

## DESCRIPTION

AMC MODEL SWN-218-12DT-MP-IND-2553-B48 IS A PHASE AND AMPLITUDE MATCHED, ABSORPTIVE (NON-REFLECTIVE) SP12T PIN DIODE SWITCH DESIGNED FOR 6 TO 18 GHz OPERATION.

## SPECIFICATIONS

- FREQUENCY RANGE: . . . . . 6 TO 18 GHz
- INSERTION LOSS: . . . . . 6 TO 12 GHz: 4.3 dB MAXIMUM  
12 TO 18 GHz: 5.6 dB MAXIMUM
- ISOLATION: . . . . . 6 TO 12 GHz: 70 dB MINIMUM  
12 TO 18 GHz: 70 dB MINIMUM
- VSWR ONE PORT ON: . . . . . 6 TO 12 GHz: 2.0:1  
12 TO 18 GHz: 2.0:1
- AMPLITUDE MATCHING: . . . . . ±1.2 dB
- PHASE MATCHING: . . . . . ±30°
- ON TIME: . . . . . 700 nS MAXIMUM
- OFF TIME: . . . . . 700 nS MAXIMUM
- POWER SUPPLY: . . . . . +5V ±5% @ 350 mA MAXIMUM  
-12V ±5% @ 100 mA MAXIMUM
- POWER HANDLING CAPABILITY WITHOUT PERFORMANCE DEGRADATION: . . . . . 600 mW CW OR PEAK
- SURVIVAL POWER: . . . . . 1.5 WATT CW
- CONTROL INPUT IMPEDANCE: . . . . . SCHOTTKY JTL, TWO UNIT LOADS (A UNIT LOAD IS 2 mA SINK CURRENT AND 50 uA SOURCE CURRENT)
- CONTROL: . . . . . LOGIC "0" (-0.3 TO +0.8V FOR "ON" STATE)  
LOGIC "1" (+2.0 TO +5.0V FOR "OFF" STATE)

PIN OUT	
PIN	FUNCTION
1	+5V
2	J2 CONTROL
3	J4 CONTROL
4	J6 CONTROL
5	J8 CONTROL
6	J10 CONTROL
7	J12 CONTROL
8	-12V
9	J1 CONTROL
10	J3 CONTROL
11	J5 CONTROL
12	J7 CONTROL
13	J9 CONTROL
14	J11 CONTROL
15	GND

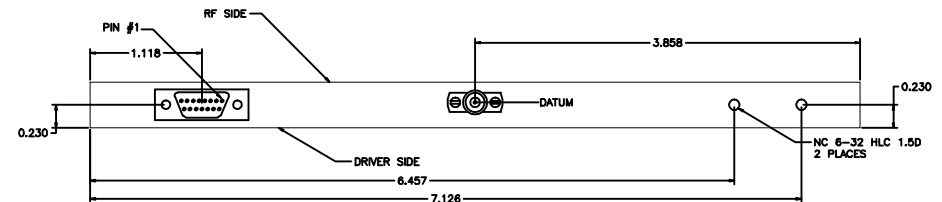
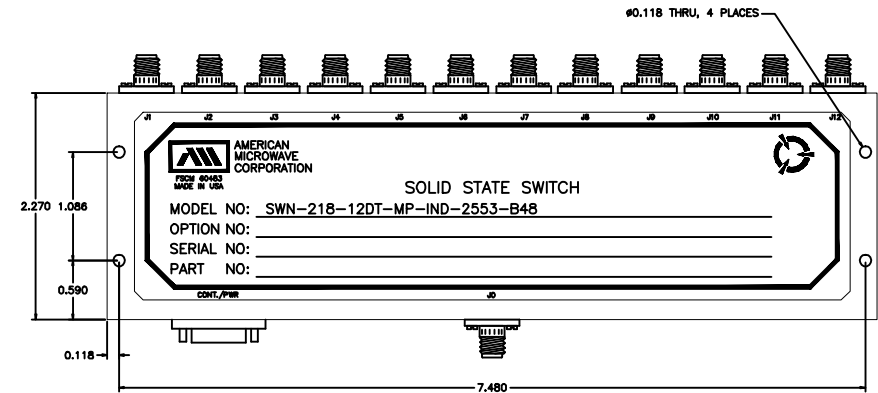
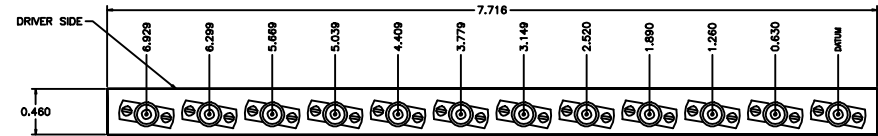
## ENVIRONMENTAL RATINGS:

- TEMPERATURE: . . . . . -65°C TO +110°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY: . . . . . MIL-STD-202F, METHOD 103B COND. B (96 HOURS AT 95%)
- SHOCK: . . . . . MIL-STD-202F, METHOD 213B COND. B (75G, 6 MSEC)
- VIBRATION: . . . . . MIL-STD-202F, METHOD 204D COND. B (0.06" DOUBLE AMPLITUDE OR 15G, WHICHEVER IS LESS)
- ALTITUDE: . . . . . MIL-STD-202F, METHOD 105C COND. B (50,000 FT.)
- TEMPERATURE CYCLE: . . . . . MIL-STD-202F, METHOD 107D COND. A (5 CYCLES)

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

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-		ECR # 07-037 ORIGINAL RELEASE	09/16/07	RA



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ISO 9001:2000 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN	WJL	03/14/07	PRODUCT FEATURE		
CHECKED	RA	03/19/07	SWN-218-12DT-MP-IND-2553-B48		
ISSUED			6 - 18 GHz SP12T SWITCH		
SIZE	FSCM NO.	DWG NO.	REV.		
A	60483	100-S004-000	-		
SCALE N:S			SHEET 1 OF 1		