

## DESCRIPTION

AMC MODEL SWS-2183-3D IS A REFLECTIVE BROAD BAND SP3T SWITCH MODULE WITH INTEGRAL TTL DRIVER IN A LOW PROFILE HERMETICALLY SEALED HOUSING.

## SPECIFICATIONS

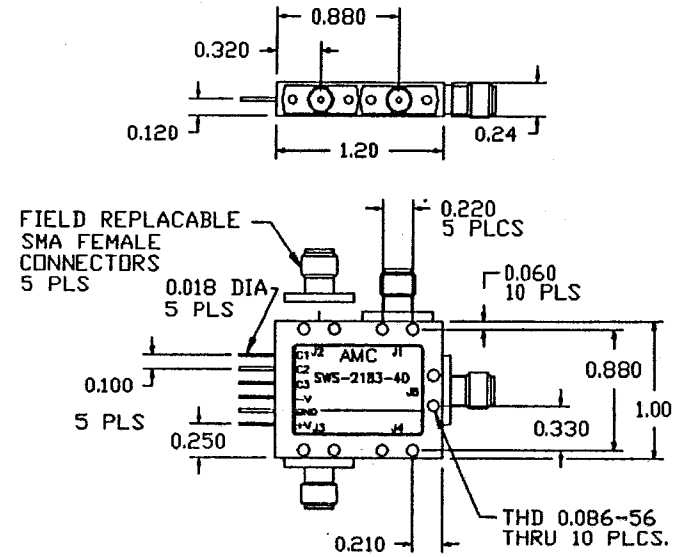
- FREQUENCY RANGE ..... 1-18 GHz MINIMUM
- INSERTION LOSS ..... 1- 2 GHz 1.2 dB MAXIMUM  
2- 4 GHz 1.5 dB MAXIMUM  
4- 8 GHz 2.0 dB MAXIMUM  
8-12 GHz 2.5 dB MAXIMUM  
12-18 GHz 3.0 dB MAXIMUM
- ISOLATION ..... 65 dB MINIMUM
- VSWR (ON) ..... 2 : 1 MAXIMUM
- SWITCHING TIME  
RISE (10% RF TO 90% RF) ..... 10 nS MAXIMUM  
FALL (90% RF TO 10% RF) ..... 10 nS MAXIMUM  
ON (50% TTL TO 90% RF) ..... 20 nS MAXIMUM  
OFF (50% TTL TO 10% RF) ..... 20 nS MAXIMUM
- CONTROL ..... TTL COMPATIBLE, UNITY LOAD  
3 INDIVIDUAL CONTROLS  
LOGIC "0" = INSERTION LOSS  
LOGIC "1" = ISOLATION
- RF POWER RATING ..... 1W CW, MAXIMUM
- POWER SUPPLY ..... + 5VDC ±5% @ 110 mA MAXIMUM  
-12VDC ±5% @ 60 mA MAXIMUM
- CONNECTORS  
RF INPUT/OUTPUT ..... FIELD REPLACEABLE SMA (FEMALE)  
POWER ..... SOLDER PIN  
CONTROL ..... SOLDER PIN
- SIZE ..... 1.20" x 1.00" x 0.24"

## AVAILABLE OPTIONS

- A01 ..... 50Ω CONTROL IMPEDANCE
- A02 ..... 100Ω CONTROL IMPEDANCE
- A03 ..... INVERSE CONTROL LOGIC (LOGIC "0" ISOLATION)
- A04 ..... EXTENDED FREQUENCY RANGE TO 100 MHz
- A07 ..... INPUT/OUTPUT VIDEO FILTER  
(ADDITIONAL 0.5 dB LOSS, 2-18 GHz)
- A10 ..... -15VDC SUPPLY
- A12 ..... 2 BIT DECODER OPTION (30 nS EXCESS DELAY)

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	ORIGINAL RELEASE, JOB # 20382-3	11/17/92	<i>MM</i>

## MECHANICAL OUTLINE



LOGIC TABLE			
C3	C2	C1	RF PATH
1	1	0	J4-J1
1	0	1	J4-J2
0	1	1	J4-J3

### NOTES:

- 1) DIMENSIONS ARE IN INCHES
- 2) TOLERANCES: X.XX ±0.020  
X.XXX ±0.010
- 3) WEIGHT: APPROX. 1.0 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



**AMERICAN MICROWAVE CORPORATION**  
7311G GROVE RD., FREDERICK, MD. 21701  
TEL: (301) 662-4700 FAX: (301) 662-4938

APPROVALS	DATE
<i>Wayne P. [Signature]</i>	11/17/92
<i>[Signature]</i>	11/22/92

**PRODUCT FEATURE**  
**SWS-2183-3D**  
SLIM LINE 1 TO 18 GHz, REFLECTIVE, SP3T SWITCH MODULE  
SIZE A SHEET 1 OF 2 DWG. # 100-2535-3