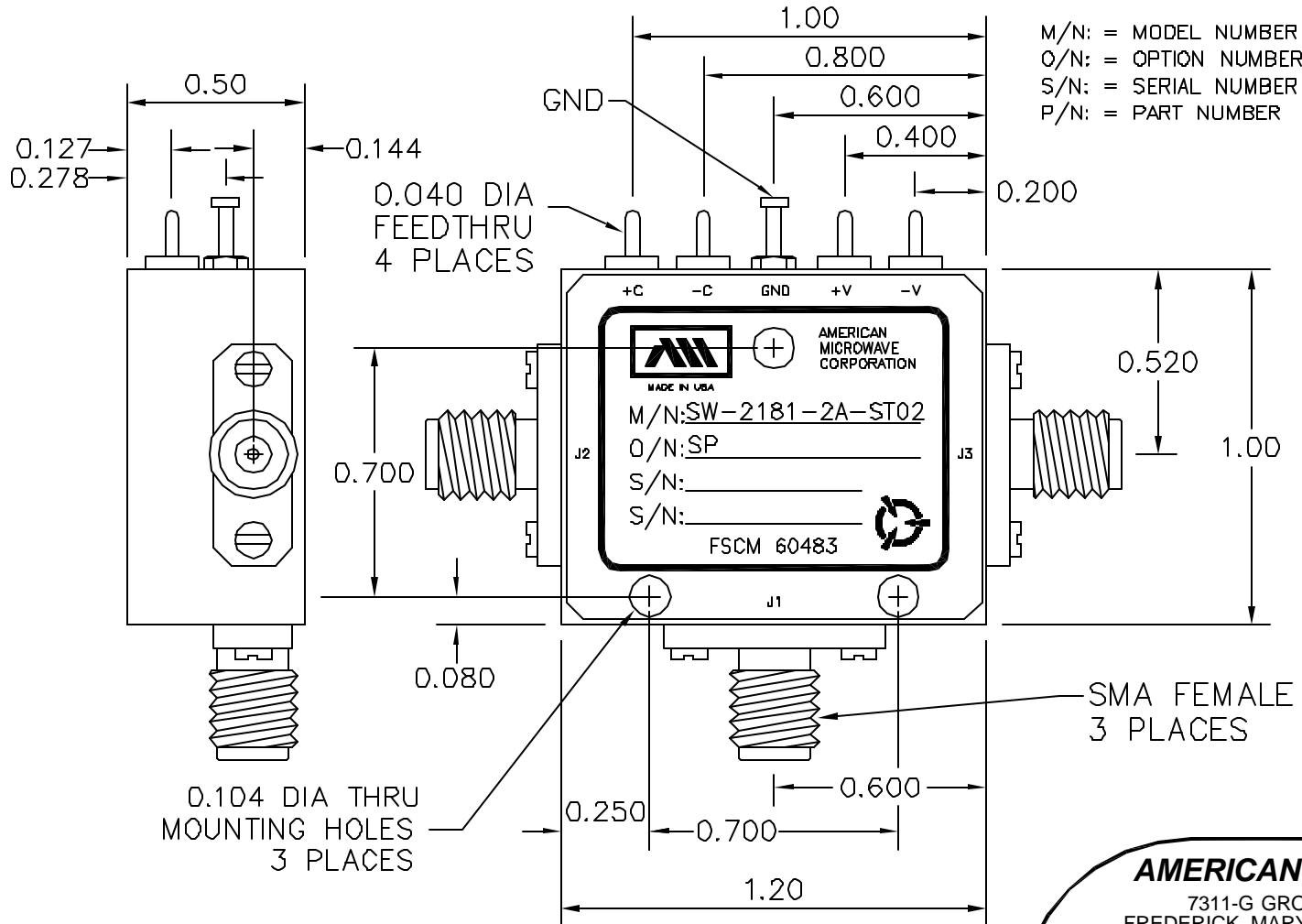


# DESCRIPTION

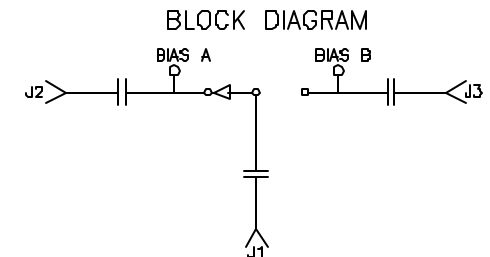
AMC MODEL SW-2181-2A-ST02 OPTION: SP IS A REFLECTIVE BROAD BAND SINGLE POLE TWO THROW SWITCH MODULE WITH AN INTEGRAL BALANCED ECL DRIVER, DESIGNED FOR ULTRA FAST SWITCHING APPLICATIONS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-		ORIGINAL RELEASE JOB# 503078-1	8/18/08	



M/N: = MODEL NUMBER  
 O/N: = OPTION NUMBER  
 S/N: = SERIAL NUMBER  
 P/N: = PART NUMBER

# MECHANICAL OUTLINE



## AMERICAN MICROWAVE CORPORATION

7311-G GROVE ROAD  
 FREDERICK, MARYLAND 21704 USA  
 TEL: 301-662-4700 FAX: 301-662-4938  
 WEBSITE: [www.americanmicrowavecorp.com](http://www.americanmicrowavecorp.com)  
 E-MAIL: [sales@americanmicrowavecorp.com](mailto:sales@americanmicrowavecorp.com)  
 ISO 9001:2000 CERTIFIED



ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX ±0.020  
 X.XXX ±0.010

APPROVALS		DATE	TITLE		
DRAWN	<i>[Signature]</i>	8/18/08	MECHANICAL OUTLINE SW-2181-2A-ST02 OPTION: SP		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7439
			SCALE	N:S	SHEET 2 OF 3

## DESCRIPTION

AMC MODEL SW-2181-2A-ST02 OPTION: SP IS A REFLECTIVE BROAD BAND SINGLE POLE TWO THROW SWITCH MODULE WITH AN INTEGRAL BALANCED ECL DRIVER, DESIGNED FOR ULTRA FAST SWITCHING APPLICATIONS.

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 2 TO 18 GHz
- INSERTION LOSS: ..... 2.0 dB TYPICAL, 3.0 dB MAXIMUM
- ISOLATION: ..... 70 dB TYPICAL, 60 dB MINIMUM
- VSWR: ..... 1.6:1
- RISE TIME: ..... 3 nSec TYPICAL, 5 nSec MAXIMUM
- FALL TIME: ..... 3 nSec TYPICAL, 5 nSec MAXIMUM
- DELAY ON: ..... 10 nSec MAXIMUM
- DELAY OFF: ..... 10 nSec MAXIMUM
- CONTROL: ..... BALANCED ECL PAIRS (-C, +C)  
(100 OHM INPUT IMPEDANCE)
- POWER INPUT: ..... +27 dBm CW MAXIMUM
- SURVIVAL POWER: ..... +30 dBm CW OR 10 W (1  $\mu$ Sec, PW)
- POWER SUPPLY: ..... +5V @ 150 mA MAXIMUM  
-5V @ 100 mA MAXIMUM
- CONNECTORS:  
RF: ..... SMA FEMALE  
CONTROL: ..... SOLDER PIN  
POWER: ..... SOLDER PIN
- SIZE: ..... 1.20" (L) x 1.00" (W) x 0.50" (H)
- WEIGHT: ..... 1.4 OUNCE TYPICAL

## OPTIONS:

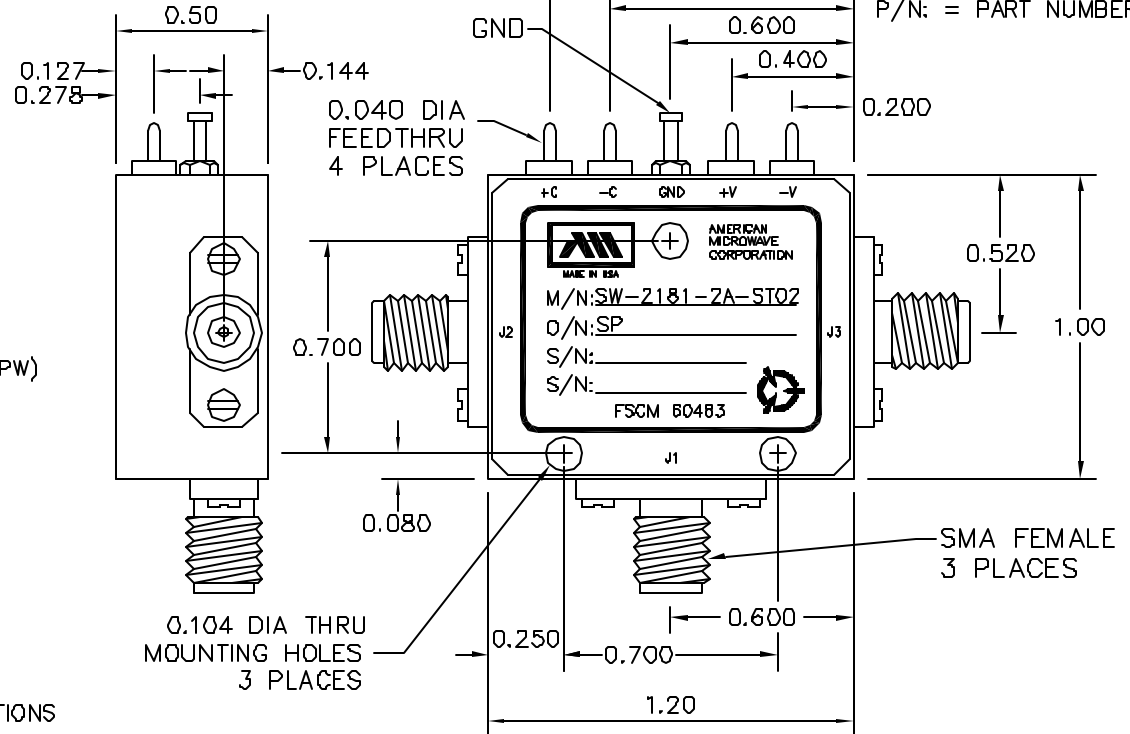
- SP: ..... SPECIAL FOR CUSTOMER SPECIFICATIONS

ECL LOGIC TABLE		
C+	C-	RF PATH
1 (-0.9V)	0 (-1.75V)	J1-J2
0 (-1.75V)	1 (-0.9V)	J1-J3

## ENVIRONMENTAL RATINGS:

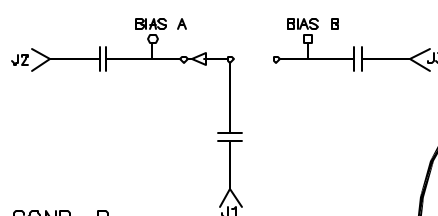
- TEMPERATURE: ..... -55°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: ..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: ..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION



M/N: = MODEL NUMBER  
O/N: = OPTION NUMBER  
S/N: = SERIAL NUMBER  
P/N: = PART NUMBER

BLOCK DIAGRAM



ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 503076-1	5/18/05	

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APPROVALS		DATE	TITLE		
DRAWN <i>JDS</i>		5/18/05	PRODUCT FEATURE SW-2181-2A-ST02 OPTION: SP		
CHECKED			2 - 18 GHz, SINGLE POLE TWO THROW SWITCH		
ISSUED			SIZE A	FSCM NO. 60483	DWG NO. 100-7439
			SCALE N:S	SHEET 1 OF 3	