



**AMERICAN MICROWAVE  
CORPORATION**

## SP2T NON-REFLECTIVE/ABSORPTIVE SOLID STATE PIN DIODE SWITCH

### KEY FEATURES

- 500 MHz TO 18 GHz  
(10MHz to 18GHz optional)
- HIGH POWER (2 WATTS)
- HIGH ISOLATION
- LOW INSERTION LOSS
- TTL LOGIC COMPATIBLE



**AMC MODEL No: SWN-218-2DT OPTION 0518, HPR2W**

### SPECIFICATIONS: (NON-REFLECTIVE)

• FREQUENCY RANGE	:	500 MHz to 18 GHz (10MHz to 18GHz Optional)
• INSERTION LOSS	:	3.0 dB MAX.
	:	0.85 dB TYP. @ 500 MHz
	:	0.75 dB TYP. @ 2 GHz
	:	1.25 dB TYP. @ 10 GHz
	:	3.00 dB TYP. @ 18 GHz
• ISOLATION	:	≥ 80 dB MIN.
	:	≥ 95 dB TYP. @ 500 MHz
	:	≥ 95 dB TYP. @ 2 GHz
	:	≥ 90 dB TYP. @ 10 GHz
	:	≥ 80 dB TYP. @ 18 GHz
• VSWR	:	2.0:1
• SWITCHING SPEED	:	"RISE" 15nS MAX., 10nS TYP.
	:	"FALL" 15nS MAX., 10nS TYP.
	:	"ON" 100nS MAX., 75nS TYP.
	:	"OFF" 100nS MAX., 75nS TYP.
• CONTROL	:	Single control TTL Toggle (Independent control available)
• VIDEO TRANSIENTS	:	≤4.3 V Peak to Peak, 300 MHZ Bandwidth
	:	≤1.7 V Peak to Peak, 20 MHZ Bandwidth
• RF INPUT POWER	:	+20dBm Operating, 1 Watt Survival (Other power Levels available)
• DC POWER SUPPLY	:	+5vdc @ +100mA MAX.
(Other supply voltages available)	:	- 12vdc @ - 100mA MAX.
• SIZE	:	1.2"(L) X 1.0"(W) X 0.5"(H)
• WEIGHT	:	≤ 1.2 oz

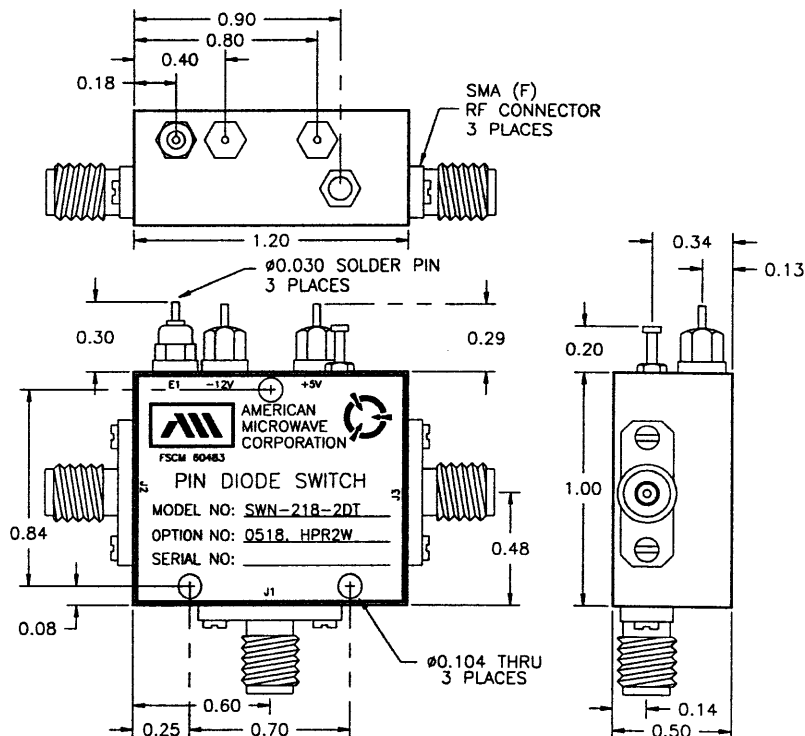
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7311 G GROVE ROAD, FREDERICK, MARYLAND 21704 • Tel. (301) 662-4700 • Fax (301) 662-4938



## SUMMARY TEST DATA

**MODEL NUMBER** : SWN-218-2DT OPTION 0518, HPR2W  
**SERIAL NUMBER** : 2MS910753  
**ENGINEER** : RENE AFABLE  
**VOLTAGE & CURRENT DRAW** : +5vdc: @+69.1mA; -12vdc: @ -62.5mA



ALL DIMENSIONS ARE IN INCHES

TOLERANCES:

X.XX ±0.020  
 X.XXX ±0.010

### 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.

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