

**DESCRIPTION:**

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

**SPECIFICATIONS:**

- FREQUENCY: . . . . . 0.5 GHz TO 18 GHz
- INSERTION LOSS: . . . REFLECTIVE: 2.5db  
                                   ABSORPTIVE: 3.5db
- ISOLATION: . . . . . 0.5 GHz TO 2 GHz: 60db  
                                   2 GHz TO 18 GHz: 70db
- VSWR: . . . . . REFLECTIVE IN/OUT: 2.0:1  
                                   ABSORPTIVE IN/OUT: 2.0:1  
                                   ABSORPTIVE OUT/OFF: 2.0:1
- SPEED: . . . . . RISE: 10ns TYPICAL, 15ns MAX.  
                                   FALL: 10ns TYPICAL, 15ns MAX.  
                                   DELAY ON: 75ns TYPICAL, 100ns MAX.  
                                   DELAY OFF: 75ns TYPICAL, 100ns MAX.
- POWER INPUT: . . . . . (CW)+20dBm (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: . . . 1 WATT CW, 10 WATTS PEAK 1 usec
- CONTROL: . . . . . TTL LOGIC "0"= J1-J2 ON "1"= J1-J3 ON
- POWER SUPPLY: . . . . +5V @ 100 mA MAX.  
                                   -5V @ 75mA MAX.(RELECTIVE)  
                                   100mA MAX.(ABSORPTIVE/NON-REFLECTIVE)
- CONNECTORS:  
   RF . . . . . SMA FEMALE  
   CONTROL . . . . . SOLDER PIN
- SIZE: . . . . . 1.20" (L) x 1.00" (W) x 0.50" (H)
- WEIGHT: . . . . . 1.5 OUNCE TYPICAL

**OPTIONS:**

- SINGLE CONTROL WITH SOLDER PIN STANDARD
- IND-SP . . . . . INDEPENDANT CONTROL WITH SOLDER PIN (LOGIC "0" = ON "1" = OFF)
  - 10M18 . . . . . 10 MHz TO 18 GHz (INSERTION LOSS INCREASES BY 1.5dB AT 10 MHz AND 0.5db AT 18 GHz)
  - 100M18 . . . . . 100 MHz TO 18 GHz (INSERTION LOSS INCREASES BY 1.5dB AT 100 MHz AND 0.5db AT 18 GHz)
  - 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 12.4 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 1.5dB AT 100 MHz AND 1.0db AT 20 GHz)
  - 220 . . . . . 2 GHz TO 20 GHz (INSERTION LOSS INCREASES BY 1.0db AT 20 GHz)
  - 1020 . . . . . 10 GHz TO 20 GHz (INSERTION LOSS INCREASES BY 1.0db 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

**ENVIRONMENTAL RATINGS:**

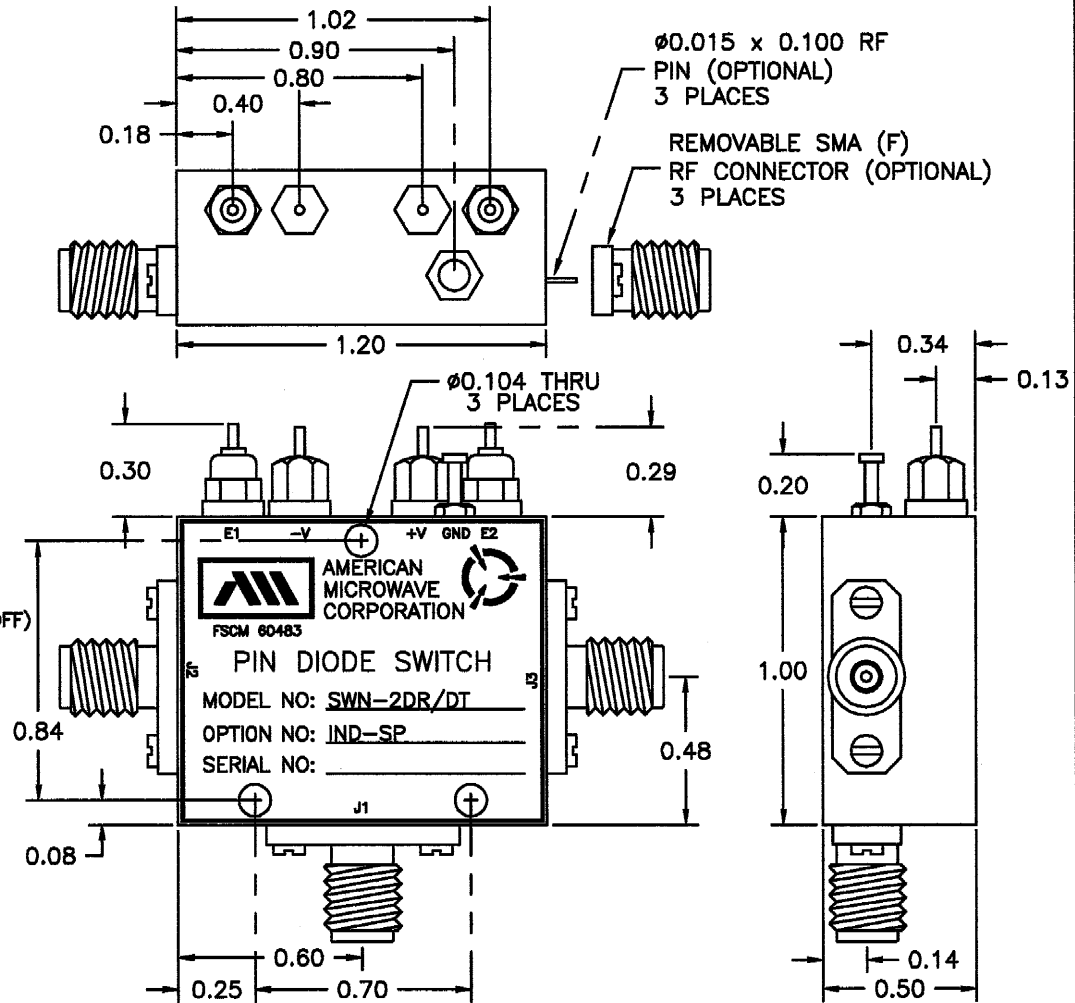
- TEMPERATURE: . . . . . -55°C TO +85°C (OPERATING)  
                                   -65°C TO +125°C (STORAGE)
- HUMIDITY: . . . . . MIL-STD-202F, METHOD 103B COND. B
- SHOCK: . . . . . MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: . . . . . MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: . . . .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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:

- X.XX ±0.020
- X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		ORIGINAL RELEASE	7/29/99	



NOTE:

- DR=WITH DRIVER, REFLECTIVE
- DT=WITH DRIVER, NON-REFLECTIVE/ABSORPTIVE

APPROVALS		DATE	TITLE	
DRAWN WSP, RRA		7/29/99	OUTLINE DRAWING SWN-2DR/DT-IND-SP SOLID STATE SWITCH	
CHECKED			SIZE	FSCM NO.
ISSUED			A	60483
			DWG NO.	100-4427-2
			SCALE	N/S
			SHEET	1 of 2

AMERICAN MICROWAVE CORPORATION  
 FREDERICK, MARYLAND