

**DESCRIPTION:**

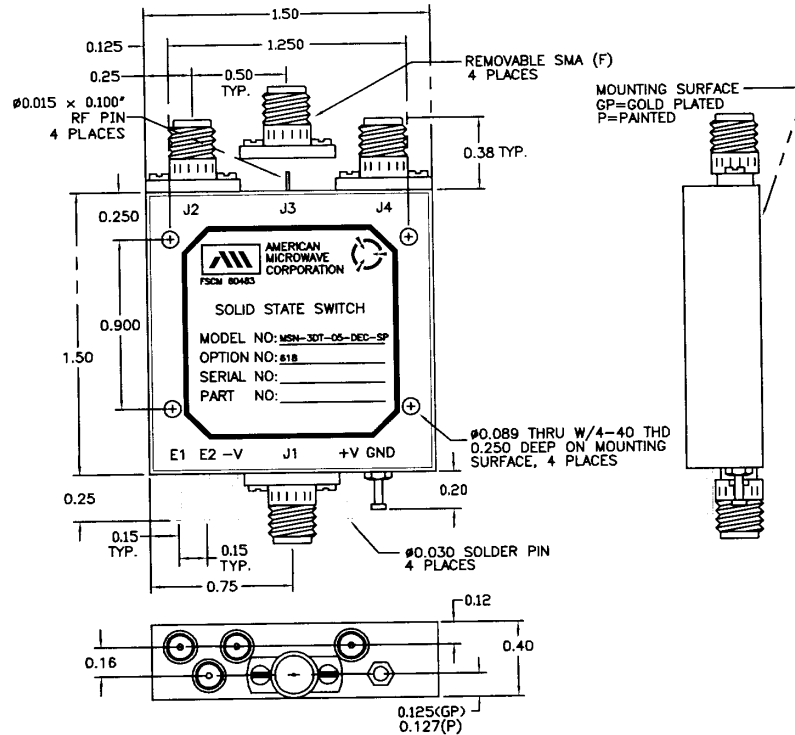
AMC MODEL NUMBER MSN-3DT-05-DEC-SP OPTION 618 IS A SINGLE POLE THREE THROW PIN DIODE SWITCH. DESIGNED FOR THE 6 GHz TO 18 GHz FREQUENCY RANGE WITH LOW INSERTION LOSS AND HIGH ISOLATION.

| ZONE |  | REV. | DESCRIPTION                      | DATE     | APPROVED |
|------|--|------|----------------------------------|----------|----------|
|      |  |      | ORIGINAL RELEASE, JOB# 906116E-1 | 10/29/09 |          |

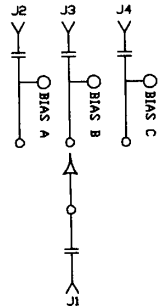
**SPECIFICATIONS:**

- FREQUENCY: ..... 6 GHz TO 18 GHz
- INSERTION LOSS: ..... 3.75 dB
- ISOLATION: ..... 70 dB MINIMUM
- VSWR: ..... ABSORPTIVE IN/OUT: 2.0:1  
 ABSORPTIVE OUT/OFF: 2.0:1
- SPEED: ..... RISE: 10ns TYPICAL, 15ns MAX.  
 FALL: 10ns TYPICAL, 15ns MAX.  
 DELAY ON: 75ns TYPICAL, 100ns MAX.  
 DELAY OFF: 75ns TYPICAL, 100ns MAX.
- POWER INPUT: ..... (CW)+20dBm (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: ..... 1 WATT CW, 10 WATTS PEAK 1 usec
- CONTROL: ..... TTL LOGIC "0"=ON "1"=OFF
- POWER SUPPLY: ..... +5V @ 150 mA MAXIMUM  
 -5V @ 100 mA MAXIMUM

**MECHANICAL OUTLINE**



**BLOCK DIAGRAM**



| LOGIC TABLE |   |    |    |
|-------------|---|----|----|
| L           | L | J2 | ON |
| H           | L | J3 | ON |
| L           | H | J4 | ON |

**CONFIDENTIAL AND PROPRIETARY**

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE: ..... -55°C TO +85°C (OPERATING)  
 -65°C TO +125°C (STORAGE)
- HUMIDITY: ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107D COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES

TOLERANCES:  
 X.XX ±0.020  
 X.XXX ±0.010

|                     |          |  |              |
|---------------------|----------|--|--------------|
| PART NO.            |          | AMERICAN MICROWAVE CORPORATION<br>FREDERICK, MARYLAND                    |              |
| APPROVALS           | DATE     | TITLE  |              |
| DRAWN<br><i>WJP</i> | 10/29/09 | PRODUCT FEATURE<br>MSN-3DT-05-DEC-SP<br>OPTION 618<br>SOLID STATE SWITCH |              |
| CHECKED             |          | SIZE   | FSCM NO.     |
| ISSUED              |          | A  | 60483        |
|                     |          | DWG NO.  | 100-6812     |
|                     |          | SCALE  | SHEET 1 of 3 |