

## DESCRIPTION

AMC MODEL SWN-2184-1A OPTIONS 303F, 45-068 AND HPR10W IS A SPST REFLECTIVE PIN-DIODE SWITCH/MODULATOR OPTIMIZED FOR A FREQUENCY RANGE OF 3.1 TO 3.5 GHz WITH THE HIGH POWER OPTION.

## FEATURES

- 3.1 TO 3.5 GHz
- LOW LOSS
- HIGH POWER
- HIGH ISOLATION
- TTL LOGIC COMPATIBLE
- MINIATURE SIZE

## SPECIFICATIONS

- FREQUENCY RANGE ..... 3.1 TO 3.5 GHz
- INSERTION LOSS ..... 2.5dB MAXIMUM
- ISOLATION ..... 60dB MINIMUM
- VSWR ..... 2.0:1
- RISE TIME ..... 100ns MAXIMUM, 75ns TYPICAL
- RECOVERY TIME ..... 250ns MAXIMUM, 220ns TYPICAL
- VIDEO-TRANSIENTS .....  $\leq 2.0V$  PEAK TO PEAK, 300 MHz BANDWIDTH  
 $\leq 2.0V$  PEAK TO PEAK, 20 MHz BANDWIDTH
- RF INPUT POWER ..... 20 WATTS PEAK, 7 WATTS AVERAGE
- DC POWER (NO LOAD)
  - +V ..... +5VDC @ 100mA
  - V ..... -15VDC @ 50mA MAXIMUM
- SIZE ..... 1.0" x 1.0" x 0.5"
- WEIGHT .....  $\leq 1.0$  OZ.

## OPTIONS

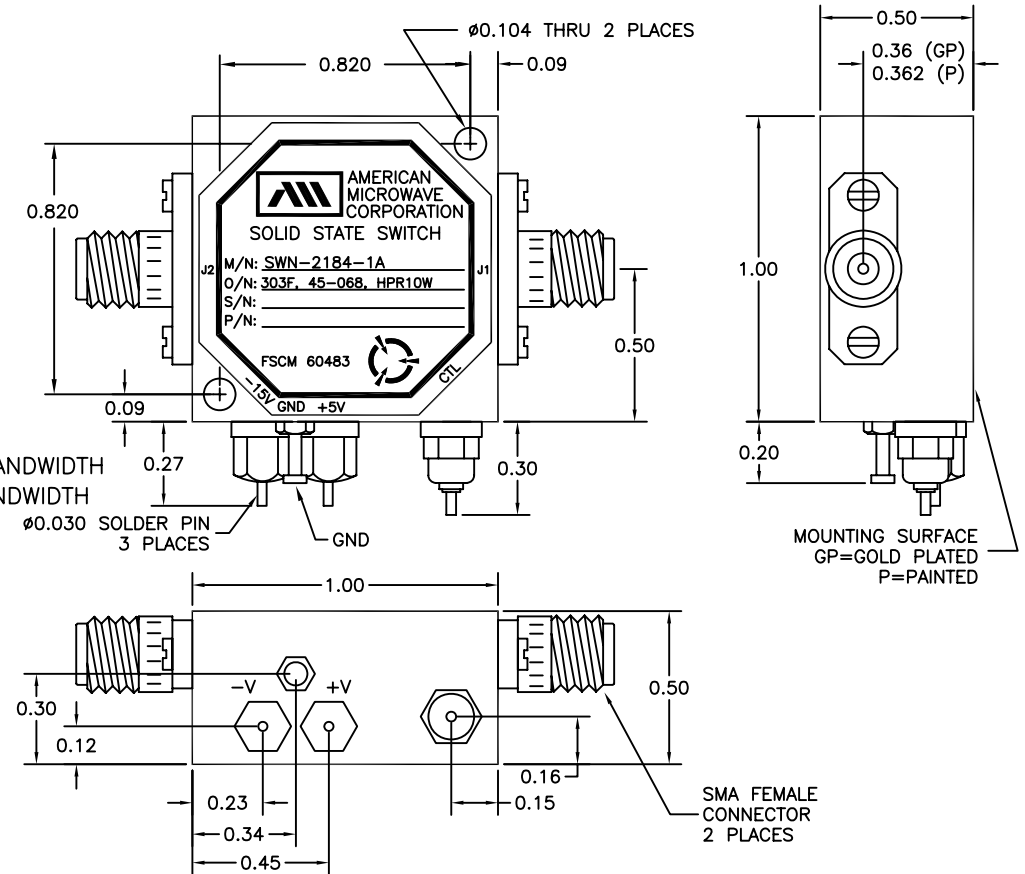
- 303F ..... 3.1 TO 3.5 GHz FREQUENCY RANGE
- 45-068 ..... HIGH POWER OPTION
- HPR10W ..... 10 WATT POWER OPTION

## 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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 606122	08/08/06	



ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX  $\pm 0.020$   
 X.XXX  $\pm 0.010$

## 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



APPROVALS		DATE	TITLE			
DRAWN <i>PRB</i>		08/08/06	PRODUCT FEATURE SWN-2184-1A			
REDRAWN <i>RA</i>		09/12/06	OPTION: 303F, 45-068, HPR10W 3.1 TO 3.5 GHz SPST REFLECTIVE PIN-DIODE SWITCH			
ISSUED			SIZE	FSCM NO.	DWG NO.	REV.
			A	60483	100-6986-1	-
			SCALE	N:S	SHEET	1 OF 4

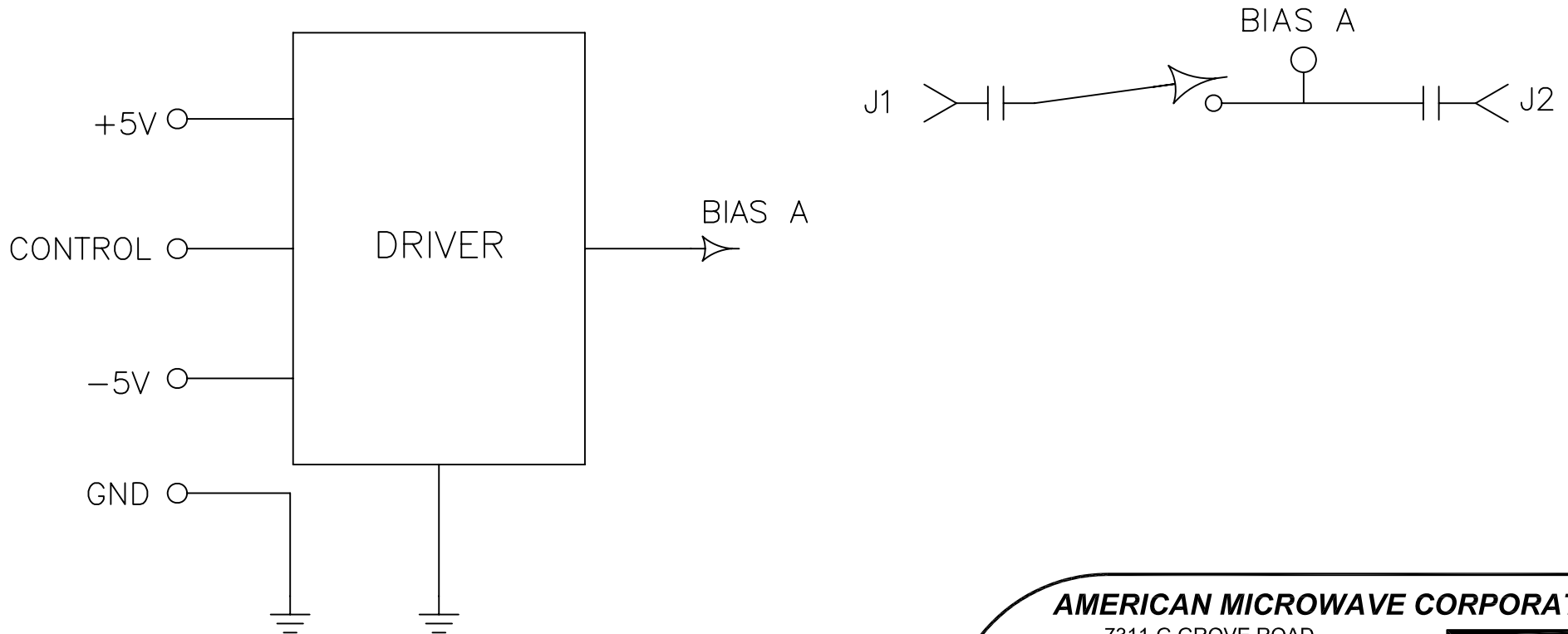


**DESCRIPTION**

AMC MODEL SWN-2184-1A OPTIONS 303F, 45-068 AND HPR10W IS A SPST REFLECTIVE PIN-DIODE SWITCH/MODULATOR OPTIMIZED FOR A FREQUENCY RANGE OF 3.1 TO 3.5 GHZ WITH THE HIGH POWER OPTION.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 606122 RAYTHEON TECHNICAL SERVICES	08/08/06	

**FUNCTIONAL BLOCK DIAGRAM**



**CONFIDENTIAL AND PROPRIETARY**

**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



APPROVALS		DATE	TITLE		
DRAWN	<i>PRB</i>	08/08/06	PRODUCT FEATURE SWN-2184-1A		
REDRAWN	<i>Rd</i>	09/12/06	OPTION: 303F, 45-068, HPR10W 3.1 TO 3.5 GHz SPST REFLECTIVE PIN-DIODE SWITCH		
ISSUED			SIZE	FSCM NO.	DWG NO.
			A	60483	100-6986-1
			SCALE	N:S	SHEET 3 OF 4