

**DESCRIPTION:**

AMC MODEL SWN-2181-TRA-IND-SP IS A TRANSFER SWITCH MODULE WITH LOW INSERTION LOSS, HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER IN A SMALL 1.0" x 1.0" x 0.5" PACKAGE, DESIGNED FOR 0.5 GHz TO 18 GHz OPERATION.

**SPECIFICATIONS:**

- FREQUENCY: . . . . . 0.5 GHz TO 18 GHz
- INSERTION LOSS: . . . . . 3.5 dB MAX. @ 18 GHz
- ISOLATION: . . . . . 0.5 GHz TO 18 GHz: 60 dB MINIMUM
- VSWR: . . . . . IN/OUT: 2.0:1
- SPEED: . . . . . RISE: 10ns TYPICAL, 15ns MAXIMUM  
FALL: 10ns TYPICAL, 15ns MAXIMUM  
DELAY ON: 75ns TYPICAL, 100ns MAXIMUM  
DELAY OFF: 75ns TYPICAL, 100ns MAXIMUM
- POWER INPUT: . . . . . (CW)+27 dBm(500 mW) (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: . . . . . 75 WATTS CW, 10 WATTS PEAK 1 usec PULSE WIDTH
- POWER SUPPLY: . . . . . +5V @ 100 mA MAXIMUM  
-5V @ 100 mA MAXIMUM
- CONTROL: . . . . . SEE TABLE I
- SIZE: . . . . . 1.00 (L) x 1.00 (W) x 0.50 (H)
- WEIGHT: . . . . . 1.5 OUNCES TYPICAL

**OPTIONS:**

SINGLE CONTROL WITH SOLDER PIN STANDARD

IND-SP . . . . . INDEPENDANT CONTROL WITH SOLDER PIN

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

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

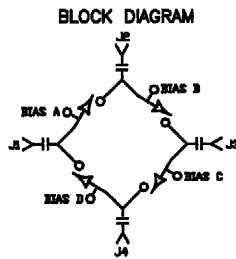
B10 . . . . . HIGHER ISOLATION VERSION

**ENVIRONMENTAL RATINGS:**

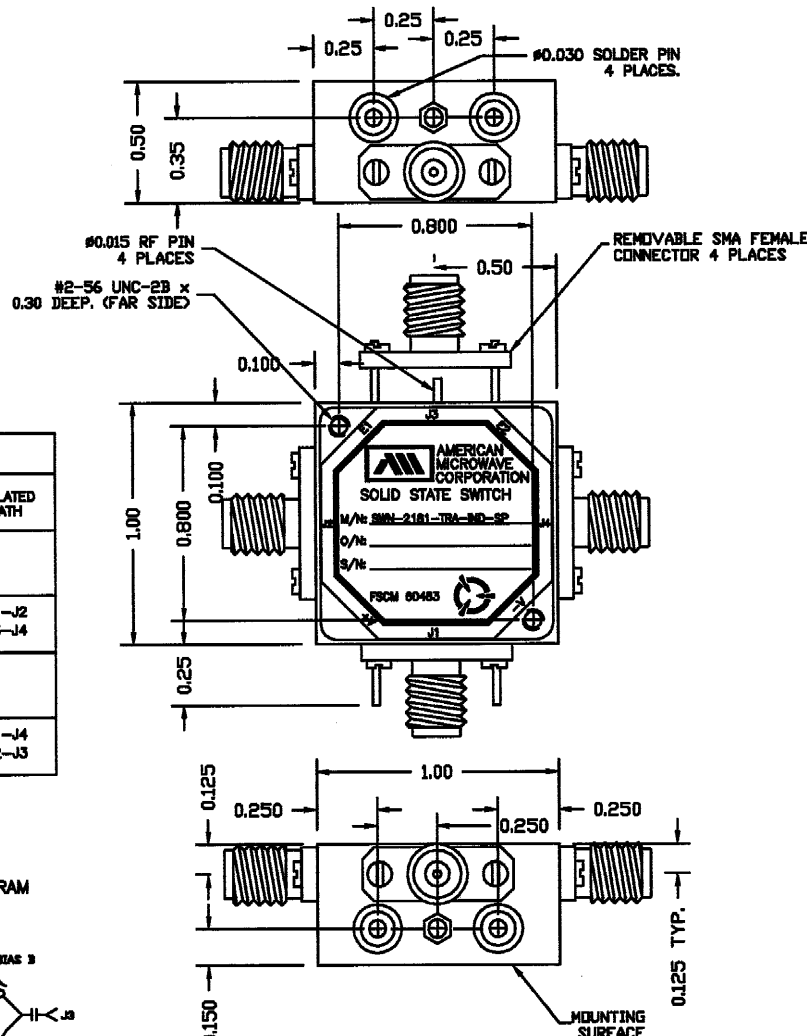
- TEMPERATURE: . . . . . -55°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: . . . . . MIL-STD-202F, METHOD 103B COND. B
- SHOCK: . . . . . MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: . . . . . MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: . . . . . MIL-STD-202F, METHOD 105C COND. B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

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

TABLE I			
CTL	TTL LOGIC	LOW LOSS PATH	ISOLATED PATH
E1	0	J1-J2 J3-J4	
	1		J1-J2 J3-J4
E2	0	J1-J4 J2-J3	
	1		J1-J4 J2-J3



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	ORIGINAL RELEASE	02/18/00	



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CONTRACT NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
WSP & Rd	02/18/00	PRODUCT FEATURE SWN-2181-TRA-IND-SP TRANSFER SWITCH	
CHECKED		SIZE	FSCM NO.
		A	60483
ISSUED		DWG NO.	REV.
		100-4708-2	-
SCALE N/S		SHEET 1 of 3	