



TEST REPORT

ON

0.5 TO 2 GHz

SINGLE POLE TWO THROW

REFLECTIVE SWITCH

AMC MODEL No:

SWN-218-2DR-STANDARD

OPTION 052, HPR1W, B02

Serial Numbers: 2MS404289 AND 2MS404290

DESIGNED

BY

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TESTED

BY

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REPORTED

BY

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November 11, 2004

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ISO9001 : 2000 CERTIFIED

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**SINGLE POLE TWO THROW
REFLECTIVE SWITCH
AMC MODEL No:
SWN-218-2DR-STANDARD OPT 052, HPR1W, B02**

FEATURES:

- **0.5 TO 2 GHz FREQUENCY RANGE**
- **LOW INSERTION LOSS**
- **HIGH ISOLATION**

SPECIFICATIONS:

- **FREQUENCY** : 0.5 TO 2 GHz
- **INSERTION LOSS** : 2.0 dB MAXIMUM
- **ISOLATION** : 60 dB MINIMUM
- **VSWR** : 2.0:1
- **SPEED** : RISE: 10 ns TYPICAL, 15 ns MAXIMUM
: FALL: 10 ns TYPICAL, 15 ns MAXIMUM
: DELAY ON: 75 ns TYPICAL, 100 ns MAXIMUM
: DELAY OFF: 75 ns TYPICAL, 100 ns MAXIMUM
- **POWER INPUT** : (CW) +20 dBm (STANDARD), 10 dBm HIGH SPEED
- **SURVIVAL POWER** : 1 WATT CW, 10 WATTS PEAK 1 usec
- **CONTROL** : TTL LOGIC "0"=ON, "1"=OFF
- **POWER SUPPLY** : +5V @ 100 mA MAXIMUM
: -15V @ 75 mA MAXIMUM

PRODUCT FEATURE

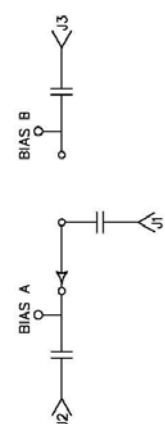
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE JOB# 402026PE-1	8/29/04	

DESCRIPTION:
 AMC MODEL SWN-218-2DR-STANDARD OPTION: 052, HPR1W, B02 IS A SINGLE POLE TWO THROW SWITCH WITH AN INSERTION LOSS OF 2.0 dB MAXIMUM, AN ISOLATION OF 60 dB MINIMUM, IT IS DESIGNED TO OPERATE BETWEEN THE 0.5 TO 2 GHz FREQUENCY RANGE.

SPECIFICATIONS:

- FREQUENCY: 0.5 GHz TO 2.0 GHz
- INSERTION LOSS: 2.0 dB MAXIMUM
- ISOLATION: 60 dB MINIMUM
- VSWR: 2.0:1
- SPEED: RISE: 10ns TYPICAL, 15ns MAXIMUM
 FALL: 10ns TYPICAL, 15ns MAXIMUM
 DELAY ON: 75ns TYPICAL, 100ns MAXIMUM
 DELAY OFF: 75ns TYPICAL, 100ns MAXIMUM
- POWER INPUT: (CW)+20dBm (STANDARD), +10 dBm (HIGH SPEED)
- SURVIVAL POWER: 1 WATT CW, 10 WATTS PEAK 1 usec
- CONTROL: TTL LOGIC "0"=ON "1"=OFF
- POWER SUPPLY: +5V @ 100 mA MAXIMUM
 -15V @ 75 mA MAXIMUM

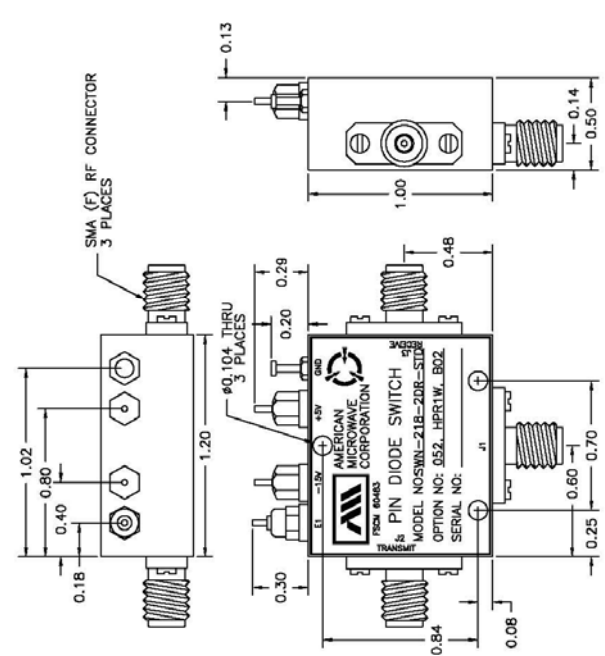
OPTIONS:
 SINGLE CONTROL WITH SOLDER PIN STANDARD
 052 FREQUENCY RANGE OF 0.5 - 2.0 GHz
 HPR1W HIGH POWER, 1 WATT
 B02 -15V POWER SUPPLIES



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

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



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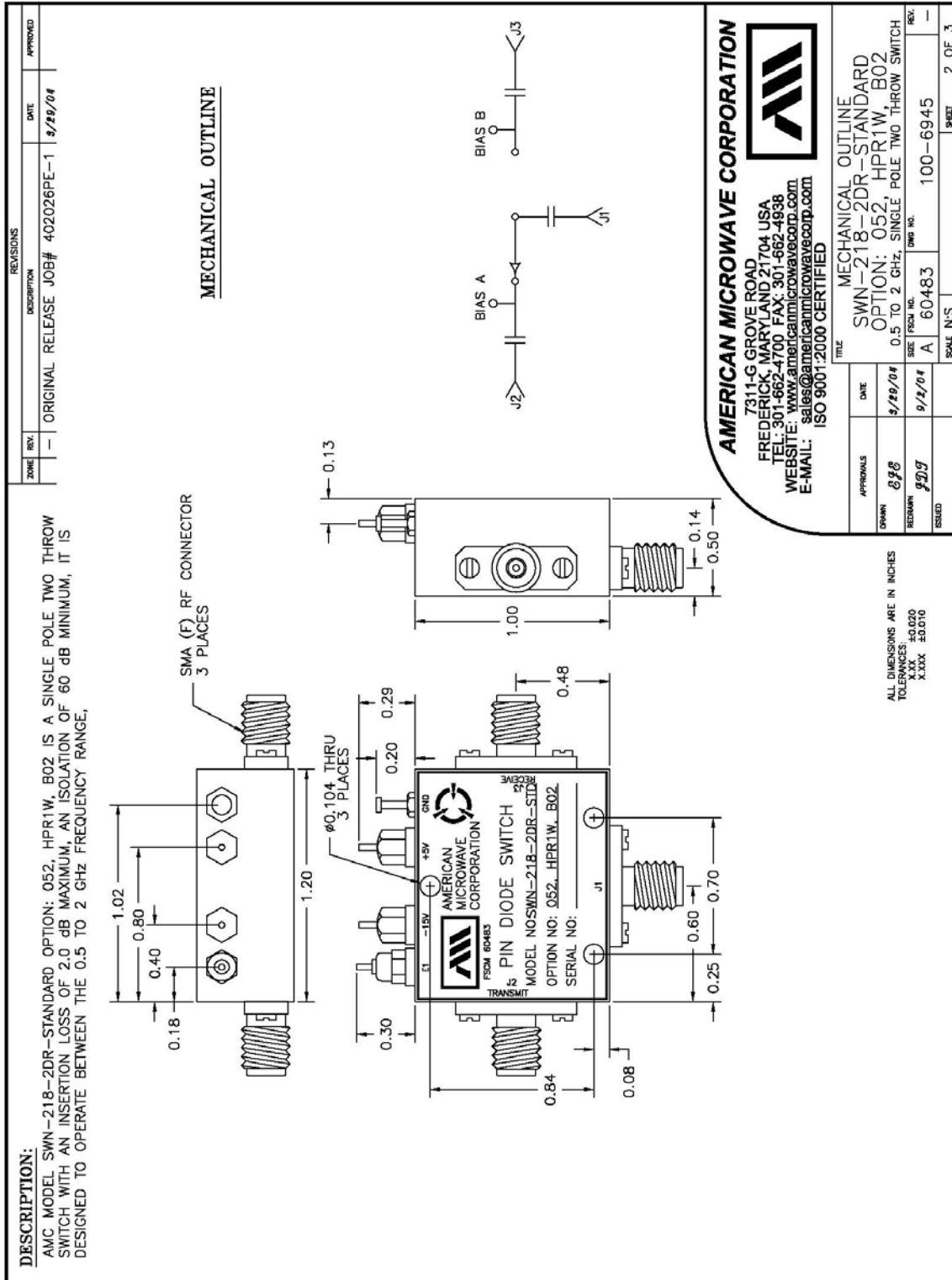
APPROVALS		DATE	TITLE
DESIGN	8/28	8/29/04	PRODUCT FEATURE
REVISION	8/29	8/29/04	SWN-218-2DR-STANDARD OPTION: 052, HPR1W, B02
ISSUED			0.5 TO 2 GHz, SINGLE POLE TWO THROW SWITCH

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

SCALE: N/S SHEET 1 OF 3

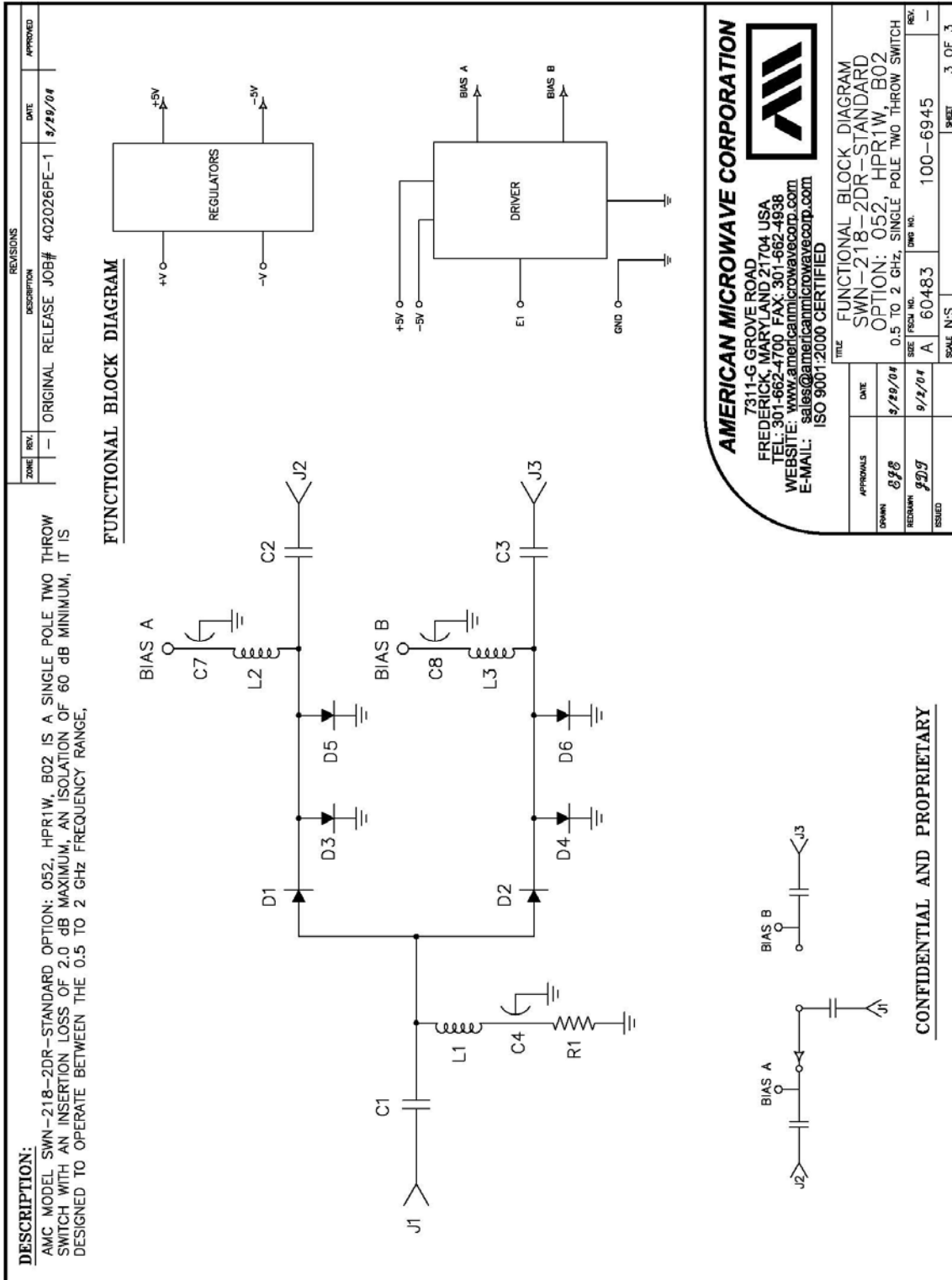


OUTLINE DRAWING





FUNCTIONAL SCHEMATIC



FINAL TEST DATA

FINAL TEST DATA SHEETS

FOR

AMC MODEL NUMBER

SWN-218-2DR-STANDARD
OPTION 052, HPR1W, B02

Serial Numbers:

2MS404289 AND 2MS404290

FINAL TEST DATA

AMC MODEL NO: SWN-218-2DR-STANDARD OPTIONS HPR1W052, HPR1W, B02
 SERIAL NUMBER: 2MS404289

FORM: 492-SW-DTA 11/11/00



DATE: 27 May 2004

FINAL TEST DATA
 ON
 MICROWAVE SWITCH

CUSTOMER: AEROFLEX No: 10027 TECHNICIAN: T,PHUNG E #29
 JOB NO: 402026PE-1
 MODEL NO: SWN-218-2DR-STANDARD OPTION NO: 052, HPR1W, B02
 SERIAL NO: 2MS404289 SPECIFICATION:
 CURRENT DRAW: + 5VDC @ 21 mA; - 15 VDC @ 12 mA FREQUENCY RANGE: 0.5 - 2.0 GHz

INSERTION LOSS (WORST CASE)	RETURN LOSS (WORST CASE)					
	INPUT dB	INPUT VSWR	OUTPUT ON dB	OUTPUT ON VSWR	OUTPUT OFF dB	OUTPUT OFF VSWR
J1-J2 0.37 dB	22.63 dB	1.15 : 1	24.52 dB	1.12 : 1	dB	1. : 1
J1-J3 0.37 dB	22.21 dB	1.16 : 1	25.06 dB	1.11 : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
ISOLATION	SWITCHING SPEED					
	DELAY ON	RISE TIME	DELAY OFF	FALL TIME		
J1-J2 73 dB	35 nS	2 nS	25 nS	1 nS		
J1-J3 73 dB	35 nS	2 nS	25 nS	1 nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		

NOTE: Any additional test data on back

TESTED ON: HP8722ES,E3631A,485 OCS.

QA/QC APPROVAL: K. Vogler DATED: 6/2/04

FINAL TEST DATA

AMC MODEL NO: SWN-218-2DR-STANDARD OPTIONS HPR1W052, HPR1W, B02
 SERIAL NUMBER: 2MS404290

FORM: 492-SW-DTA 11/12/00



DATE: 27 May 2004

FINAL TEST DATA ON MICROWAVE SWITCH

CUSTOMER: AEROFLEX No : 10027 TECHNICIAN: T.PHUNG E #29
 JOB NO: 402026PE-1
 MODEL NO: SWN-218-2DR-STANDARD OPTION NO: 052, HPR1W, B02
 SERIAL NO: 2MS404290 SPECIFICATION:
 CURRENT DRAW: + 5VDC @ 21 mA; - 15 VDC @ 12 mA FREQUENCY RANGE: 0.5 - 2.0 GHz

INSERTION LOSS (WORST CASE)	RETURN LOSS (WORST CASE)					
	INPUT dB	INPUT VSWR	OUTPUT ON dB	OUTPUT ON VSWR	OUTPUT OFF dB	OUTPUT OFF VSWR
J1-J2 0.40 dB	21.63 dB	1.18 : 1	21.32 dB	1.18 : 1	dB	1. : 1
J1-J3 0.40 dB	20.44 dB	1.21 : 1	20.27 dB	1.21 : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
	dB	1. : 1	dB	1. : 1	dB	1. : 1
SWITCHING SPEED						
ISOLATION	DELAY ON	RISE TIME	DELAY OFF	FALL TIME		
J1-J2 73 dB	35 nS	2 nS	25 nS	1 nS		
J1-J3 73 dB	35 nS	2 nS	25 nS	1 nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		
	nS	nS	nS	nS		

NOTE: Any additional test data on back

TESTED ON: HP8722ES, E3631A, 485 OCS.

QA/QC APPROVAL: K. Doula DATED: 6/2/04