



# 10 MHz TO 2 GHz ABSORPTIVE LOW LOSS, HIGH ISOLATION SP8T PIN DIODE SWITCH

- LOW LOSS
- ABSORPTIVE
- HIGH ISOLATION

### AMC MODEL Nos:

**SWN-2000-8DR/DT-0012** (ABSORPTIVE or REFLECTIVE)  
**MSN-8DR/DT-05-10M2** (ABSORPTIVE or REFLECTIVE)  
**MSN-8DR/DT-06-10M2** (ABSORPTIVE or REFLECTIVE)  
**MSNC-8DR/DT-06-10M2** (ABSORPTIVE or REFLECTIVE)

### SPECIFICATIONS:

- **FREQUENCY RANGE** : 10 MHz GHz TO 2 GHz
- **INSERTION LOSS** : 2.50 dB MAX.  
 (For Absorptive, Non-Absorptive or Reflective reduces Loss by about 0.5 dB)  
 : 1.50 dB TYP. @ 0.01 GHz  
 : 1.30 dB TYP. @ 0.5 GHz  
 : 1.50 dB TYP. @ 1.0 GHz  
 : 2.00 dB TYP. @ 2.0 GHz
- **ISOLATION** : 75 dB MIN.  
 : 90 dB TYP. @ 0.05 GHz  
 : 95 dB TYP. @ 0.1 GHz  
 : 95 dB TYP. @ 0.5 GHz  
 : 90 dB TYP. @ 1.0 GHz  
 : 80 dB TYP. @ 2.0 GHz
- **VSWR** : 2.0:1
- **SWITCHING SPEED** :
 

	<u>ALL SERIES DESIGN</u>	<u>SERIES/SHUNT DESIGN</u>
RISE	50 nS Maximum	25 nS Maximum
FALL	50 nS Maximum	25 nS Maximum
ON	250 nS Maximum	100 nS Maximum
OFF	250 nS Maximum	100 nS Maximum
- **CONTROL** : TTL Compatible (Independent Control, Standard; 3-bit Binary Decoder Available)
- **VIDEO TRANSIENTS** : 2.5 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. (+5/-5vdc Standard,  
 : -5vdc @ 75 mA MAX., <50 mA TYP. Other Voltage Options Also Available)
- **SIZE & WEIGHT** : SWN : 5.1" X 2.0" X 0.56" @ <7.0 oz. (5.10 " X 2.0" X 0.75" Also Available)  
 : MSN-05: 4.0" X 1.5" X 0.40", MSN-06: 4.75" X 1.5" X 0.5" Both <6.0oz.  
 : MSNC-06: 4.76" X 1.5" X 0.40" <6.0oz.

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)

7311 G GROVE ROAD, FREDERICK, MARYLAND 21704 • Tel. (301) 662-4700 • Fax (301) 662-4938



# SUMMARY TEST DATA

MODEL NUMBER

: SWN-2000-8DR/DT-0012

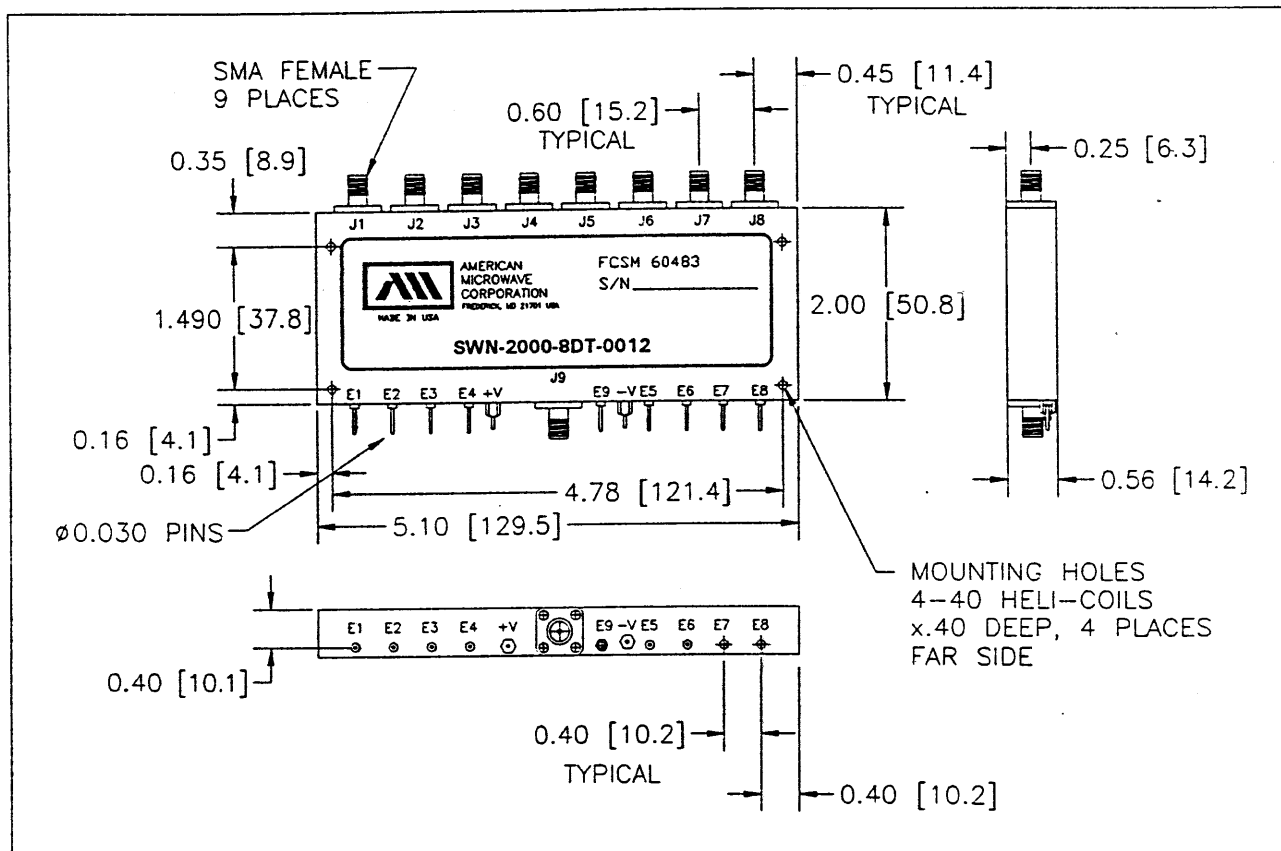
: MSN-8DR/DT-05-10M2

: MSN-9DR/DT-06-10M2

TECHNICIAN

: R. AFABLE

## MECHANICAL OUTLINES



SWN-2000-8DT-0012

TOLERANCE: X.XX ±0.05 INCHES, X.XXX ±0.002 INCHES

## ENVIRONMENTAL RATINGS

- TEMPERATURE -54°C TO +85°C (OPERATING)  
-65°C TO +100°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

MAY 25, 1998



## AVAILABLE OPTIONS AND HOW TO ORDER SWN-2000 SERIES OF SWITCHES

**EXAMPLE :**

SWN - 2000 - 8 D T - XXXX - ###  
1      2    3 4 5    6      7

- 1. : SWN : Switch Designator (SW = Older Models, SWN = Newer Models)
- 2. : 2000 : Series Designator (2181 = Older Models, 218 or 1170 = Newer Models)
- 3. : 8 : Number of Throws, ie: 3 (SP3T), 4 (SP4T), 5 (SP5T), 6 (SP6T), 7 (SP7T), 8 (SP8T)
- 4. : D : Indicates Integral Driver
- 5. : T : T = Terminated (Absorptive), R = Reflective (Non-Absorptive)
- 6. : XXXX : Frequency Range of Switch as Illustrated Below
- 7. : ### : Available Options as Noted Below

OPTION:	MULTI-THROW SWITCH OPTIONS
001	SMA Male RF Connectors (Increases Insertion Loss by 0.25dB per Arm)
002	Inverted Logic, "0" = ON (Standard TTL Logic is "1" = ON)
003	+ 12vdc DC Power Supply (Standard is $\pm$ 5vdc)
004	+ 15vdc DC Power Supply (Standard is $\pm$ 5vdc)
005	3-bit Binary Decoder
006	- 12vdc DC Power Supply (Standard is $\pm$ 5vdc)
007	- 15vdc DC Power Supply (Standard is $\pm$ 5vdc)
008	MULTIPIN CONNECTOR
009	0.4" THICK OPTION AVAILABLE (Consult Factory For Details)
XXXX	Indicates the Frequency for which the Switch has been Adjusted  For Example:      10M2 = 10 MHz to 2.0 GHz 40M2 = 40 MHz to 2.0 GHz 12 = 1.0 GHz to 2.0 GHz 1052 = 1.5 GHz to 2.0 GHz

AMERICAN MICROWAVE CORPORATION  
7311-G GROVE ROAD, FREDERICK, MARYLAND 21704  
TELEPHONE NUMBER : 301-662-4700  
FACIMILE NUMBER : 301-662-4938

PLEASE CALL OR FAX FOR CATALOGS, TEST REPORTS AND ORDERING INFORMATION  
ON ANY OF OUR PRODUCTS

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