

DESCRIPTION:

AMC MODEL SWN-2181-TRA 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: 1 WATT 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)

818 8 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

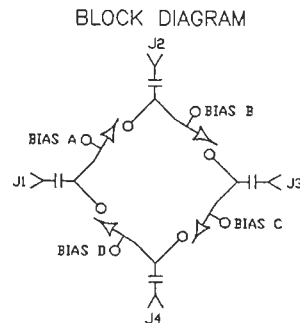
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:

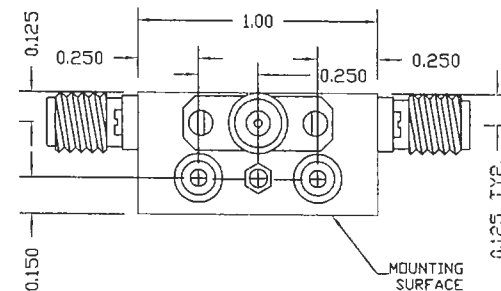
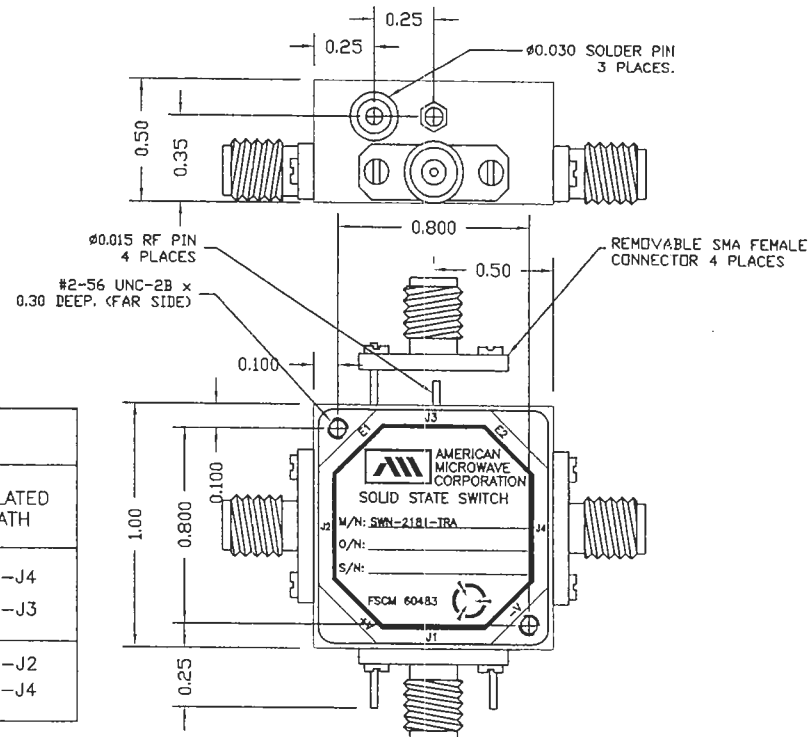
X.XX ±0.020

X.XXX ±0.010

TTL LOGIC	LOW LOSS PATH	ISOLATED PATH
0	J1-J2 J3-J4	J1-J4 J2-J3
1	J1-J4 J2-J3	J1-J2 J3-J4



REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	-	ORIGINAL RELEASE	02/18/00
	A	SEE ECN #04-056	4/28/04



CONTRACT NO.		AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN WSP & RA	02/18/00	PRODUCT FEATURE SWN-2181-TRA	
REDRAWN JDJ	8/17/04	0.5 TO 18 GHz TRANSFER SWITCH MODULE	
CHECKED CA	8/31/04	SIZE A	FSCM NO. 60483
ISSUED		DWG NO. 100-4708-1	REV. A
SCALE N/S		SHEET 1 of 3	