

DESCRIPTION

AMC MODEL SWN-4DT-561R875 OPTION: NG, IS A TERMINATED SINGLE POLE FOUR THROW SWITCH MODULE, WHICH INCLUDES STANDARD SP4T, PIN DIODE LIMITER, VIDEO FILTER, ATTENUATOR AND AMPLIFIER. THE MODULE IS DESIGNED TO OPERATE FROM 0.7 TO 1.3 GHz WITH 0dB GAIN AND 6 dBm P1dB.

SPECIFICATIONS

- FREQUENCY RANGE: 0.7 TO 1.3 GHz
- PATH GAIN: 0.0 dB \pm 0.6 dB
- GAIN DEVIATION: \pm 0.4dB MAX AT ROOM TEMPERATURE
0.5 dB or -1 dB MAX FROM ROOM TEMPERATURE TO OPERATING TEMPERATURE RANGE
- POWER INPUT: 3dBm(NOMINAL), CW +25 dBm (MAX)
+25 dBm (1 μ S, 0.1% DUTY CYCLE)
- P1dB: 6 dBm MIN
- HARMONICS: -20 dBm MIN WHEN Pin = 3 dBm
-65 dBm MAX WHEN Pin = -20 dBm
- SPURIOUS: -60 dBm MIN WHEN Pin = 3 dBm
-65 dBm MAX WHEN Pin = -20 dBm
- RF ISOLATION: 65 dB MIN FROM UNSELECTED INPUT TO OUTPUT
35 dB MIN FROM OUTPUT TO SELECTED INPUT
70 dB MIN FROM ISOLATION INPUT TO INPUT
-60 dBm MAX SPECTRAL ENERGY LEAKAGE FROM 700 TO 1300 MHz
- INSERTION PHASE VARIATION: \pm 1.5° MAX FOR ANY 50 MHz SEGMENT
- INSERTION GAIN VARIATION: \pm 0.3 dB MAX FOR ANY 50 MHz SEGMENT
- VSWR: INPUT: 1.4:1 MAX; OUTPUT: 1.6:1 MAX
FROM 700 TO 1300 MHz
- SWITCHING TIME: 25 nS MAX FROM 50% TTL TO 90% RF OUTPUT
- VIDEO FEEDTHROUGH: FROM 500 TO 1300 MHz, -70 AND -60 dBm MAX
AFTER A DURATION OF 30ns AND 25ns, RESPECTIVELY.
- SWITCH CONTROL: "0" ON, "1" OFF
- DC POWER REQUIREMENT: 5Vdc AT 320 mA MAX, -12Vdc AT 50mA MAX
- FINISH: CHROMATE CONVERSION COATING PER MIL-C-5541, CLASS 1A OR CLASS 3

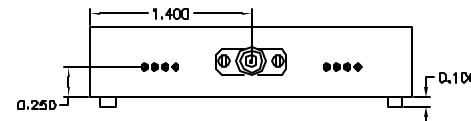
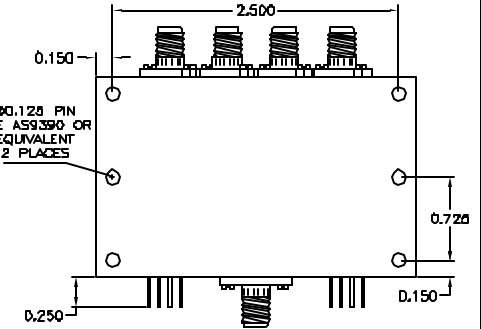
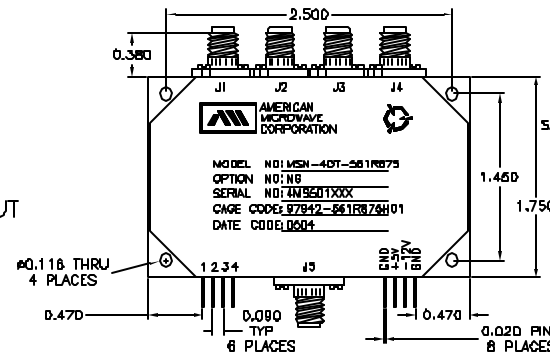
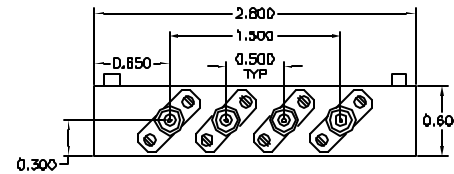
ENVIRONMENTAL RATINGS:

- TEMPERATURE: -40°C TO +85°C (OPERATING)
-55°C TO +95°C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103 COND. B
- SHOCK: MIL-STD-810, METHOD 516 COND. B
- VIBRATION: MIL-STD-810, METHOD 514 PROC. I
- ALTITUDE: MIL-STD-202, METHOD 105 COND. C
- SALT FOG: ASTM G85.A4
- EXPLOSIVE ATMOSPHERE: MIL-STD-810, METHOD 511.1
- ACOUSTIC NOISE: FOLLOW FIG.4 IN SCD

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

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
XXX \pm 0.020
XXX \pm 0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 410254-1&c2E	8/10/05	



CONTROL / WORLD LINES				SWITCH PATH
E1	E2	E3	E4	SELECTED
0	1	1	1	J1 TO J5
1	0	1	1	J2 TO J5
1	1	0	1	J3 TO J5
1	1	1	0	J4 TO J5

AMERICAN MICROWAVE CORPORATION

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ISO 9001:2000 CERTIFIED



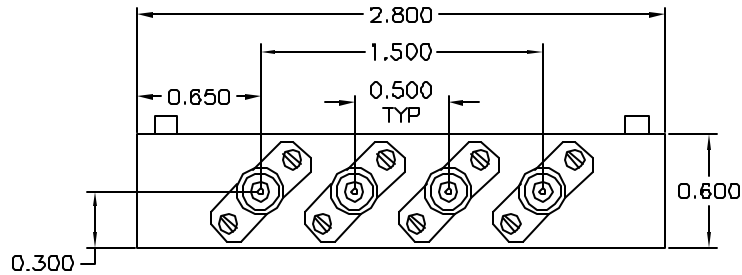
APPROVALS		DATE	TITLE		REV.
DRAWN	YR	8/10/05	PRODUCT FEATURE MSN-4DT-561R875 OPTION: NG 0.7 TO 1.3GHz SP4T AND AMPLIFIER MODULE		-
CHECKED			SIZE	FSCHM NO.	DWG NO.
ISSUED			A	60483	100-7312
			SCALE	N:S	SHEET 1 OF 3

DESCRIPTION

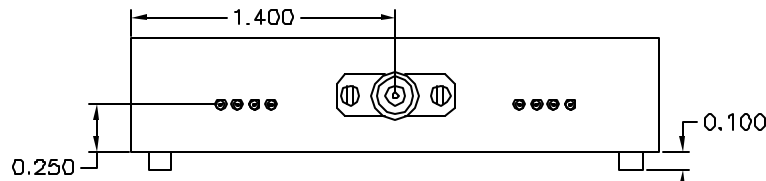
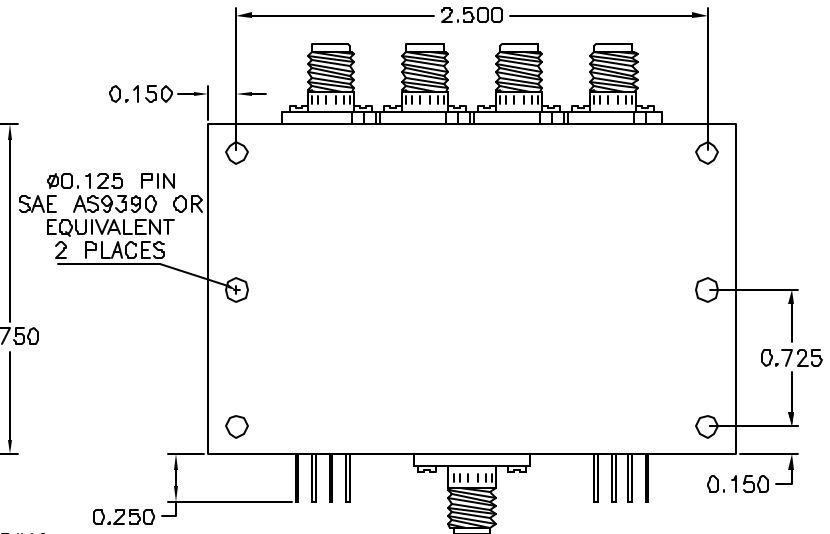
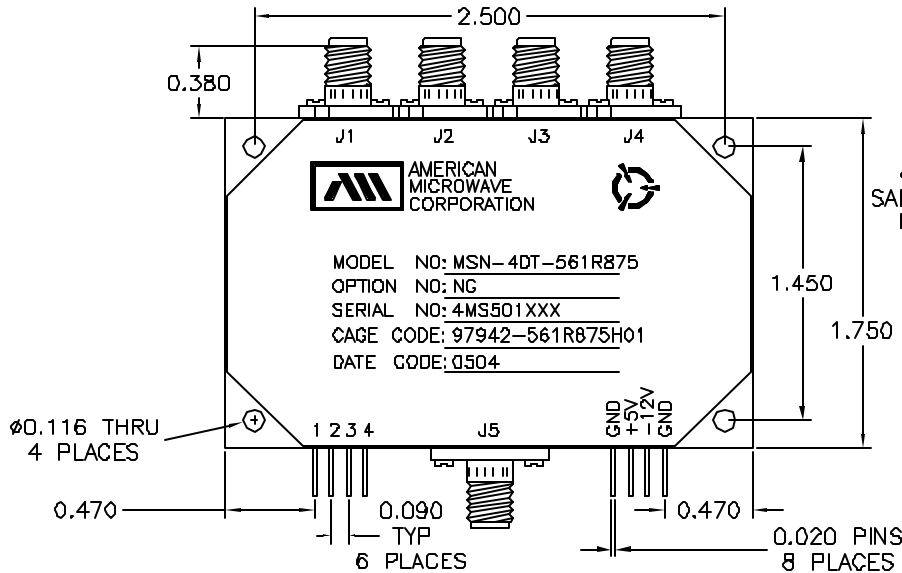
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	-	ORIGINAL RELEASE JOB# 410254-1&c2E	8/10/05	

MECHANICAL OUTLINE



CONTROL / WORLD LINES				SWITCH PATH
E1	E2	E3	E4	SELECTED
0	1	1	1	J1 TO J5
1	0	1	1	J2 TO J5
1	1	0	1	J3 TO J5
1	1	1	0	J4 TO J5



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

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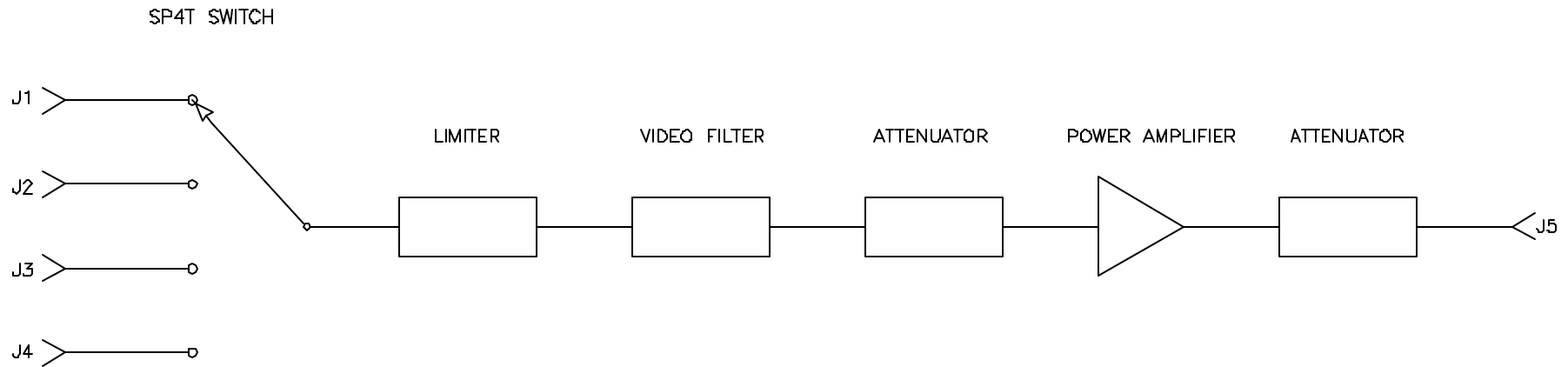
APPROVALS		DATE	TITLE		REV.
DRAWN	YR	8/10/05	MECHANICAL OUTLINE MSN-4DT-561R875 OPTION: NG		-
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	60483	100-7312
			SCALE	N:S	SHEET 2 OF 3

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ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	ORIGINAL RELEASE JOB# 410254-1&2E NORTHROP GRUMMAN, MD	8/10/05	

FUNCTIONAL BLOCK DIAGRAM



CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE	
DRAWN <i>YR</i>		8/10/05	FUNCTIONAL BLOCK DIAGRAM MSN-4DT-561R875 OPTION: NG	
CHECKED			0.7 TO 1.3GHz SP4T AND AMPLIFIER MODULE	
ISSUED			SIZE A	REV. -
			PSCH NO. 60483	DWG NO. 100-7312
			SCALE N:S	SHEET 3 OF 3