

## DESCRIPTION

AMC MODEL SWS-2184-1D OPT: A10 IS A REFLECTIVE BROAD BAND SPST SWITCH MODULE WITH INTEGRAL TTL DRIVER PACKAGED IN A LOW PROFILE, HERMETICALLY SEALED HOUSING.

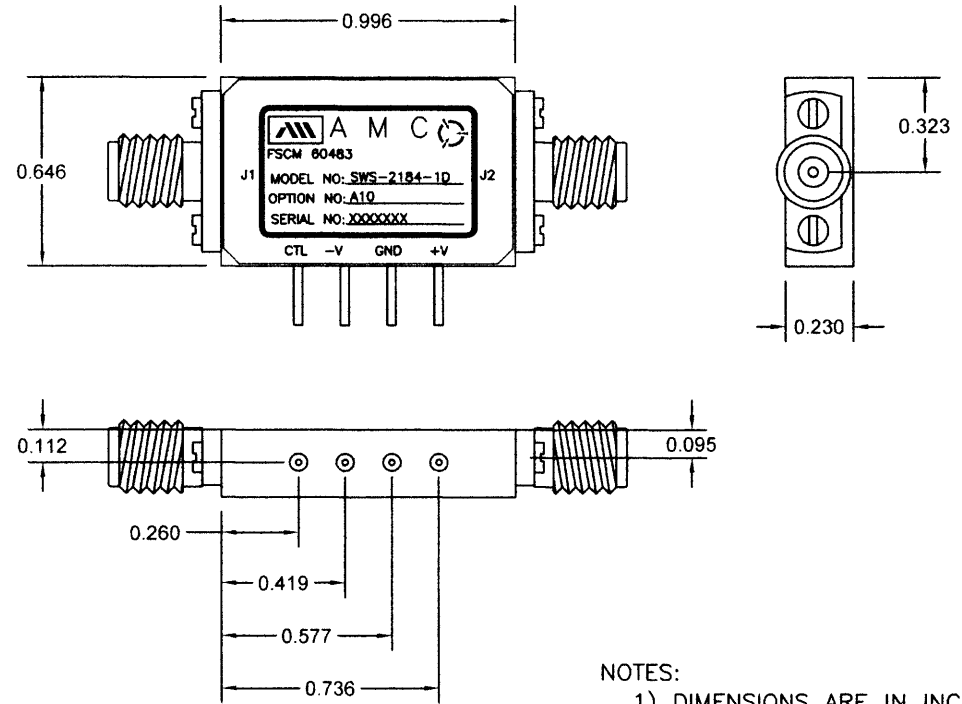
## SPECIFICATIONS

- FREQUENCY RANGE . . . . . 1-18 GHz MINIMUM
- INSERTION LOSS . . . . . 1- 2 GHz 1.0 dB MAXIMUM  
2- 4 GHz 1.2 dB MAXIMUM  
4- 8 GHz 1.4 dB MAXIMUM  
8-12.4 GHz 1.9 dB MAXIMUM  
12.4-18 GHz 2.4 dB MAXIMUM
- ISOLATION . . . . . 1- 2 GHz 60 dB MINIMUM  
2-18 GHz 80 dB MINIMUM
- VSWR (ON) . . . . . 2:1 MAXIMUM
- RF POWER RATING . . . . . 2W CW, 10W PEAK (1  $\mu$ S PW)
- 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  
LOGIC "0" = INSERTION LOSS  
LOGIC "1" = ISOLATION
- POWER SUPPLY . . . . . + 5VDC  $\pm$ 5% @ 50 mA MAXIMUM  
-15VDC  $\pm$ 5% @ 5 mA MAXIMUM
- CONNECTORS  
RF INPUT/OUTPUT . . . . . FIELD REPLACEABLE SMA (FEMALE)  
POWER . . . . . SOLDER PIN  
CONTROL . . . . . SOLDER PIN
- SIZE . . . . . 0.996" x 0.646 x 0.230"

## AVAILABLE OPTIONS

- A01 . . . . . 50 $\Omega$  CONTROL IMPEDANCE
- A02 . . . . . 100 $\Omega$  CONTROL IMPEDANCE
- A03 . . . . . INVERSE CONTROL LOGIC (LOGIC "0" ISOLATION)
- A04 . . . . . EXTENDED FREQUENCY RANGE TO 100 MHz
- A05 . . . . . 5 WATTS CW MAXIMUM
- A06 . . . . . 2 nS RISE/FALL TIME
- A07 . . . . . INPUT/OUTPUT VIDEO FILTER  
(ADDITIONAL 0.5 dB EXCESS LOSS, 2-18 GHz)
- A08 . . . . . SINGLE ENDED ECL (10 nS ON/OFF TIME)
- A09 . . . . . BALANCED ECL DRIVER (10 nS ON/OFF TIME)
- A10 . . . . . -15 VOLT POWER SUPPLY


| REVISIONS |      |                  |         |          |
|-----------|------|------------------|---------|----------|
| ZONE      | REV. | DESCRIPTION      | DATE    | APPROVED |
|           | -    | ORIGINAL RELEASE | 12/5/03 |          |



- NOTES:
- 1) DIMENSIONS ARE IN INCHES
  - 2) TOLERANCES: X.XX  $\pm$ 0.020  
X.XXX  $\pm$ 0.010
  - 3) WEIGHT: APPROX. 0.7 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

|                     |         |   |          |              |
|---------------------|---------|---|----------|--------------|
| PART NO.            |         |  AMERICAN MICROWAVE CORPORATION<br>FREDERICK, MARYLAND |          |              |
| APPROVALS           | DATE    | TITLE   |          |              |
| DRAWN<br><i>JKM</i> | 12/5/03 | PRODUCT FEATURE<br>SWS-2184-1D<br>OPTION A10  |          |              |
| CHECKED             |         | SIZE  | FSCM NO. | DWG NO.      |
| ISSUED              |         | A   | 60483    | 100-6862     |
|                     |         | SCALE   | N:S      | SHEET 1 OF 3 |