



TEST REPORT
ON
50 MHz TO 20.25 GHz
SINGLE POLE THREE THROW
ABSORPTIVE / NON-REFLECTIVE SWITCH MODULE

AMC MODEL No:
MSNN-3DT-05-STANDARD
OPTION MACOM, 50M21

Serial Number: 3MS412267

DESIGNED
BY
R. Afable

TESTED
BY
P. Kuhn

REPORTED
BY
E. Elder

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AMERICAN MICROWAVE CORPORATION., 7311-G Grove Road, Frederick, MD 21704
Tel: 301-662-4700 • Fax: 301-662-4938 • Email: sales@americanmicrowavecorp.com
Website: <http://www.americanmicrowavecorp.com>

ISO9001 : 2000 CERTIFIED



TABLE OF CONTENTS

●	PRODUCT DESCRIPTION AND ELECTRICAL SPECIFICATIONS	PAGE 3
●	PRODUCT FEATURE AND ENVIRONMENTAL SPECIFICATIONS	PAGE 4
●	OUTLINE DRAWING	PAGE 5
●	FUNCTIONAL SCHEMATIC	PAGE 6
●	TEST DATA ON MSNN-3DT-05-STANDARD OPTION MACOM, 50M21 SERIAL NUMBER 3MS412267	PAGE 7

**SINGLE POLE THREE THROW
ABSORPTIVE / NON-REFLECTIVE SWITCH MODULE
AMC MODEL No:
MSNN-3DT-05-STANDARD OPTIONS MACOM, 50M21**

FEATURES:

- **50 MHz TO 20.25 GHz FREQUENCY RANGE**
- **LOW INSERTION LOSS**
- **HIGH ISOLATION**
- **INTEGRAL TTL DRIVER**

SPECIFICATIONS:

• FREQUENCY	:	50 MHz TO 20.25 GHz
• INSERTION LOSS	:	3 dB MAXIMUM
• ISOLATION	:	35 dB MINIMUM
• VSWR	:	2.0:1
• INPUT THIRD ORDER INTERCEPT POINT	:	+30 dBm MINIMUM
• INPUT SECOND ORDER INTERCEPT POINT	:	+40 dBm MINIMUM
• MAXIMUM INPUT POWER	:	+20 dBm MINIMUM
• SWITCHING SPEED (50% TTL TO 10/90% RF)	:	75/100 nS
• CONTROL LOGIC	:	TTL "0" = ON; "1" = OFF
• DC BIAS	:	+5V @ 75 mA MAXIMUM -15V @ 50 mA MAXIMUM

PRODUCT FEATURE

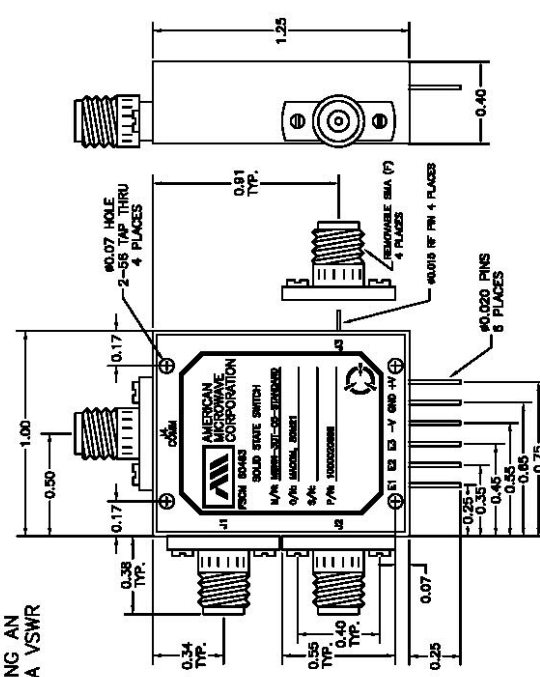
REV#	DESC	REVISIONS	DATE	APPROVED
1	ORIGINAL RELEASE	JOB# 408188E	9/20/04	

DESCRIPTION

AMC MODEL MSNN-3DT-05-STANDARD OPTION: MACOM, 50M21 IS A 0.05 TO 20.25 GHz, ABSORPTIVE/NON-REFLECTIVE, SINGLE POLE THREE THROW SWITCH HAVING AN INSERTION LOSS OF 3 dB MAXIMUM, AN ISOLATION OF 35 dB MINIMUM AND A VSWR OF 2.0:1 MAXIMUM.

SPECIFICATIONS

- FREQUENCY RANGE: 0.05 TO 20.25 GHz
- INSERTION LOSS: 3 dB MAXIMUM
- VSWR: 2.0:1 MAXIMUM
- ISOLATION: 35 dB MINIMUM
- INPUT THIRD ORDER INTERCEPT POINT: +30 dBm MINIMUM
- INPUT SECOND ORDER INTERCEPT POINT: +40 dBm MINIMUM
- MAX INPUT POWER: +20 dBm MINIMUM
- SWITCHING SPEED (50% TTL TO 10/90% RF): : 75/100 nSec
- CONTROL LOGIC: TTL "0" = ON; "1" = OFF
- CONTROL TABLE: SEE CONTROL TABLE
- DC BIAS: +5V @ 75 mA MAXIMUM
 -15V @ 50 mA MAXIMUM



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

ENVIRONMENTAL RATINGS

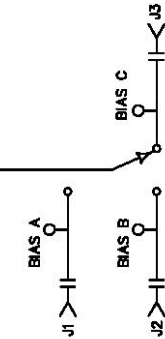
- TEMPERATURE: -10°C TO +70°C (OPERATING)
 -65°C TO +125°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLES: MIL-STD-202F, METHOD 107D COND. A

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

CONTROL TABLE

	E1	E2	E3	
0	1	1	1	J4-J1
1	0	1	1	J4-J2
1	1	0	1	J4-J3

BLOCK DIAGRAM



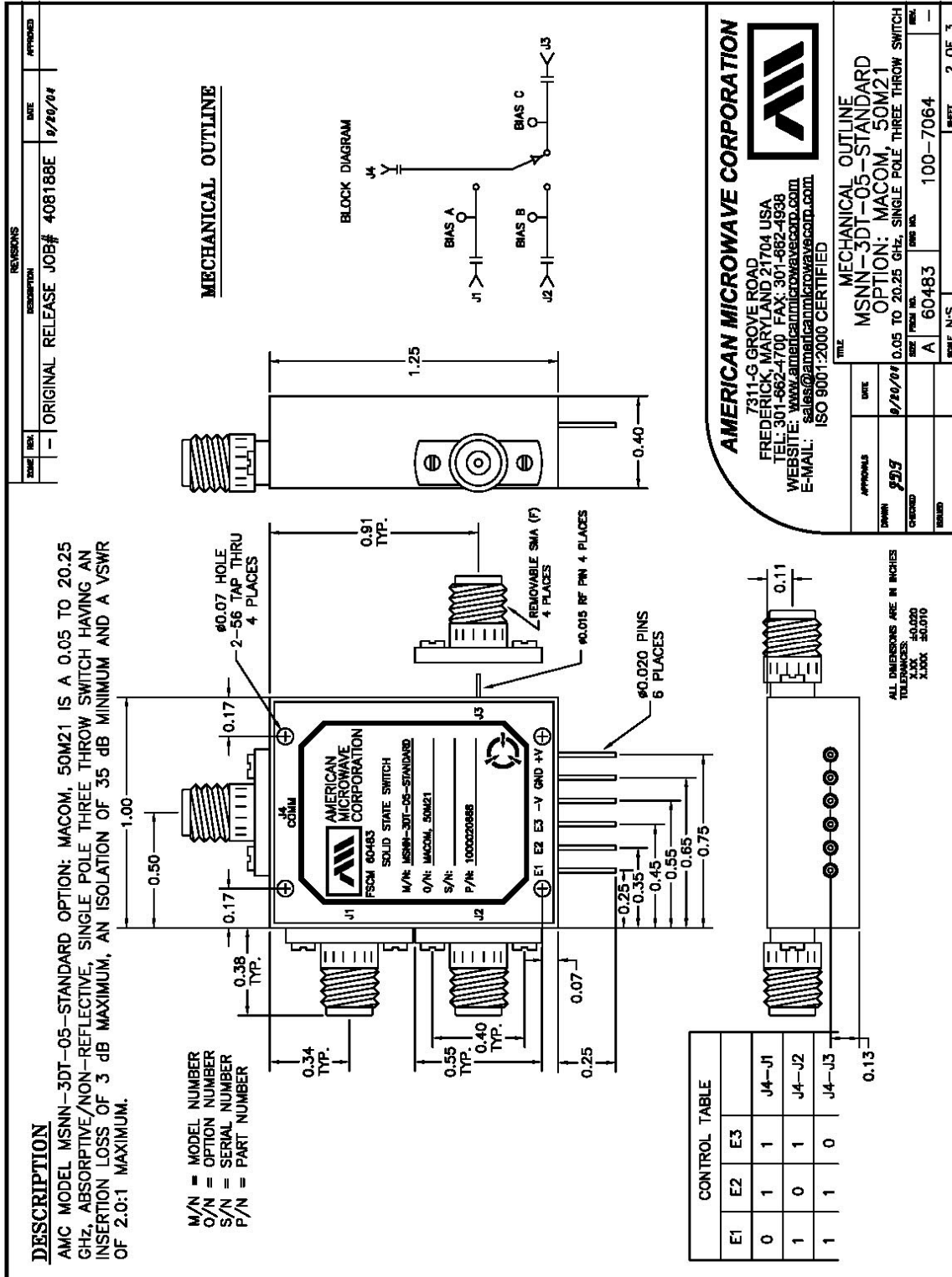
AMERICAN MICROWAVE CORPORATION

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
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TITLE		DATE		REV#	
MSNN-3DT-05-STANDARD		9/20/04		1	
OPTION: MACOM, 50M21					
SIZE	FORM NO.	FORM NO.	FORM NO.	FORM NO.	FORM NO.
A	60483	100-7064			
SCALE	N/S	1 OF 3			

ALL DIMENSIONS ARE IN INCHES
 UNLESS OTHERWISE SPECIFIED
 TOLERANCES:
 .000
 .001
 .002
 .005

OUTLINE DRAWING





FUNCTIONAL SCHEMATIC

