

## DESCRIPTION

AMC MODEL SW-0105-2A IS A REFLECTIVE SPDT SWITCH MODULE WITH INTEGRAL DRIVER, DESIGNED TO MAINTAIN LOW LOSS/VSWR AND VIDEO TRANSIENT RESPONSES. APPLICATIONS ARE FOR HIGHLY SENSITIVE LOW-NOISE RADARS, RECEIVERS, AND MISSILE SYSTEMS.

## SPECIFICATIONS

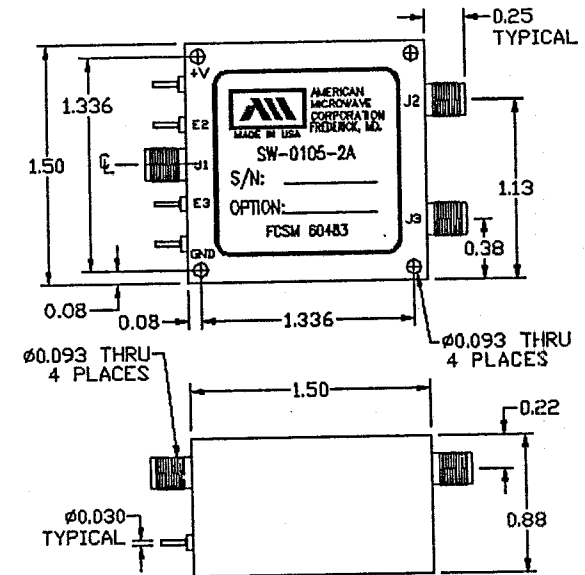
- FREQUENCY RANGE ..... 100-500 MHz MINIMUM
- INSERTION LOSS ..... 0.8 dB MAXIMUM
- AMPLITUDE BALANCE .....  $\pm 0.1$  dB MAXIMUM
- PHASE BALANCE .....  $\pm 0.5^\circ$  MAXIMUM
- ISOLATION ..... 60 dB MINIMUM
- VSWR ..... 1.3:1 MAXIMUM
- SWITCHING TIME
  - RISE (10% RF TO 90% RF) ..... 300 ns MAXIMUM
  - FALL (90% RF TO 10% RF) ..... 300 ns MAXIMUM
  - ON (50% TTL TO 90% RF) ..... 500 ns MAXIMUM
  - OFF (50% TTL TO 10% RF) ..... 500 ns MAXIMUM
- RF POWER RATINGS ..... +30 dBm CW MAXIMUM
- RF LEAKAGE (CONDUCTIVE/RADIATED) ... 60 dBc MINIMUM
- IN-BAND VIDEO POWER/TRANSIENTS ... -60 dBm MAXIMUM
- CONTROLS ..... TTL COMPATIBLE, UNITY LOAD  
2 INDIVIDUAL CONTROLS  
LOGIC "0" = INSERTION LOSS  
LOGIC "1" = ISOLATION  
(SEE TRUTH TABLE)
- POWER SUPPLY ..... +5VDC  $\pm 5\%$  @ 130 mA MAXIMUM
- CONNECTORS
  - RF INPUT/OUTPUT ..... SMA FEMALE
  - POWER ..... SOLDER PIN
  - CONTROL ..... SOLDER PIN
- SIZE ..... 1.5" x 1.5" x 0.88"

## AVAILABLE OPTIONS

- A01 ..... 50  $\Omega$  CONTROL IMPEDANCE
- A02 ..... 100  $\Omega$  CONTROL IMPEDANCE
- A03 ..... INVERSE CONTROL LOGIC (LOGIC "0" ISOLATION)
- A08 ..... SINGLE CONTROL LOGIC (LOGIC "0" = J1-J2 PATH ON)
- A16 ..... +9 TO +18 VDC POWER SUPPLY
- A17 ..... EXTENDED FREQUENCY BAND  
(FROM 10 MHz TO 18 GHz, CONSULT FACTORY)

ZONE		REV.	DESCRIPTION	DATE	APPROVED
		A	ORIGINAL RELEASE, JOB # 20384E	11/22/92	<i>[Signature]</i>

## MECHANICAL OUTLINE




E3	E2	RF PATH ON
1	0	J1-J2
0	1	J1-J3

### NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX  $\pm 0.020$   
X.XXX  $\pm 0.010$
- 3) WEIGHT: APPROX. 5 OZ

## ENVIRONMENTAL RATINGS

- TEMPERATURE ..... -55°C TO +95°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

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		<b>PRODUCT FEATURE</b> <b>SW-0105-2A</b> 100-500 MHz, LOW NOISE, REFLECTIVE SPDT SWITCH MODULE	
APPROVALS DRAWN CHECKED	DATE 11/22/92 11/22/92	SIZE A	SHEET 1 OF 2 DWG. # 100-2870