

REVISIONS

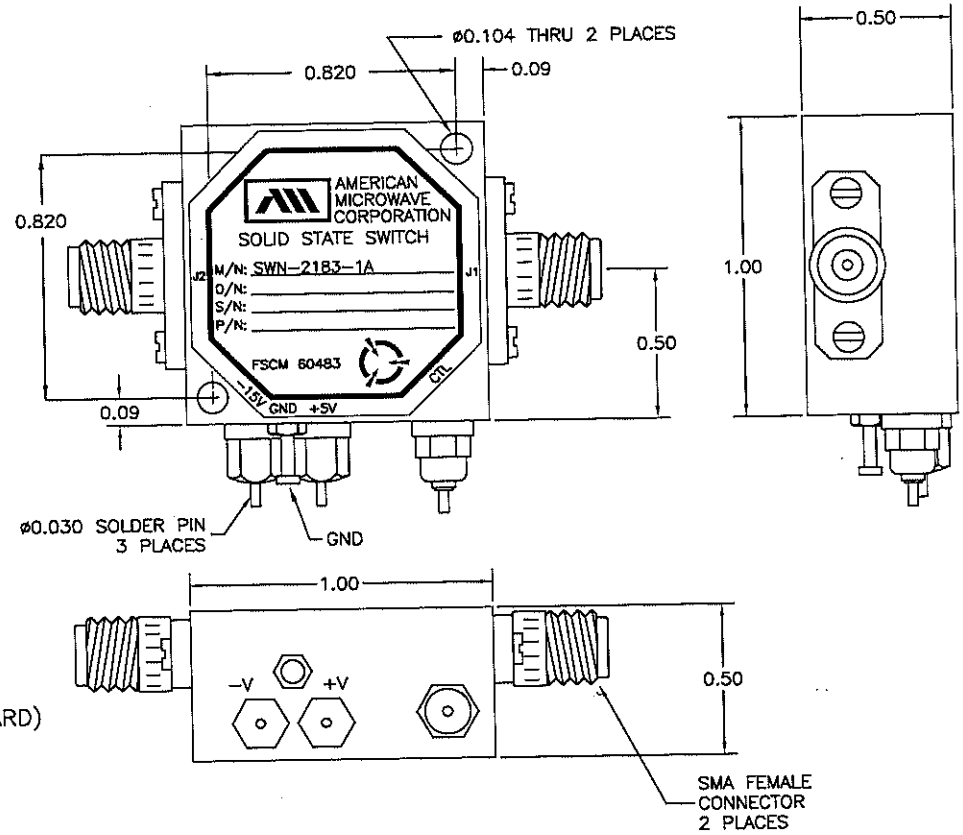
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE	05/19/08	<i>[Signature]</i>

DESCRIPTION

AMC MODEL SWN-2183-1A IS A SPST REFLECTIVE PIN-DIODE SWITCH/MODULATOR WITH A FREQUENCY RANGE OF 0.5 TO 18.0 GHz

SPECIFICATIONS

- FREQUENCY RANGE 0.5 TO 18 GHz
- INSERTION LOSS 2.3dB MAX
- ISOLATION 40dB MIN
- VSWR 1.9:1
- RISE/FALL TIME 10nS MAX
- DC POWER (NO LOAD)
 - +V +5VDC @ 100mA
 - V -5VDC @ 45mA
- POWER HANDLING 2 WATTS AVERAGE, 10 WATTS PEAK, 1usec MAX, PW
- CONTROL IMPEDANCE TTL COMPATIBLE, TWO LOAD. (A LOAD IS 1.6mA SINK CURRENT AND 40uA SOURCE CURRENT.)
- CONTROL LOGIC LOGIC "0" (-0.3 TO +0.7 VOLTS FOR SWITCH OFF. LOGIC "1" (+2.5 TO +5.0 VOLTS FOR SWITCH ON.



AVAILABLE OPTIONS:

- 001 TWO SMA MALE RF CONNECTORS
- 002 ONE SMA MALE AND ONE SMA FEMALE CONNECTORS
- 003 SMC CONTROL CONNECTOR (SOLDER TYPE IS STANDARD)
- 004 ±15 VOLT POWER SUPPLY REQUIREMENT
- 005 50 OHMS CONTROL IMPEDENCE
- 006 CANNON MULTIPIN MDM9SSP
- 007 INVERTED LOGIC
- 008 EXTENDED FREQUENCY TO 100MHZ
- 010 50 nSEC MAX SWITCHING SPEED (5 WATTS CW MAX)
- 012 2 nSEC MAX SWITCHING SPEED (100MW CW MAX)
- 013 -12 VDC POWER SUPPLY REQUIREMENT (+5V, -5V IS STANDARD)
- 103 INTEGRAL VIDEO FILTERS
- 2-18 GHz INSERTION LOSS INCREASE OF 0.75 dB MAX
- HS HIGH SPEED VERSION - 20nSEC DELAY
- AT OFF ARM TERMINATION

ENVIRONMENTAL RATINGS

- **TEMPERATURE** -65°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

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

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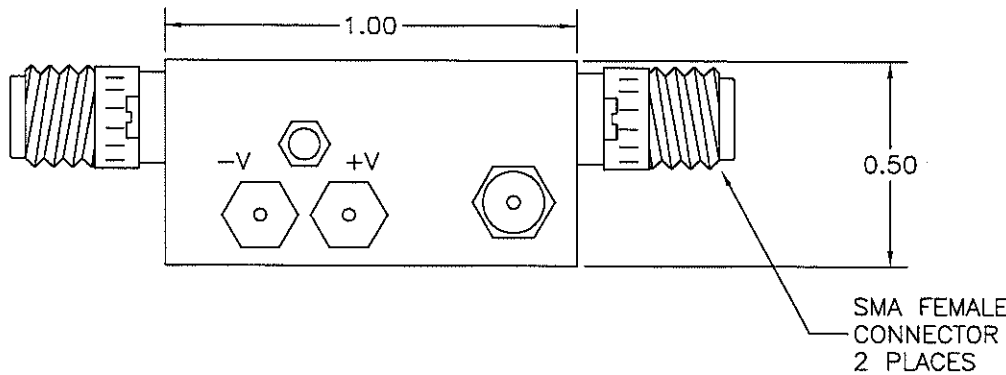
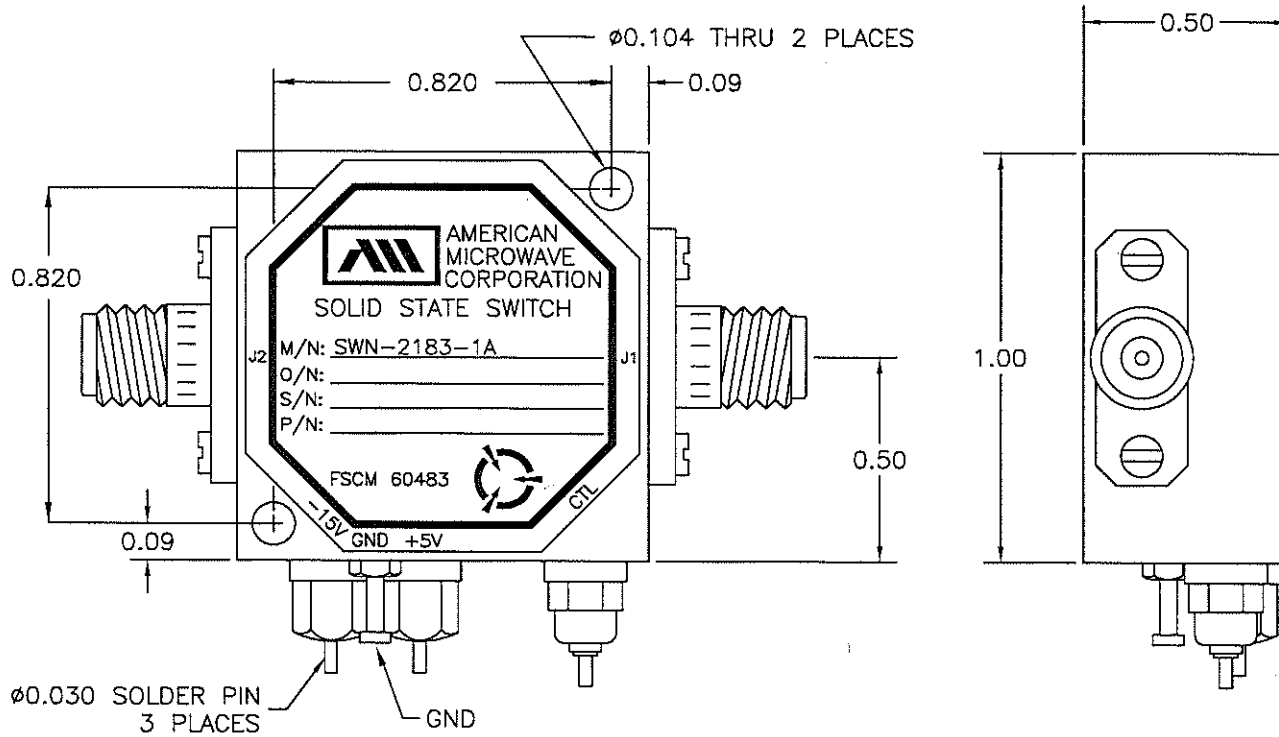


APPROVALS		DATE	TITLE			REV.
DRAWN	<i>MEB</i>	05/19/08	PRODUCT FEATURE SWN-2183-1A			
REDRAWN			SIZE	FSCM NO.	DWG NO.	
ISSUED	<i>[Signature]</i>	5/16/08	A	60483	100-7783	-
			SCALE	N:S	SHEET	1 OF 4

DESCRIPTION

AMC MODEL SWN-2183-1A IS A SPST REFLECTIVE PIN-DIODE SWITCH/MODULATOR WITH A FREQUENCY RANGE OF 0.5 TO 18.0 GHZ

MECHANICAL OUTLINE



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 TOLERANCES:
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 X.XXX ±0.010

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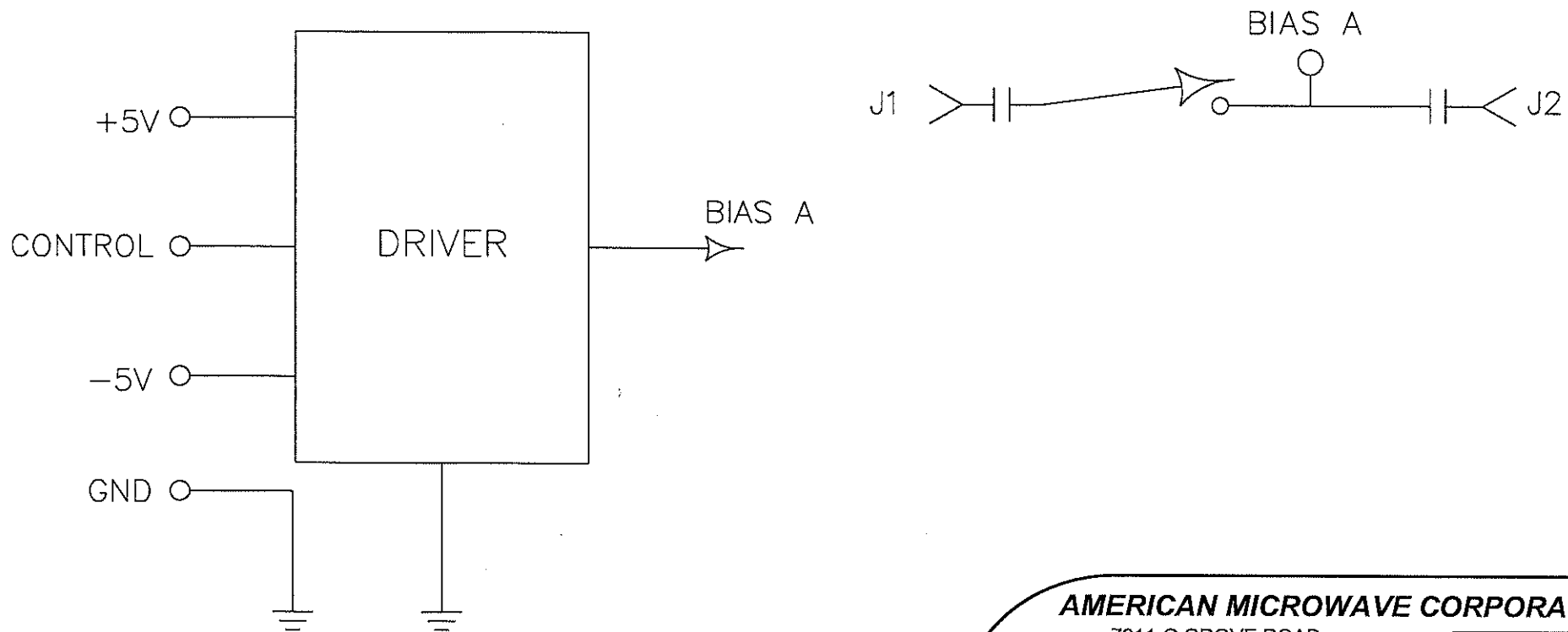


APPROVALS		DATE		TITLE		
DRAWN <i>MBB</i>		05/13/08		PRODUCT FEATURE SWN-2183-1A		
REDRAWN		SIZE	FSCM NO.	DWG NO.		REV.
ISSUED <i>[Signature]</i>		A	60483	100-7783		-
SCALE N:S				SHEET		2 OF 4

DESCRIPTION

AMC MODEL SWN-2183-1A IS A SPST REFLECTIVE PIN-DIODE SWITCH/MODULATOR WITH A FREQUENCY RANGE OF 0.5 TO 18.0 GHz

FUNCTIONAL BLOCK DIAGRAM



CONFIDENTIAL AND PROPRIETARY

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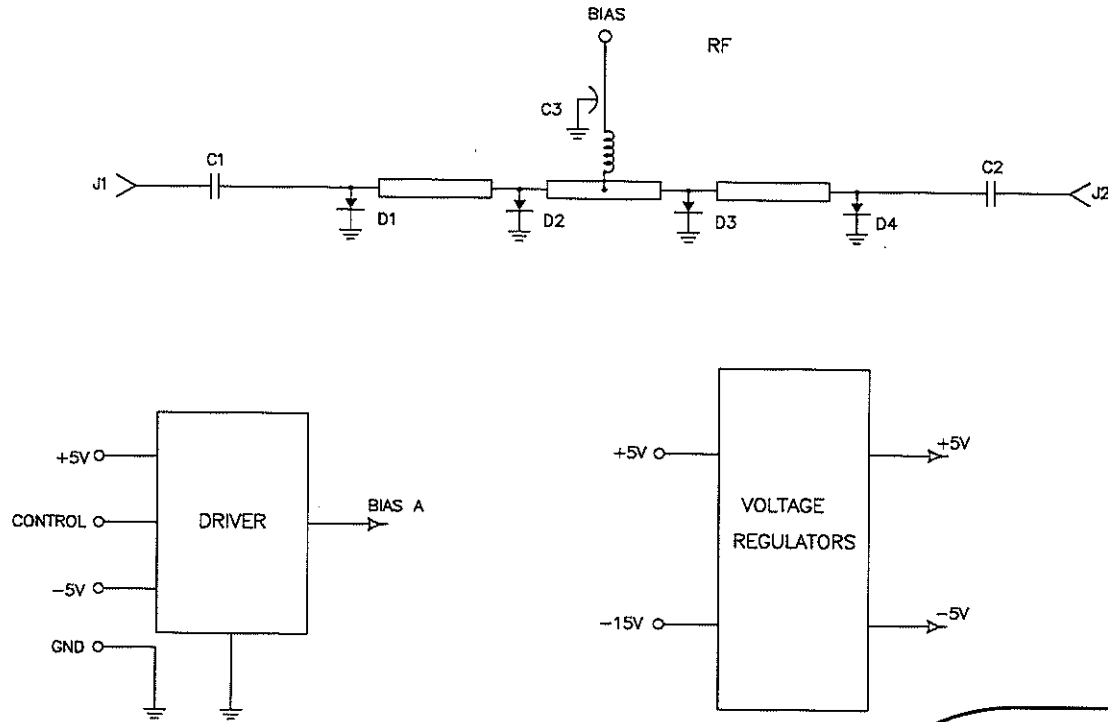


APPROVALS		DATE	TITLE			
DRAWN <i>MEB</i>		05/19/08	PRODUCT FEATURE SWN-2183-1A			
REDRAWN			SIZE	FSCM NO.	DWG NO.	REV.
ISSUED <i>[Signature]</i>		5/15/04	A	60483	100-7783	-
			SCALE	N:S		SHEET 3 OF 4

DESCRIPTION

AMC MODEL SWN-2183-1A IS A SPST REFLECTIVE PIN-DIODE SWITCH/MODULATOR WITH A FREQUENCY RANGE OF 0.5 TO 18.0 GHz

FUNCTIONAL SCHEMATIC DIAGRAM



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APPROVALS		DATE	TITLE		
DRAWN		05/13/08	PRODUCT FEATURE		
REDRAWN			SWN-2183-1A		
ISSUED			0.5 TO 18.0 GHz SPST REFLECTIVE PIN-DIODE SWITCH	SIZE	REV.
			A	F5CM NO. 60483	—
				DWG NO. 100-7783	
			SCALE N:S	SHEET 4 OF 4	