

## DESCRIPTION

AMC MODEL SWN-2181-TRA OPTION: 30M18 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 30 MHz TO 18 GHz OPERATION.

## SPECIFICATIONS

- FREQUENCY RANGE: ..... 30 MHz TO 18 GHz
- INSERTION LOSS: ..... 3.5 dB MAXIMUM @ 18 GHz
- ISOLATION: ..... 60 dB MINIMUM
- VSWR: ..... IN/OUT: 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: ..... SEE TABLE 1
- POWER SUPPLY: ..... +5V @ 100 mA MAXIMUM  
-5V @ 100 mA MAXIMUM
- CONNECTORS:
  - RF: ..... SMA FEMALE
  - CONTROL: ..... SOLDER PIN
- SIZE: ..... 1.00" (L) x 1.00" (W) x 0.50" (H)
- WEIGHT: ..... 1.5 OUNCE TYPICAL

## OPTIONS:

- 30M18: ..... 30 MHz TO 18 GHz FREQUENCY RANGE

TABLE 1		
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

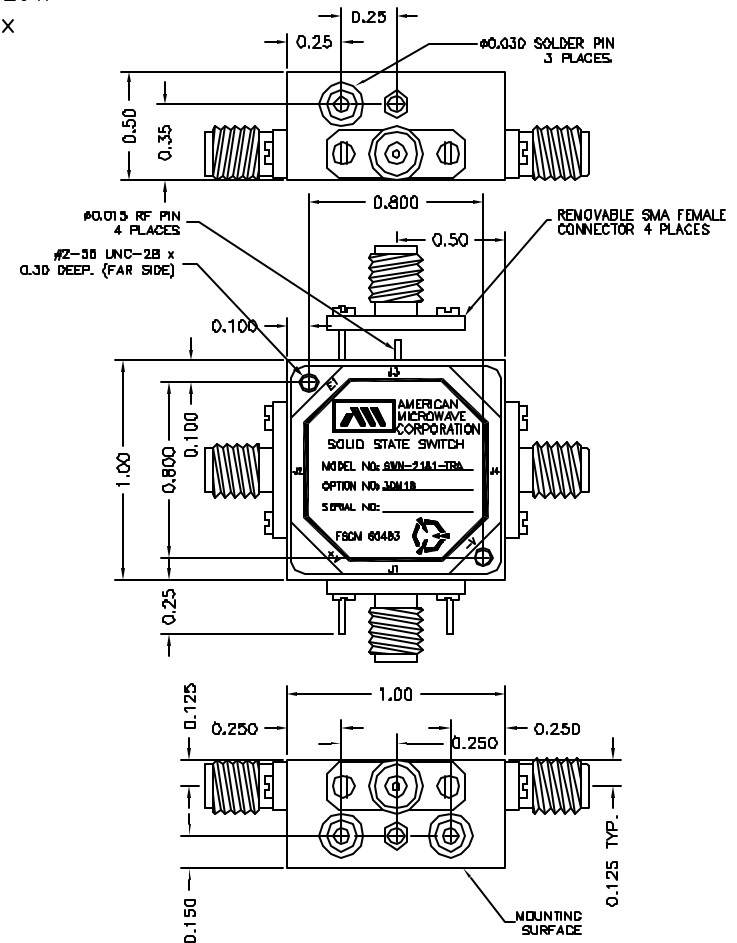
## ENVIRONMENTAL RATINGS:

- 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:  
XXX ±0.020  
XXXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 507177-1	8/10/05	



## AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED



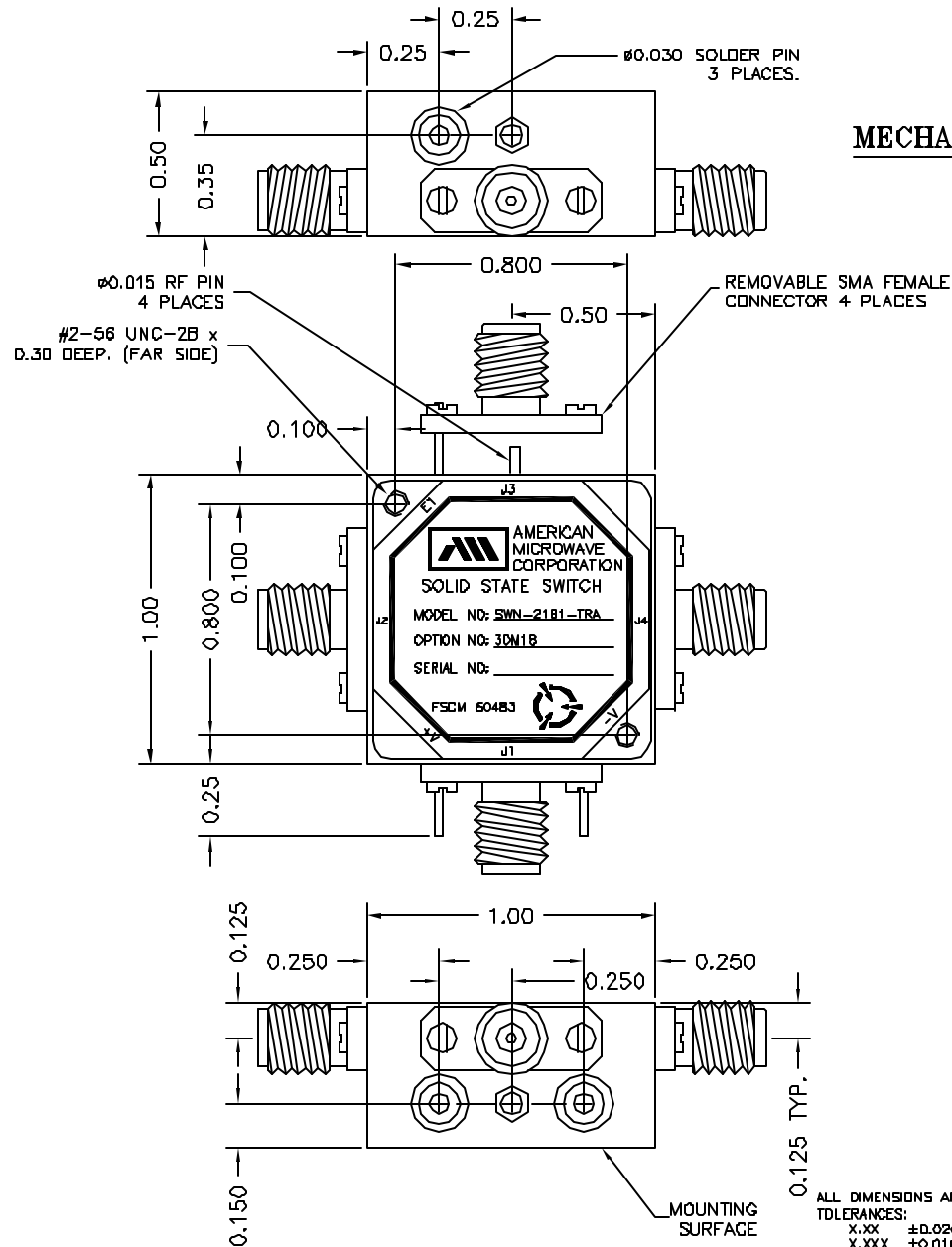
APPROVALS		DATE	TITLE			REV.
DRAWN <i>FDS</i>		8/10/05	PRODUCT FEATURE SWN-2181-TRA OPTION: 30M18 30 MHz TO 18 GHz, TRANSFER SWITCH			-
CHECKED			SIZE A	FSCH NO. 60483	DWG NO. 100-7483	
ISSUED			SCALE N:S		SHEET 1 OF 4	

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ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 507177-1	8/10/05	

## MECHANICAL OUTLINE



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

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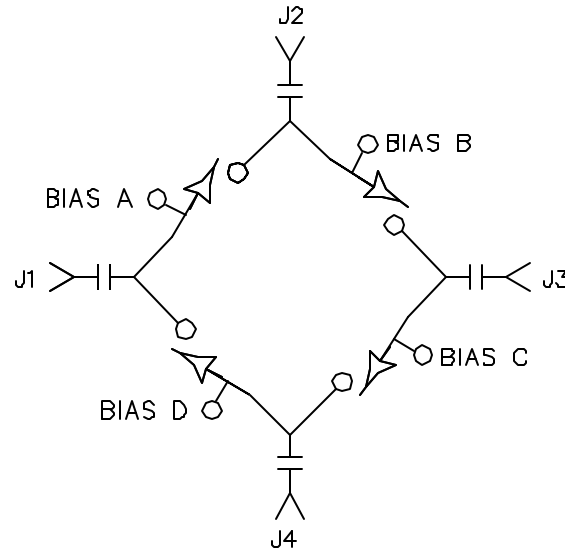
APPROVALS		DATE	TITLE		
DRAWN	<i>FDS</i>	8/10/05	MECHANICAL OUTLINE SWN-2181-TRA OPTION: 30M18 30 MHz TO 18 GHz, TRANSFER SWITCH		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7483
			SCALE	N:S	SHEET 2 OF 4

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ZONE	REV.	DESCRIPTION	DATE	APPROVED
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**FUNCTIONAL BLOCK DIAGRAM**



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APPROVALS		DATE	TITLE		REV.
DRAWN		8/10/05	FUNCTIONAL BLOCK DIAGRAM		
CHECKED			SWN-2181-TRA		
ISSUED			OPTION: 30M18		
			SIZE	PSCM NO.	DWG NO.
			A	60483	100-7483
			SCALE	N:S	SHEET 3 OF 4