

## DESCRIPTION

AMC MODEL SWN-2DR/DT-STANDARD IS A SINGLE POLE TWO THROW, REFLECTIVE (DR) OR ABSORPTIVE/NON-REFLECTIVE (DT) SWITCH MODULE WITH VERY LOW INSERTION LOSS, HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR BROAD BAND OPERATIONS.

## SPECIFICATIONS

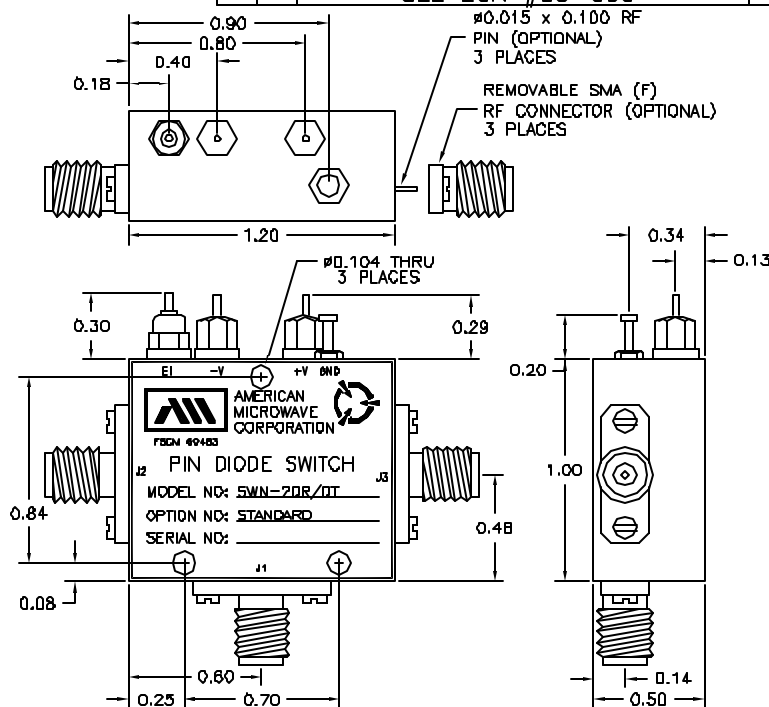
- FREQUENCY RANGE: ..... 0.5 TO 18 GHz
- INSERTION LOSS: ..... REFLECTIVE: 2.5 dB MAXIMUM  
ABSORPTIVE: 3.5 dB MAXIMUM
- ISOLATION: ..... 0.5 GHz TO 2 GHz: 60 dB MINIMUM  
2 GHz TO 18 GHz: 70 dB MINIMUM
- VSWR: ..... REFLECTIVE IN/OUT: 2.0:1  
ABSORPTIVE IN/OUT: 2.0:1  
ABSORPTIVE OUT/OFF: 2.0:1
- RISE TIME: ..... 10 nSec TYPICAL, 15 nSec MAXIMUM
- FALL TIME: ..... 10 nSec TYPICAL, 15 nSec MAXIMUM
- DELAY ON: ..... 75 nSec TYPICAL, 100 nSec MAXIMUM
- DELAY OFF: ..... 75 nSec TYPICAL, 100 nSec MAXIMUM
- POWER INPUT: ..... (CW)+20 dBm (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: ..... 1 WATT CW, 10 WATTS PEAK 1 uSec
- CONTROL: ..... TTL LOGIC "0" = J1-J2 ON  
TTL LOGIC "1" = J1-J3 ON
- POWER SUPPLY: ..... +5V @ 100 mA MAXIMUM  
-5V @ 75 mA MAXIMUM (REFLECTIVE)  
100 mA MAXIMUM (ABSORPTIVE/NON-REFLECTIVE)
- CONNECTORS:  
RF: ..... SMA FEMALE  
CONTROL: ..... SOLDER PIN
- SIZE: ..... 1.20" (L) x 1.00" (W) x 0.50" (H)

## OPTIONS:

- SINGLE CONTROL WITH SOLDER PIN STANDARD
- IND-SP: ..... INDEPENDENT CONTROL WITH SOLDER PIN (LOGIC "0"=ON; "1"=OFF)
- HS: ..... HIGH SPEED VERSION
- LVT: ..... LOW VIDEO TRANSIENTS - SPECIFY VIDEO BANDWIDTH
- 10M18: ..... 10 MHz TO 18 GHz (INSERTION LOSS INCREASES  
BY 1.5 dB AT 10 MHz AND 0.5 dB AT 18 GHz)
- 100M18: ..... 100 MHz TO 18 GHz (INSERTION LOSS INCREASES  
BY 1.5 dB AT 100 MHz AND 0.5 dB AT 18 GHz)
- 052: ..... 500 MHz TO 2 GHz (NO CHANGE IN INSERTION LOSS)
- 118: ..... 1 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 218: ..... 2 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 412: ..... 4 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 618: ..... 6 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 1218: ..... 12 GHz TO 18 GHz (NO CHANGE IN INSERTION LOSS)
- 100M20: ..... 100 MHz TO 20 GHz (INSERTION LOSS INCREASES  
BY 1.5 dB AT 100 MHz AND 1.0 dB AT 20 GHz)
- 220: ..... 2 GHz TO 20 GHz (INSERTION LOSS INCREASES  
BY 1.0 dB AT 20 GHz)
- 1020: ..... 10 GHz TO 20 GHz (INSERTION LOSS INCREASES  
BY 1.0 dB AT 20 GHz)
- B01: ..... -12V POWER SUPPLIES
- B02: ..... -15V POWER SUPPLIES
- B03: ..... REVERSE LOGIC "1"=ON; "0"=OFF
- B04: ..... DRIVERLESS, CURRENT CONTROLLED
- B05: ..... HIGH SPEED, TURNON/TURNOFF 20 nSec MAXIMUM  
WHEN APPLICABLE OR OPTION HS
- B06: ..... HIGH POWER - SPECIFY CW POWER, PEAK POWER, PULSE WIDTH,  
DUTY CYCLE, RF FREQUENCY AND BANDWIDTH
- B07: ..... CUSTOM DESIGNED PRODUCT - SPECIFY INITIALS OF CUSTOMER
- B08: ..... LOW VIDEO TRANSIENTS - SPECIFY VIDEO BANDWIDTH
- B09: ..... LOW INSERTION LOSS VERSION
- B10: ..... HIGHER ISOLATION VERSION

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
XXX ±0.020  
XXX ±0.010  
WEIGHT 1.5 oz. TYPICAL

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-		ORIGINAL RELEASE JOB# 907137-1	7/29/99	
A		SEE ECN #05-060	8/13/05	



## 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

## AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED



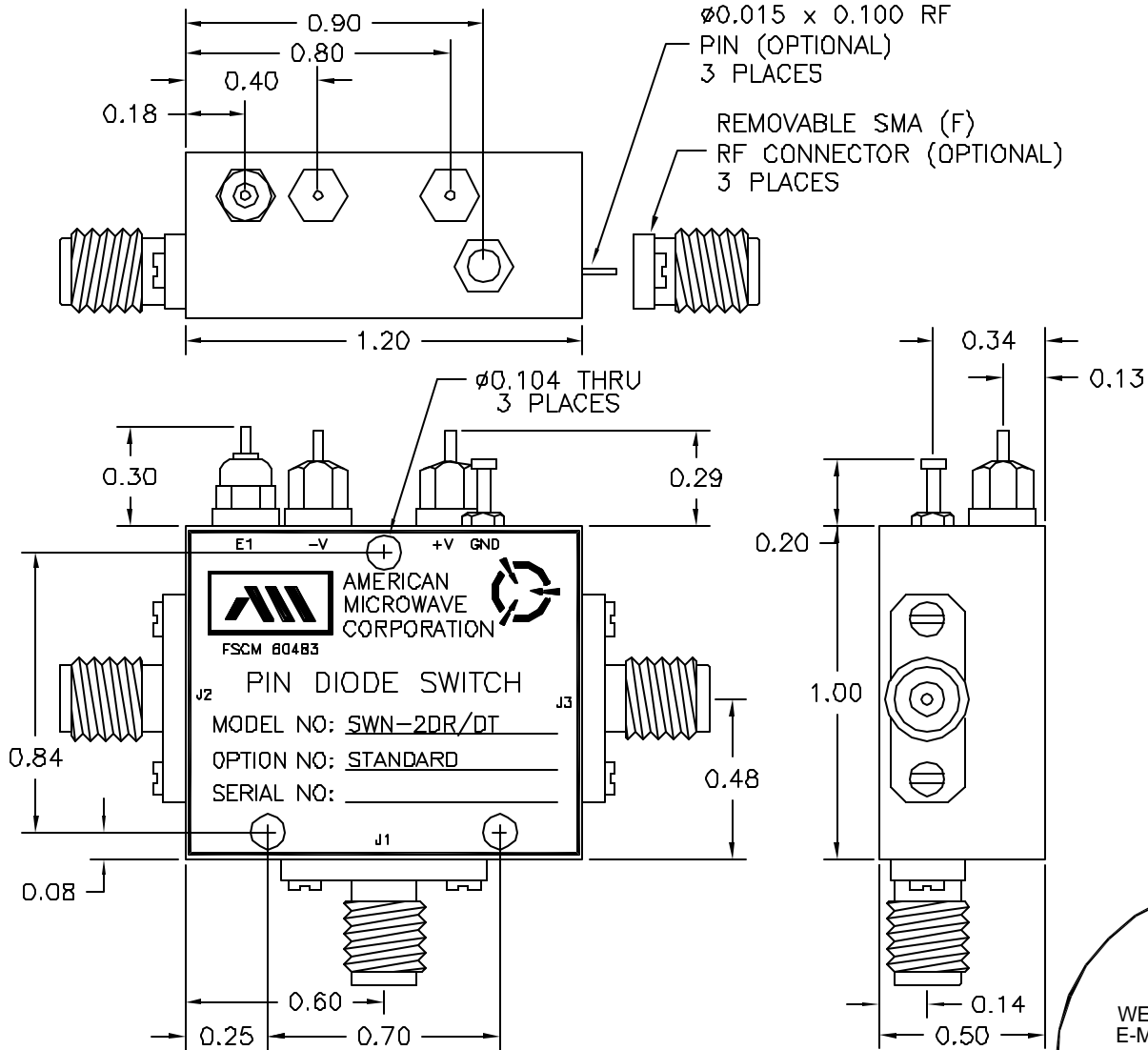
APPROVALS		DATE	TITLE		
DRAWN WPP, RRd		7/29/99	PRODUCT FEATURE SWN-2DR/DT-STANDARD		
MODIFIED FDJ		8/13/05	SIZE A	FSCM NO. 60483	DWG NO. 100-4427-1
ISSUED			SCALE N:S	SHEET 1 OF 4	

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	-	ORIGINAL RELEASE JOB# 907137-1	7/29/99	
	A	SEE ECN #05-060	8/13/05	

**MECHANICAL OUTLINE**



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

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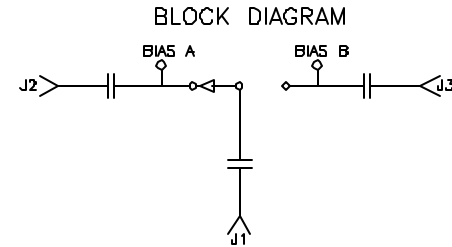
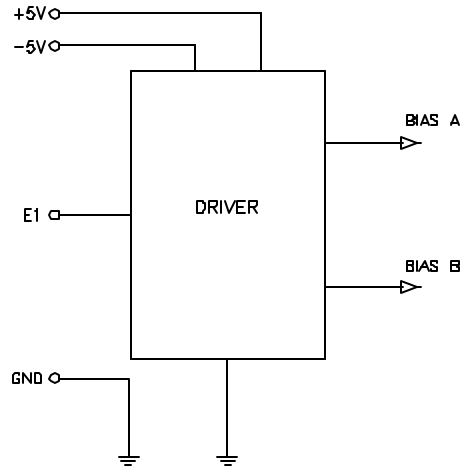
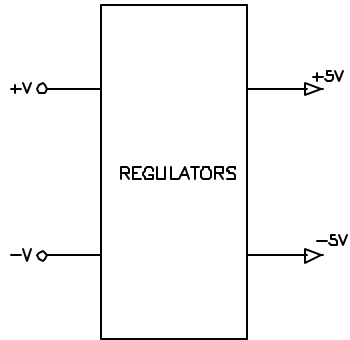
APPROVALS		DATE	TITLE		
DRAWN WPP, RRd		7/29/99	MECHANICAL OUTLINE SWN-2DR/DT-STANDARD		
MODIFIED FDJ		8/13/05	SIZE A	FSCM NO. 60483	DWG NO. 100-4427-1
ISSUED			SCALE N:S	SHEET 2 OF 4	

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	A	SEE ECN #05-060	8/13/05	

**FUNCTIONAL BLOCK DIAGRAM**



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APPROVALS		DATE	TITLE		
DRAWN <i>WFP, RRd</i>		7/29/99	FUNCTIONAL BLOCK DIAGRAM		
MODIFIED <i>FDJ</i>		8/13/05	SWN-2DR/DT-STANDARD		
ISSUED			0.5 TO 18 GHz, SINGLE POLE TWO THROW SWITCH	SIZE A	REV. A
			FSCH NO. 60483	DWG NO. 100-4427-1	
			SCALE N:S	SHEET	3 OF 4