



TEST REPORT  
ON  
2.5 TO 3 GHz  
SINGLE POLE TWO THROW  
REFLECTIVE SWITCH MODULE  
AMC MODEL No:  
**SWN-218-2DR-STANDARD**  
OPTION HPR1W, HS10NS, 2075F, SH

Serial Numbers: 2MS303092 THRU 2MS303094

DESIGNED  
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**October 27, 2004**

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**ISO9001 : 2000 CERTIFIED**

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**SINGLE POLE TWO THROW  
REFLECTIVE SWITCH MODULE  
AMC MODEL No:  
SWN-218-2DR-STANDARD OPT HPR1W, HS10NS, 2075, SH**

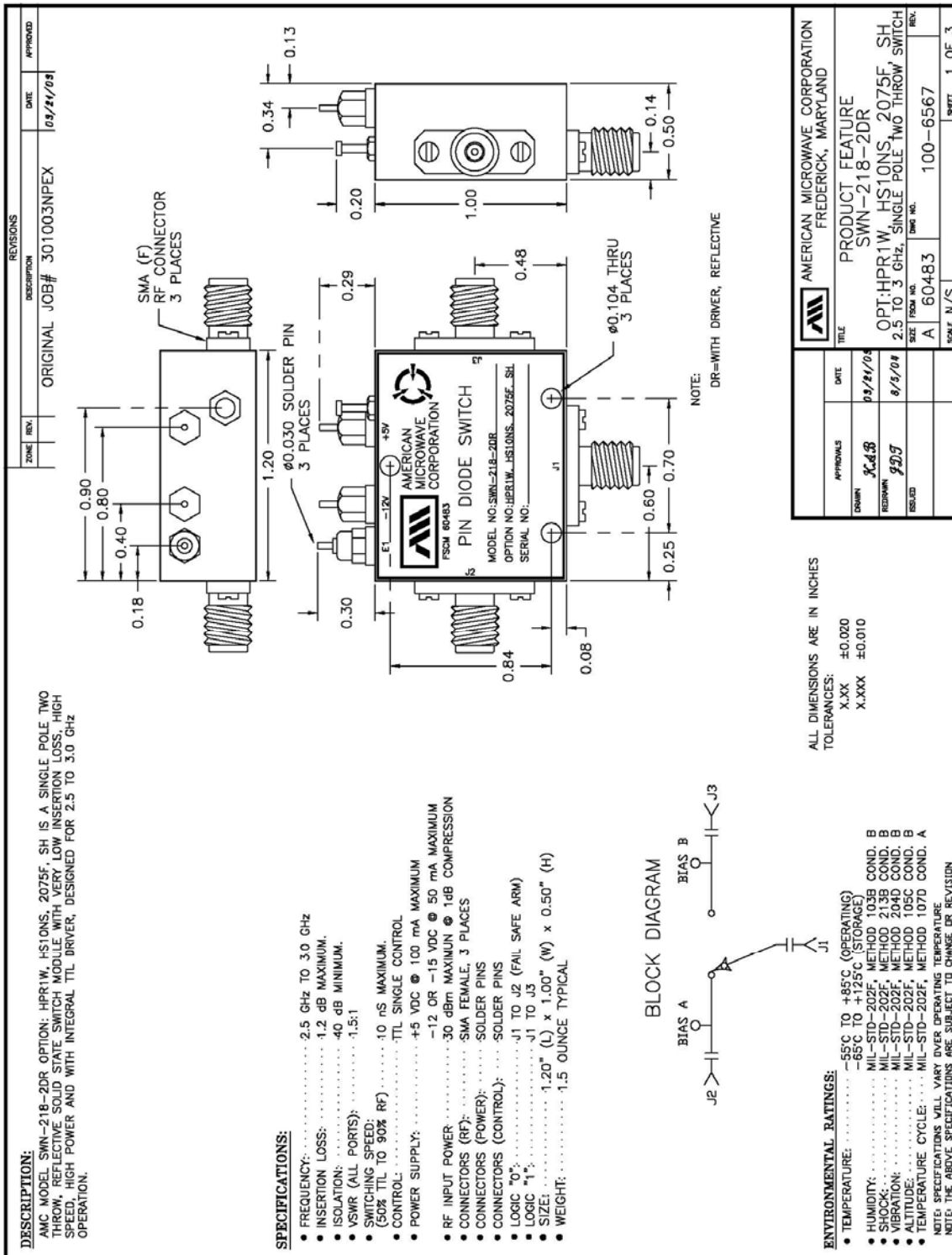
**FEATURES:**

- **2.5 TO 3 GHz FREQUENCY RANGE**
- **LOW INSERTION LOSS**
- **HIGH SPEED**
- **HIGH POWER CAPABILITIES**

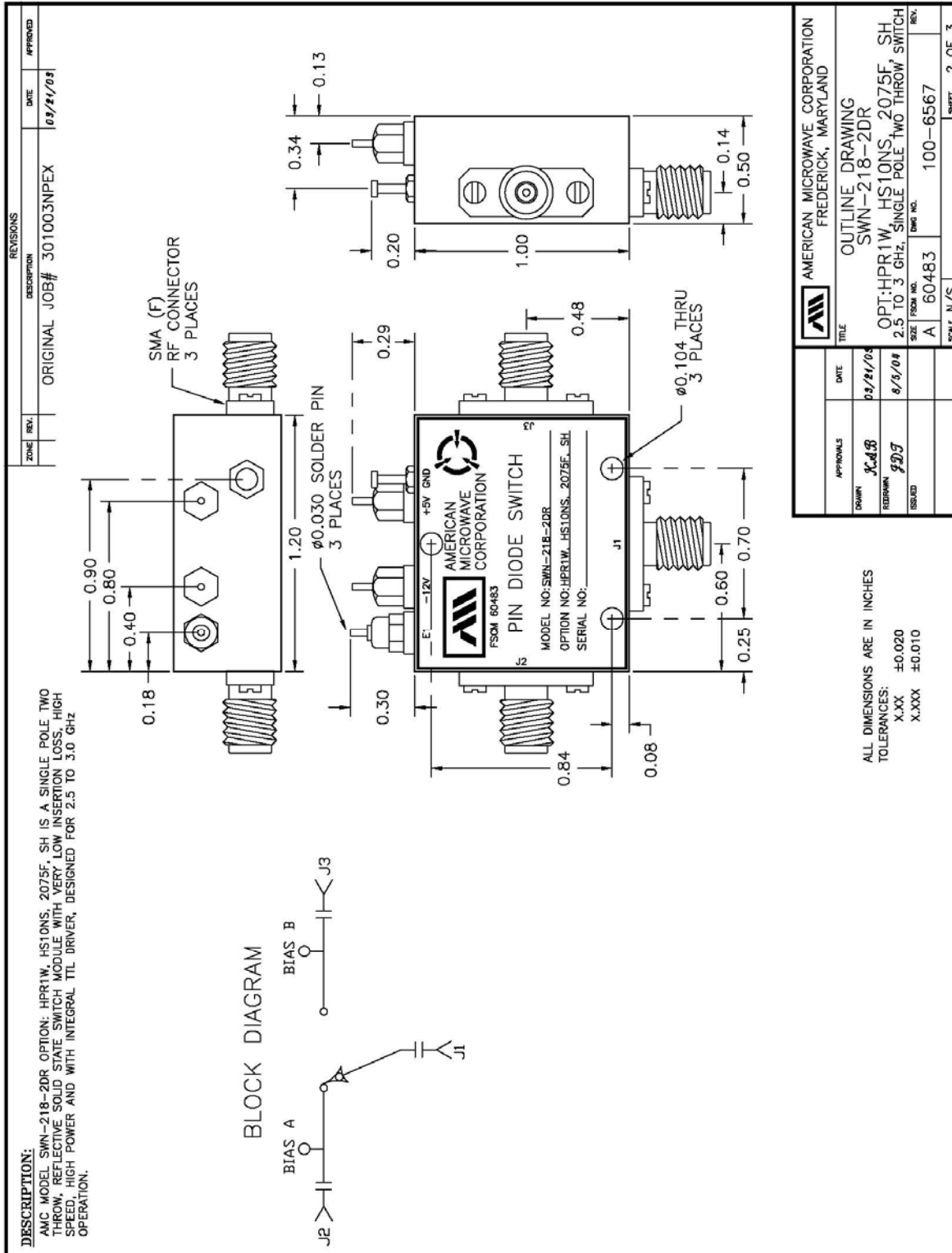
**SPECIFICATIONS:**

- **FREQUENCY** : 2.5 TO 3 GHz
- **INSERTION LOSS** : 1.2 dB MAXIMUM
- **ISOLATION** : 40 dB MINIMUM
- **VSWR** : 1.5:1
- **SWITCHING SPEED** : 10 nSEC MAXIMUM
- **CONTROL** : TTL SINGLE CONTROL
- **POWER SUPPLY** : +5 VDC @ 100 mA MAXIMUM  
-12 OR -15 VDC @ 50 mA MAXIMUM
- **RF INPUT POWER** : 30 dBm MAXIMUM @ 1 dB COMPRESSION
- **CONNECTORS (RF)** : SMA FEMALE, 3 PLACES
- **CONNECTORS (POWER)** : SOLDER PINS
- **CONNECTORS (CONTROL)** : SOLDER PINS
- **LOGIC "0"** : J1 TO J2 (FAIL SAFE ARM)
- **LOGIC "1"** : J1 TO J3
- **SIZE** : 1.20" (L) x 1.00" (W) x 0.50" (H)
- **WEIGHT** : 1.5 OUNCE TYPICAL

## PRODUCT FEATURE



**OUTLINE DRAWING**





## FINAL TEST DATA

FINAL TEST DATA SHEETS

FOR

AMC MODEL NUMBER

**SWN-218-2DR-STANDARD**  
OPTION HPR1W, HS10NS, 2075F, SH

Serial Numbers:

**2MS303092 THRU 2MS303094**



**FINAL TEST DATA**

AMC MODEL NO: SWN-218-2DR-STANDARD OPTIONS HPR1W, HS10NS, 2075F, SH  
 SERIAL NUMBER: 2MS303092

FORM: 389-SW-DTA  
 DATE: 5-6-03



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FINAL TEST DATA  
 ON  
 MICROWAVE SWITCH

CUSTOMER: CHEANG DO SUI      TECHNICIAN: E. SCHNAUB  
 JOB NO: 30100312PEX  
 MODEL NO: SWN-218-2DR-STANDARD      OPTION NO: HPR1W, HS10NS, 2075F, SH  
 SERIAL NO: 2MS303092      SPECIFICATION:  
 CURRENT DRAW: + 5 VDC @ 120 mA; - 12 VDC @ 10 mA      FREQUENCY RANGE: 2.5 - 3 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	1.04 dB @ 2.5-3.0 GHz	14.08	dB:1.49 : 1	14.22	dB:1.48 : 1	—	dB:1. : 1		
J1-J3	1.07 dB @ 2.5-3.0 GHz	17.03	dB:1.33 : 1	16.54	dB:1.35 : 1	—	dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
	dB @ GHz		dB:1. : 1		dB:1. : 1		dB:1. : 1		
ISOLATION		SWITCHING SPEED							
		DELAY ON	RISE TIME	DELAY OFF	FALL TIME				
J1-J2	75 dB @ 2.5-3.0 GHz	10	nS	—	nS	8	nS	—	nS
J1-J3	76 dB @ 2.5-3.0 GHz	8	nS	—	nS	10	nS	—	nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS
	dB @ GHz		nS		nS		nS		nS

NOTE: Any additional test data on back

TESTED ON: 4/8/2003

QA/QC APPROVAL: Dwight V. Smith      Q2      DATED: 5/7/03







**FINAL TEST DATA**

AMC MODEL NO: SWN-218-2DR-STANDARD OPTIONS HPR1W, HS10NS, 2075F, SH  
 SERIAL NUMBER: 2MS303094

FORM: 389-SW-DTA  
 DATE: 5-5-03



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FINAL TEST DATA  
 ON  
 MICROWAVE SWITCH

CUSTOMER: CHENG-013 S1021      TECHNICIAN: E. SCHAUB  
 JOB NO: 3010033 NPEX  
 MODEL NO: SWN-218-2DR-STANDARD      OPTION NO: HPR1W, HS10NS, 2075F, SH  
 SERIAL NO: 2MS303094      SPECIFICATION:  
 CURRENT DRAW: + 5 VDC @ 120mA; - 12 VDC @ 22mA      FREQUENCY RANGE: 2.5 - 3 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	0.94 dB @ 2.5-3.0 GHz	18.05	1.29 : 1	17.43	1.31 : 1	—	1. : 1		
J1-J3	1.00 dB @ 2.5-3.0 GHz	18.49	1.27 : 1	17.37	1.31 : 1	—	1. : 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
	dB @ GHz	dB:1.	: 1	dB:1.	: 1	dB:1.	: 1		
ISOLATION		SWITCHING SPEED							
		DELAY ON	RISE TIME	DELAY OFF	FALLTIME				
J1-J2	76 dB @ 2.5-3.0 GHz	10	nS	—	nS	8	nS	—	nS
J1-J3	75 dB @ 2.5-3.0 GHz	8	nS	—	nS	10	nS	—	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS
	dB @ GHz	nS	nS	nS	nS	nS	nS	nS	nS

NOTE: Any additional test data on back

TESTED ON: HP8720B

QA/QC APPROVAL: Dwight V. Smith      02      DATED: 5/7/03