

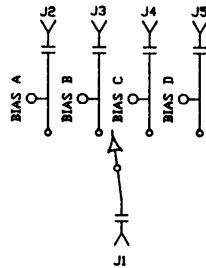
**DESCRIPTION:**

AMC MODEL MSN-4DR-05-1064595 OPTION RC, 303F IS A REFLECTIVE, SINGLE POLE FOUR THROW SWITCH MODULE WITH LOW INSERTION LOSS, VERY HIGH ISOLATION AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR 3.1 GHz TO 3.5 GHz OPERATION.

**SPECIFICATIONS:**

- FREQUENCY: ..... 3.1 GHz TO 3.5 GHz
- INSERTION LOSS: ..... 1.0 dB MAXIMUM
- ISOLATION: ..... 90 dB MINIMUM
- VSWR: ..... 1.5:1 MAXIMUM
- SWITCHING TIME: ..... THE SWITCHING TIME, INCLUDING DRIVER PORTION OF THE SWITCH ASSEMBLY, SHALL NOT EXCEED 5 MICROSECONDS.
- POWER SUPPLY: ..... +5VDC @ 175 mA MAXIMUM  
 ..... -15VDC @ 50 mA MAXIMUM
- PHASE: ..... PORT TO PORT: ±2 DEGREES  
 ..... UNIT TO UNIT: ±3 DEGREES
- CONTROL LOGIC: ..... SEE LOGIC TABLE
- SHIELDING: ..... RF LEAKAGE FROM THE DIODE SWITCH SHALL BE AT LEAST -80 dB WITH RESPECT TO THE MAIN LINE RF POWER, MEASURED PER MIL-STD-461
- INTERMODULATION PRODUCTS: ..... THE THIRD ORDER INTERMODULATION PRODUCTS SHALL BE -60 dBm MAXIMUM AT 0 dBm OUTPUT. THE 2 SIGNALS SHALL BE SUCH THAT THE THIRD ORDER IMP IS WITHIN THE FREQUENCY RANGE OF 3.1 GHz TO 3.5 GHz.
- SIZE: ..... 1.56" (L) x 2.10" (W) x 1.15" (H)
- WEIGHT: ..... ≤ 12 OUNCES TYPICAL

BLOCK DIAGRAM

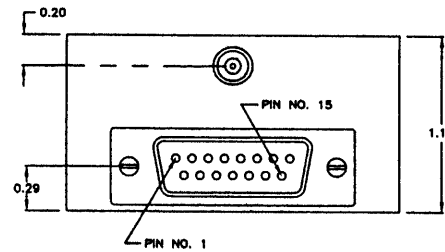
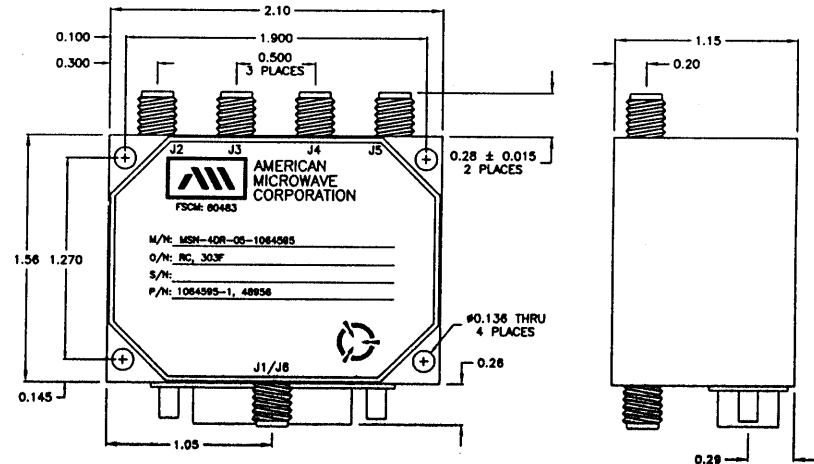


**ENVIRONMENTAL RATINGS**

- TEMPERATURE: ..... +20°C TO +35°C (OPERATING)  
 ..... -40°C TO +52°C (STORAGE)
- HUMIDITY: ..... 20 PERCENT TO 80 PERCENT RELATIVE HUMIDITY OVER THE TEMPERATURE RANGE +13°C TO +35°C
- SHOCK: ..... MIL-STD-202F, METHOD 213B COND. G, EXCEPT 20 G
- VIBRATION: ..... SHALL MEET THE REQUIREMENTS OF MIL-STD-202, METHOD 204, TEST CONDITION A, EXCEPT ±1.5 G FROM 5.5 Hz TO 28 Hz, AND ±3.5 G FROM 28 Hz TO 500 Hz
- ALTITUDE: ..... OPERATING: SEA LEVEL TO 10,000 FEET.  
 ..... NONOPERATING: SEA LEVEL TO 50,000 FEET.
- TEMPERATURE CYCLE: ..... MIL-STD-202F, METHOD 107D COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	ORIGINAL JOB# 006147E	10/06/00	



PIN	FUNCTION
1	BIT 1+
2	BIT 2+
3	BIT 3+
4	BIT 4+
5	SPARE
6	SPARE
7	-15V
8	+5V
9	BIT 1+ RTN
10	BIT 2+ RTN
11	BIT 3+ RTN
12	BIT 4+ RTN
13	SPARE
14	-15V RTN
15	+5V RTN

BIT 4	BIT 3	BIT 2	BIT 1	RF PATH
0	0	0	1	J1-J2
0	0	1	0	J1-J3
0	1	0	0	J1-J4
1	0	0	0	J1-J5
ALL OTHER STATES				NOT ASSIGNED
NO CONNECTION				J1-J2

ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 X.XX ±0.020  
 X.XXX ±0.010

M/N = MANUFACTURER PART NUMBER  
 O/N = OPTION NUMBER  
 S/N = SERIAL NUMBER  
 P/N = PART NUMBER

APPROVALS		DATE	AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	
DRAWN		10/06/00	TITLE	
CHECKED		2/3/02	PRODUCT FEATURE	
ISSUED			MSN-4DR-05-1064595	
			OPTIONS: RC, 303F	
SIZE	FSCM NO.	DWG NO.	REV.	
A	60483	100-5702	-	
SCALE N/S			SHEET 1 of 3	