



TEST REPORT
ON
2 TO 18 GHz
SINGLE POLE THREE THROW
ABSORPTIVE / NON-REFLECTIVE SWITCH MODULE

AMC MODEL No:
MSN-3DT-218-05-ISONET

Serial Number: 3MS70763

DESIGNED
BY
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May 25, 2005

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ISO9001 : 2000 CERTIFIED

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SINGLE POLE THREE THROW ABSORPTIVE / NON-REFLECTIVE SWITCH MODULE AMC MODEL No: MSN-3DT-218-05-ISONET

FEATURES:

- **2 TO 18 GHz FREQUENCY RANGE**
- **RECTANGULAR HOUSING DESIGN**
- **IN-LINE OUTPUT PIN CONFIGURATION**

SPECIFICATIONS:

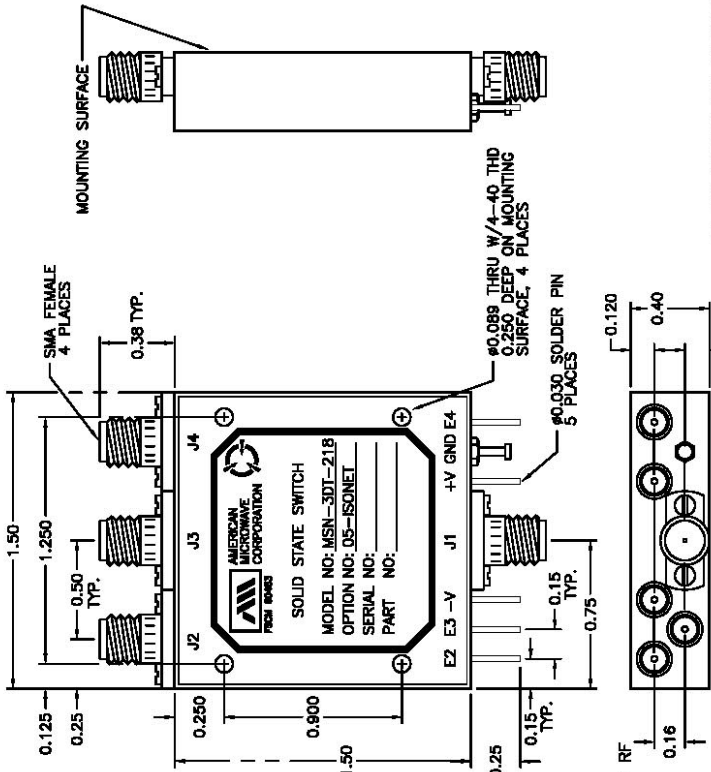
●	FREQUENCY	:	2 TO 18 GHz
●	INSERTION LOSS	:	3.0 dB MAXIMUM
●	ISOLATION	:	55 dB MINIMUM
●	VSWR	:	2.0:1 MAXIMUM ON AND OFF
●	POWER HANDLING	:	1 WATT (CW AVERAGE), 10 WATT PEAK (1uS P.W. \geq 50:1 DUTY) MAXIMUM
●	SPEED	:	100 nS MAXIMUM
●	IMPEDENCE	:	50 OHMS
●	POWER SUPPLY	:	+5V @ 150 mA MAXIMUM
		:	-15V @ 65 mA MAXIMUM
●	CONNECTORS	:	SMA FEMALE (RF), SOLDER PIN (CONTROL)
●	CONTROL LOGIC	:	TTL COMPATIBLE

PRODUCT FEATURE

REV. A	REVISIONS DESCRIPTION ORIGINAL RELEASE	DATE 8/24/97	APPROVED
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SPECIFICATIONS:

FREQUENCY: 2.0 GHz TO 18 GHz
 INSERTION LOSS: 3.0 db MAXIMUM
 ISOLATION: 55 db MINIMUM
 VSWR: 2.0:1 MAXIMUM ON AND OFF
 POWER HANDLING: 1 WATT (CW AVERAGE)
 10 W PEAK (1 μ s P.W. \geq 50:1 DUTY) MAXIMUM
 SPEED: 100 ns MAXIMUM
 IMPEDANCE: 50 OHMS
 POWER SUPPLY: +5V \oplus 150 mA MAX.
 -15V \ominus 65mA MAXIMUM
 CONNECTORS: SMA FEMALE (RF) SOLDER PIN (CTL)
 CONTROL LOGIC: TTL COMPATIBLE



AMERICAN MICROWAVE CORPORATION
SOLID STATE SWITCH
 MODEL NO: MSN-3DT-218
 OPTION NO: 05-ISONET
 SERIAL NO:
 PART NO:

LOGIC TABLE

LOGIC	J1-J2	J1-J3	J1-J4
E2=0	ON		
E2=1	OFF		
E3=0		ON	
E3=1		OFF	
E4=0			ON
E4=1			OFF

NOTE:

- J1 IS RF COMMON; J2, J3 & J4 ARE RF INPUT/OUTPUT FOR EACH CHANNEL, TTL LOGIC (0) IS LOW LOSS, (1) IS ISOLATION
- E2, E3 & E4 ARE INDEPENDANT TTL CONTROL INPUTS FOR EACH CHANNEL, TTL LOGIC (0) IS LOW LOSS, (1) IS ISOLATION
- TTL (0) IS 0 TO 0.8V, TTL (1) IS 2.0 TO 5.5V
- SWITCHING SPEED IS MEASURED FROM 50% TTL TO 10%/90% DETECTED RF

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

ENVIRONMENTAL RATINGS

TEMPERATURE: -55°C TO +85°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 CYCLE: MIL-STD-202F, METHOD 107D COND. A

PART NO.	DATE	TITLE	DRAWN	CHECKED	SCALE	SHEET
	8/24/97	AMERICAN MICROWAVE CORPORATION FREDERICK, MARYLAND	WJPP		3-1	1 of 1
OUTLINE DRAWING			MSN-3DT-218-05-ISONET			
ABSORPTIVE/NON-REFLECTIVE SOLID STATE SWITCH			DWP NO. 100-4055			
REV.	FRONT NO.	DATE	REV.			
A	60483		A			

FINAL TEST DATA

AMC MODEL NO: MSN-3DT-05 OPTION 26, SERIAL NUMBER: 3MS70763

FORM: SW-01/0791



DATE: 7/23/97

MICROWAVE SWITCH FINAL TEST DATA

OB NO: 99705 (70357E) MODEL NO: MSN-3DT-218-05-ISONET SERIAL NO: 3MS70763
 CUSTOMER: AMC (ISONET) TECHNICIAN: B Gray
 SPECIFICATION: _____ FREQUENCY RANGE: 2.0-18.0 GHz

INSERTION LOSS	VSWR		
	INPUT	OUTPUT ON	OUTPUT OFF
J1-J2 -3.16 dB	-11.58 dB	-11.24 dB	-10.02 dB
J1-J3 -2.84 dB	-12.25 dB	-10.51 dB	-9.96 dB
J1-J4 -2.75 dB	-11.29 dB	-11.48 dB	-12.74 dB

ISOLATION	SWITCHING SPEED			
	DELAY ON	RISE TIME	DELAY OFF	FALL TIME
J1-J2	54 ns	4 ns	26 ns	4 ns
J1-J3	56 ns	6 ns	26 ns	4 ns
J1-J4	56 ns	4 ns	26 ns	4 ns

NOTE: Any additional Test Data on Back

Test: B Gray
 QA/QC: _____
 Date: _____