS: INCHES (MILLIMETERS)