



TEST REPORT
ON
70 MHz TO 20.5 GHz
SINGLE POLE SINGLE THROW
REFLECTIVE SWITCH / RF BLANKING MODULE

AMC MODEL No:
SWN-0720-1DR-1000021228

Serial Number: 1MS411349

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ISO9001 : 2000 CERTIFIED

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SINGLE POLE SINGLE THROW REFLECTIVE SWITCH / RF BLANKING MODULE AMC MODEL No: SWN-0720-1DR-1000021228

FEATURES:

- **70 MHz TO 20.5 GHz FREQUENCY RANGE**
- **LOW INSERTION LOSS**
- **HIGH ISOLATION**

SPECIFICATIONS:

- FREQUENCY : 70 MHz TO 20.5 GHz
- INSERTION LOSS, PASS MODE, AT +10 dBm : 1.75 dB TYPICAL
- INPUT : 2.0 dB MAXIMUM
- ISOLATION, BLANKING MODE : 33 dB MINIMUM
- INPUT THIRD ORDER INTERCEPT POINT, : +10 dBm MINIMUM
- PASS MODE
- MINIMUM RF INPUT POWER (WITHOUT : +20 dBm CW
- DAMAGE), PASS MODE
- MINIMUM RF INPUT POWER (WITHOUT : +50 dBm 10 uSEC MAXIMUM PULSE, 750 Hz RATE
- DAMAGE), BLANKING MODE
- VSWR, PASS MODE : INPUT: 2.0:1 MAXIMUM
- : OUTPUT: 2.0:1 MAXIMUM
- PULSE RISE TIME : < 100 nSEC
- DC POWER : +15 VDC @ 75 mA MAXIMUM
- : -15V @ 75 mA MAXIMUM
- : BLANKING FUNCTION IS ON WHEN EITHER INPUT
- : IS ABOVE 3V. BLANKING IS OFF (PASS MODE
- : ENABLED) WHEN BOTH INPUTS ARE BELOW 2V.
- : EACH CONTROL INPUT IS CAPABLE OF
- : HANDLING 25V PULSES AND OPERATE
- : PROPERLY.
- 2 CONTROL INPUTS
- 1 CONTROL OUTPUT : BUFFERED TTL CONTROL OUTPUT
- SWITCHING SPEED, BLANKING ON OR OFF
- FROM 50% OF 3V PULSES : 1.0 uSEC MAXIMUM, ON OR OFF
- FROM 50% OF 25V PULSES : 1.0 uSEC MAXIMUM, ON OR OFF
- DC INPUT PINS : FILTERED SOLDER TURRETS COMPATIBLE WITH
- : 24 GAUGE WIRE
- CONTROL CONNECTORS : SOLDER TURRETS COMPATIBLE WITH 24 GAUGE
- : WIRE, EMI FILTERED ABOVE 500 MHz
- RF CONNECTORS : INPUT: SMA FEMALE
- : OUTPUT: SMA MALE

PRODUCT FEATURE

REV. NO.	DESCRIPTION	DATE	APPROVED
1	ORIGINAL RELEASE JOB# 407148E	7/30/94	

DESCRIPTION

AMC MODEL SWN-0720-1DR-1000021228 IS A 70 MHz TO 20.5 GHz, REFLECTIVE SINGLE POLE SINGLE THROW SWITCH/RF BLANKING MODULE WITH AN INSERTION LOSS (PASS MODE) AT +10 dBm INPUT OF 1.75 dB MAXIMUM AND AN ISOLATION (BLANKING MODE) OF 33 dB MINIMUM.

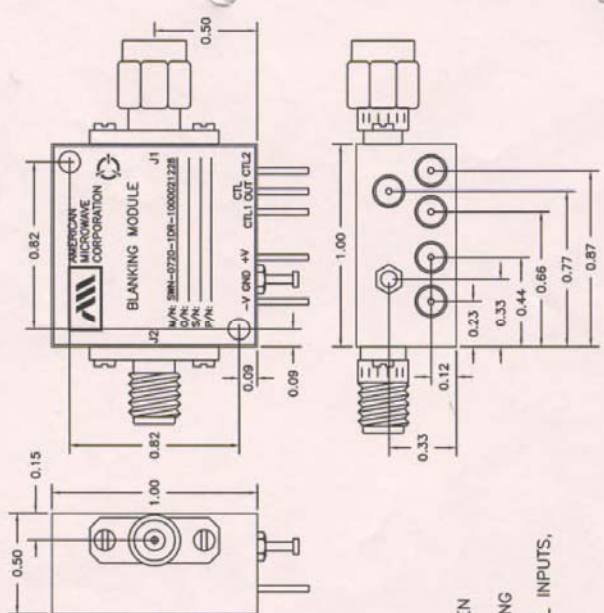
SPECIFICATIONS

- FREQUENCY RANGE: 70 MHz TO 20.5 GHz
- INSERTION LOSS, PASS MODE, AT +10 dBm INPUT: 1.75 dB TYPICAL
2.0 dB MAXIMUM
33 dB MINIMUM
- ISOLATION, BLANKING MODE: +10 dBm MINIMUM
- INPUT THIRD ORDER INTERCEPT: +20 dBm CW
- POINT, PASS MODE: +20 dBm CW
- MINIMUM RF INPUT POWER (WITHOUT DAMAGE), PASS MODE: +50 dBm 10 μ Sec MAXIMUM PULSE
- MINIMUM RF INPUT POWER (WITHOUT DAMAGE), BLANKING MODE: 750 Hz RATE
- VSWR, PASS MODE: INPUT: 2.0:1 MAXIMUM
OUTPUT: 2.0:1 MAXIMUM
- PULSE RISE TIME: <100 nSec
- DC POWER: +15VDC @ 75 mA MAXIMUM
-15V @ 75 mA MAXIMUM
- 2 CONTROL INPUTS: BLANKING FUNCTION IS ON WHEN EITHER INPUT IS ABOVE 3V
BLANKING IS OFF (PASS MODE ENABLED) WHEN BOTH INPUTS ARE BELOW 2V
EACH CONTROL INPUT IS CAPABLE OF HANDLING 25V PULSES AND OPERATE PROPERLY
NOTE: WITH NO CONNECTION TO THE CONTROL INPUTS, THE UNIT SHALL BE IN PASS MODE.
BUFFERED TTL CONTROL OUTPUT
- 1 CONTROL OUTPUT: SWITCHING SPEED, BLANKING ON OR OFF: FROM 50% OF 3V PULSE: 1.0 μ Sec MAXIMUM, ON OR OFF
FROM 50% OF 25V PULSE: 1.0 μ Sec MAXIMUM, ON OR OFF
- DC INPUT PINS: FILTERED SOLDER TURRETS COMPATIBLE WITH 24 GAUGE WIRE
- CONTROL CONNECTORS: SOLDER TURRETS COMPATIBLE WITH 24 GAUGE WIRE
EMI FILTERED ABOVE 500 MHz
- RF CONNECTORS: INPUT: SMA FEMALE
OUTPUT: SMA MALE

ENVIRONMENTAL RATINGS

- TEMPERATURE: OPERATING: -20 TO +75°C (AMBIENT)
STORAGE: -30 TO +85°C
- HUMIDITY: UP TO 95% NON-CONDENSING
- ELEVATION: SEA LEVEL TO 10,000 FEET

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



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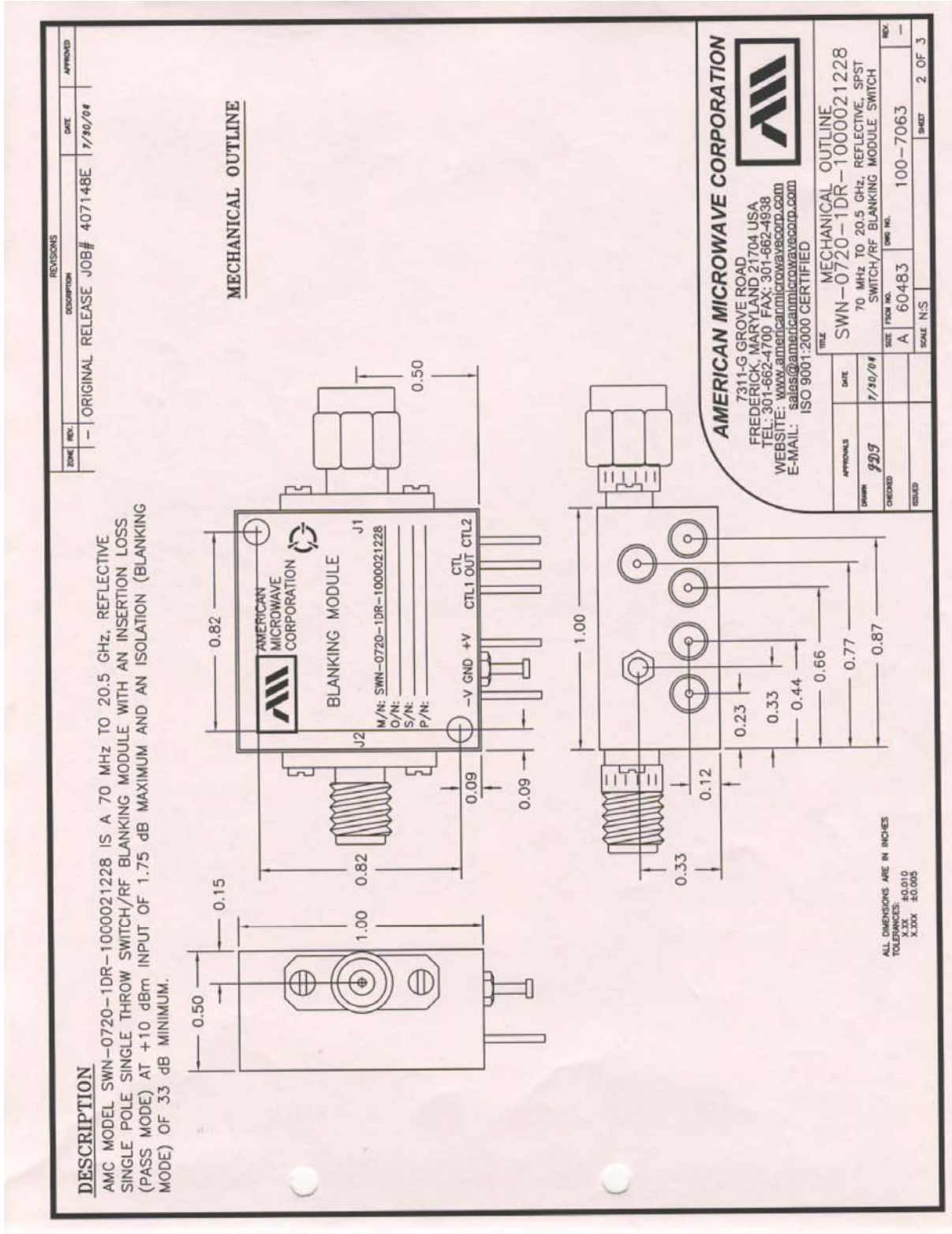
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APPROVALS	DATE	TITLE	REV.
[Signature]	7/30/94	SWN-0720-1DR-1000021228 70 MHz TO 20.5 GHz, REFLECTIVE, SPST SWITCH/RF BLANKING MODULE SWITCH	-
[Signature]	7/30/94	7311-G GROVE ROAD FREDERICK, MARYLAND 21704 USA TEL: 301-662-4700 FAX: 301-662-4938 WEBSITE: www.americamicrowavecorp.com E-MAIL: sales@americamicrowavecorp.com ISO 9001:2000 CERTIFIED	-

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ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 .10-.010
 .2-.005
 .3-.005

OUTLINE DRAWING



FUNCTIONAL SCHEMATIC

