



**AMERICAN MICROWAVE CORPORATION**

**10 MHz TO 18 GHz  
ABSORPTIVE & REFLECTIVE  
LOW LOSS, HIGH ISOLATION  
SP7T & SP8T PIN DIODE SWITCHES**

- LOW LOSS
- ABSORPTIVE
- HIGH ISOLATION
- ULTRA-BROADBAND

**AMC MODEL Nos:**

**SWN-1170-7DT-00418 (RADIAL), SW-2181-8AT-00118 (RECTANGULAR)  
SWNR-218-8DT-00118(RADIAL), SWN-218-8DT-00118(RECTANGULAR)  
MSN-8DR/DT-05-10M18 (RECTANGULAR), MSN-8DR/DT-06-10M18 (RECTANGULAR)  
MSNC-8DR/DT-06-10M18 (RECTANGULAR)**

**SPECIFICATIONS:**

● FREQUENCY RANGE	: 10 MHz TO 18 GHz
● INSERTION LOSS	: 3.75 dB MAX. (For Absorptive, Non-Absorptive or Reflective reduces Loss by about 0.5dB) : 3.50 dB TYP. @ 0.01 GHz : 1.00 dB TYP. @ 2.0 GHz : 2.20 dB TYP. @ 10.0 GHz : 3.50 dB TYP. @ 18.0 GHz
● ISOLATION	: 60 dB MIN. : 70 dB TYP. @ 0.05 GHz : 90 dB TYP. @ 2.0 GHz : 75 dB TYP. @ 12.0 GHz : 75 dB TYP. @ 18.0 GHz
● VSWR	: 2.0:1
● SWITCHING SPEED	: "RISE" : 10 nS MAX., 5nS TYP. : "FALL" : 10 nS MAX., 5nS TYP. : "ON" : 150nS MAX., 80nS TYP. : "OFF" : 50 nS MAX., 25nS TYP.
● CONTROL	: TTL Compatible (Independent Control, Standard; 3-bit Binary Decoder Available)
● VIDEO TRANSIENTS	: 2.0 V Peak to Peak in a 20 MHz BW (Without Video Filters) : 3.0 V Peak to Peak in a 300 MHz BW (Without Video Filters)
● RF INPUT POWER	: +20 dBm Operating, 1 Watt Survival
● DC POWER SUPPLY	: + 5vdc @ 250 mA MAX., <200 mA TYP. (±5vdc Standard, Other Voltage Options : - 5vdc @ 75 mA MAX., < 50 mA TYP. Also Available)
● SIZE & WEIGHT	: SWN-1170-7DT (Radial) : 1.25" dia. X 0.70" @ <3.0 oz. : SWN-218-8DT (Rectangular) : 5.10" X 2.0" X 0.56" @ <7.0 oz. : SW-2181-8AT (Rectangular) : 5.10" X 2.0" X 0.75" @ <7.0 oz. : SWNR-218-8DT (Radial) : 2.0" dia. X 0.75" @ <4.5 oz. : MSN-8DR/DT-05-10M18 (Rectangular) : 4.00" X 1.5" X 0.40" @ <4.5 oz. : MSN-8DR/DT-06-10M18 (Rectangular) : 4.75" X 1.5" X 0.50" @ <4.5 oz. : MSNC-8DR/DT-06-10M18 (Rectangular) : 4.75" X 1.5" X 0.40" @ <4.5 oz.

**ABOVE DATA IS TYPICAL FOR ABSORPTIVE OR REFLECTIVE VERSIONS  
OTHER MULTI-THROW (SP2T, SP3T, SP4T, SP5T, SP6T & SP7T) DESIGNS AVAILABLE**

**WEBSITE: [HTTP://WWW.AMWAVE.COM](http://WWW.AMWAVE.COM)**

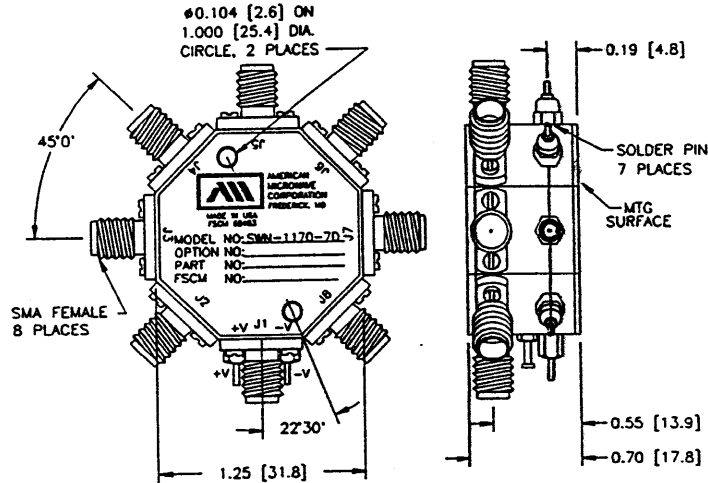
**E-MAIL: [AMCPMI@AOL.COM](mailto:AMCPMI@AOL.COM)**

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**SUMMARY TEST DATA  
SP7T & SP8T ABSORPTIVE & REFLECTIVE SWITCHES**

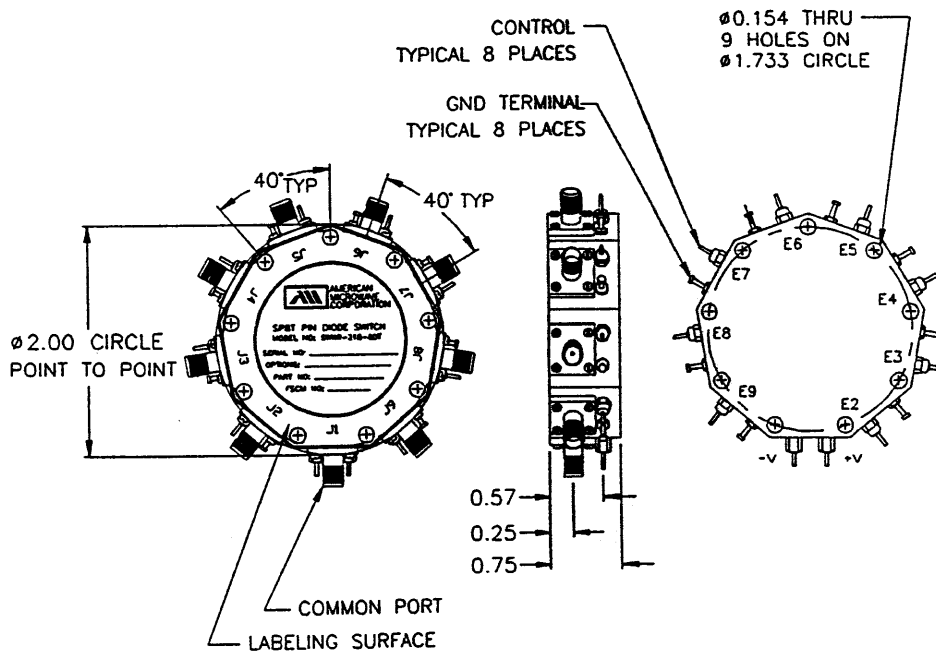


**MECHANICAL OUTLINES**



**SWN-1170-7DT**

0.4" Thick Option Available, Inquire with Factory for Details



**SWNR-218-8DT (RADIAL)**

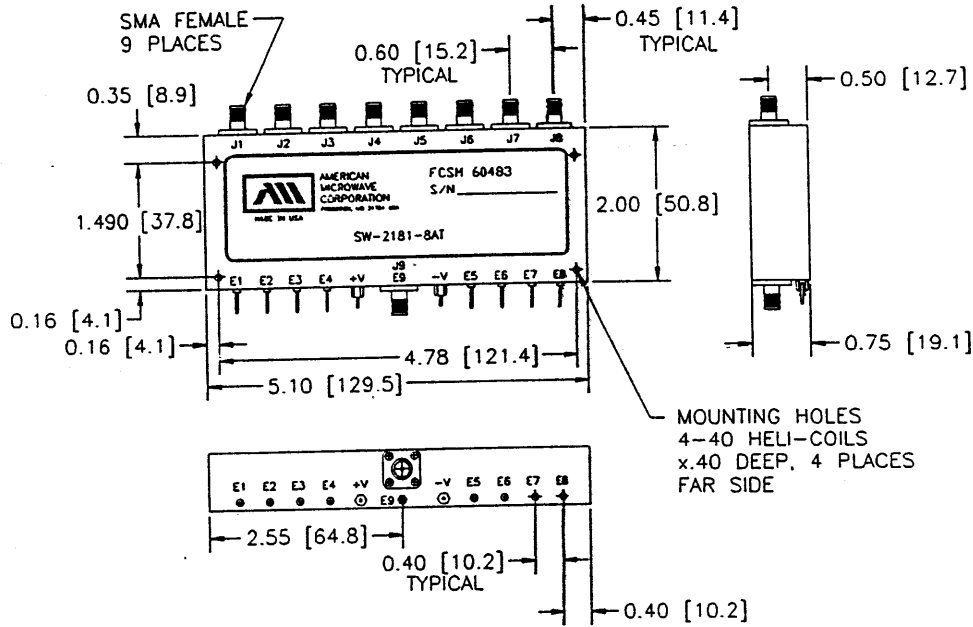
0.4" Thick Option Available, Inquire with Factory for Details  
 TOLERANCES: X.XX ± 0.02 INCHES, X.XXX ± 0.005 INCHES

JUNE 1, 1998

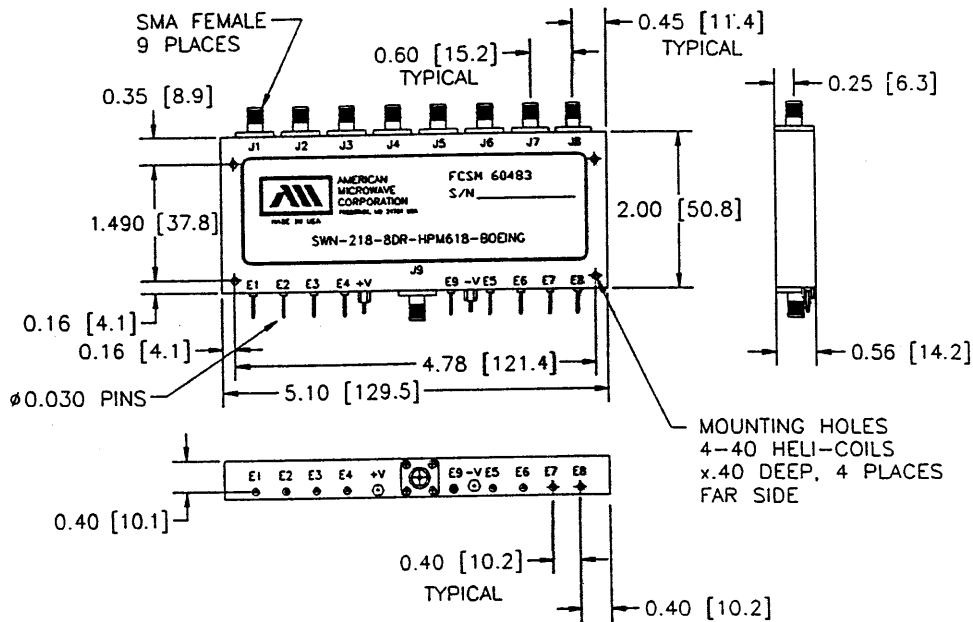
**SUMMARY TEST DATA**  
**SP7T & SP8T ABSORPTIVE & REFLECTIVE SWITCHES**



**MECHANICAL OUTLINES**



**SW-2181-8AT**



**SWN-218-8DT**

0.4" Thick Option Available, Inquire with Factory for Details  
 TOLERANCES: X.XX ± 0.02 INCHES, X.XXX ± 0.005 INCHES

JUNE 1, 1998

