

## DESCRIPTION

AMC MODEL SW-2184-1A-113 IS A REFLECTIVE SPST SWITCH/MODULATOR WITH INTEGRAL ECL DRIVER, DESIGNED TO MAINTAIN VERY LOW IN-BAND VIDEO TRANSIENT SIGNALS, AND ULTRA FAST SWITCHING RESPONSE TIME.

## SPECIFICATIONS

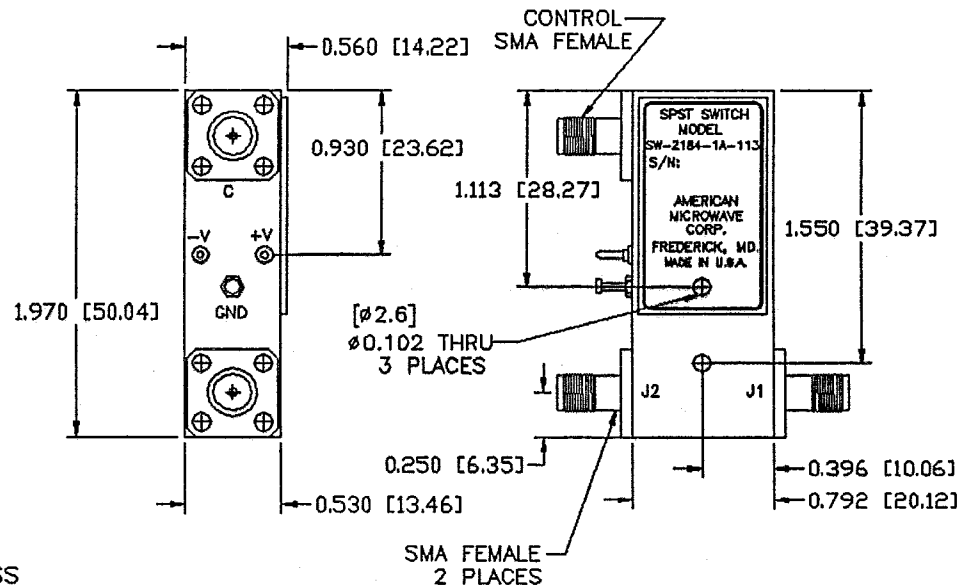
- FREQUENCY RANGE ..... 2-18 GHz MINIMUM
- INSERTION LOSS ..... 2-12 GHz, 2.5 dB MAXIMUM  
12-18 GHz, 3.1 dB MAXIMUM
- ISOLATION ..... 80 dB MINIMUM
- VSWR (DN) ..... 1.9:1 MAXIMUM
- SWITCHING TIME
  - RISE (10% RF TO 90% RF) ..... 10 ns MAXIMUM
  - FALL (90% RF TO 10% RF) ..... 10 ns MAXIMUM
  - ON (50% TTL TO 90% RF) ..... 15 ns MAXIMUM
  - OFF (50% TTL TO 10% RF) ..... 15 ns MAXIMUM
- RF POWER RATINGS ..... 2W CW MAXIMUM,  
10W PEAK (1  $\mu$ s pw) MAXIMUM
- CONTROL ..... SINGLE ENDED ECL LOGIC,  
50 $\Omega$  CONTROL IMPEDANCE  
LOGIC "0" (-1.75V)= ISOLATION  
LOGIC "1" (-0.9V)= INSERTION LOSS
- IN-BAND VIDEO POWER/TRANSIENTS ..... 50mV P-P IN 20 MHz BANDWIDTH
- POWER SUPPLY ..... +5VDC  $\pm$ 5% @ 100 mA MAXIMUM  
-5VDC  $\pm$ 5% @ 80 mA MAXIMUM
- CONNECTORS
  - RF INPUT/OUTPUT ..... SMA (FEMALE)
  - POWER ..... SOLDER PIN
  - CONTROL ..... SMA (FEMALE)
- SIZE ..... 0.792" x 1.97" x 0.56"

## AVAILABLE OPTIONS

- A02 ..... 100 $\Omega$  CONTROL IMPEDANCE
- A03 ..... INVERSE CONTROL LOGIC (LOGIC "0" INSERTION LOSS)
- A09 ..... BALANCED ECL LOGIC (SOLDER PIN CONTROLS)
- A10 .....  $\pm$ 9VDC TO  $\pm$ 18VDC SUPPLY POWER
- A14 ..... J1 SMA MALE, J2 SMA FEMALE
- A15 ..... TWO SMA MALE CONNECTORS
- A16 ..... SOLDER PIN CONTROL TERMINAL
- A17 ..... SMA MALE CONTROL TERMINAL
- A18 ..... SMC MALE CONTROL TERMINAL
- A19 ..... CANNON MULTIPIN MDM9SSP
- 240 ..... 2ns RISE/FALL TIME

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A		ORIGINAL RELEASE, JOB # 112249	11/22/92	<i>My</i>

## MECHANICAL OUTLINE



### NOTES:

- 1) DIMENSIONS ARE IN INCHES [MILLIMETERS]
- 2) TOLERANCES: X.XX  $\pm$ 0.020  
X.XXX  $\pm$ 0.010
- 3) WEIGHT: APPROX. 1.3 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

APPROVALS	DATE
DRAWN <i>WSP</i>	11/22/92
CHECKED <i>[Signature]</i>	11/22/92

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**PRODUCT FEATURE**  
**SW-2184-1A-113**

2-18 GHz, REFLECTIVE, LOW VIDEO TRANSIENT, ULTRA FAST SPST PULSE MODULATOR/SWITCH

SIZE A SHEET 1 OF 2 DWG. # 100-2860