



**AMERICAN MICROWAVE
CORPORATION**

TEST DATA

ON

7.5 TO 18.0 GHz

ABSORPTIVE

SP16T

PIN DIODE SWITCH

"TAJ MAHAL"

MODEL No: SWN-16TDA-HM-ARG

(Serial No: 16MS41001)

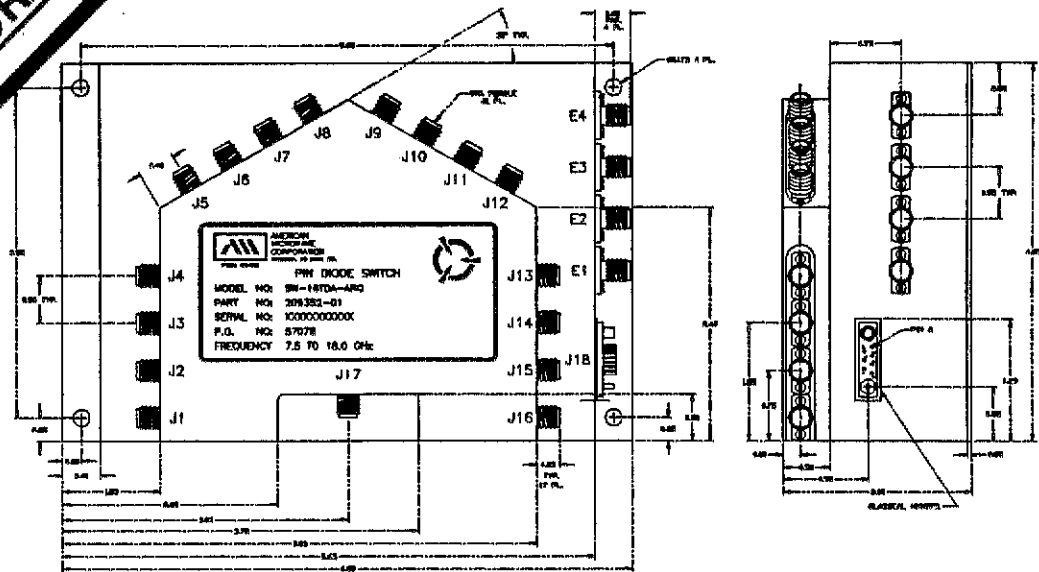
BY

**AMERICAN MICROWAVE
CORPORATION**

MAY 1, 1995

AMERICAN MICROWAVE CORPORATION

ABSORPTIVE SP16T PIN DIODE SWITCH



"TAJ MAHAL" AMC MODEL No: SWN-16TDA-HM-ARG

SPECIFICATIONS:

- **FREQUENCY** : 7.5 to 18.0 GHz (2.0 to 18.0 GHz Available)
- **INSERTION LOSS** : 4.5dB Max., 4.0dB Typical
- **ISOLATION** : 30dB Min., 40dB Typical
- **VSWR "ON"** : 2.0:1 Max., 1.7:1 Typical
- **VSWR "OFF"** : 2.0:1 Max., 1.7:1 Typical
- **SWITCHING SPEED** : ≤200nS Max.(50% TTL to 90/10% RF), 150nS Typical
- **DC POWER SUPPLY** : +5vdc @ 600mA Typical, -15vdc @ 100mA Typical
- **RF POWER** : 1 Watt Operating, 2 Watts Survival
- **CONTROL** : TTL Compatible with Integral Decoder
- **SIZE** : 6.05" x 4.00" x 2.00" (Reduced Size Available)

REFLECTIVE VERSIONS AND OTHER FREQUENCY BANDWIDTHS AVAILABLE

7311G GROVE ROAD, FREDERICK, MARYLAND 21701 • Tel. (301) 662-4700 • Fax (301) 662-4938



AMERICAN MICROWAVE CORPORATION
7311C GROVE ROAD, FREDERICK MD. 21701
TEL: (301)662-4700 FAX: (301)662-4328

TEST DATA ON
PIN DIODE SWITCH
ARGO SYSTEMS
SCD NO. 209352-01 REV. -

JOB NO: 309226-1E MODEL NO: SW162TDR-ARG OPTION: NONE DATE: 4/30/95

SERIAL NO: 16MS41001 CUSTOMER: ARGO SYSTEMS TESTED BY: P. Mable

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE
1	FREQUENCY	7.5 GHz TO 18.0 GHz	
2	INSERTION LOSS (TYPICAL SWEEP DATA)	4.0 dB MAX	J17-J1 -3.40 dB J17-J2 -3.37 dB J17-J3 -3.59 dB J17-J4 -3.61 dB J17-J5 -3.52 dB J17-J6 -3.86 dB J17-J7 -3.61 dB J17-J8 -3.26 dB J17-J9 -3.16 dB J17-J10 -3.30 dB J17-J11 -3.23 dB J17-J12 -3.23 dB J17-J13 -3.52 dB J17-J14 -3.58 dB J17-J15 -3.60 dB J17-J16 -3.97 dB

Approved
19th August, 1995.

TEST DATA ON
PIN DIODE SWITCH
ARGO SYSTEMS
SCD NO. 209352-01 REV. -



AMERICAN MICROWAVE CORPORATION
7311G GROVE ROAD, FREDERICK MD. 21701
TEL: (301)662-4700 FAX: (301)662-4938

JOB NO: 309226-1E MODEL NO: SWI62TDR-ARG OPTION: NONE DATE: 4/30/95

SERIAL NO: 16MS41001 CUSTOMER: ARGO SYSTEMS TESTED BY: P. Alghel

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE
3	ISOLATION	30 dB MIN	J17-J1 -31.46 dB
			J17-J2 -46.01 dB
			J17-J3 -43.32 dB
			J17-J4 -30.27 dB
			J17-J5 -31.20 dB
			J17-J6 -42.45 dB
			J17-J7 -36.52 dB
			J17-J8 -29.11 dB
			J17-J9 -32.06 dB
			J17-J10 -46.69 dB
			J17-J11 -47.04 dB
			J17-J12 -31.36 dB
			J17-J13 -28.04 dB
			J17-J14 -42.53 dB
			J17-J15 -43.58 dB
			J17-J16 -29.60 dB

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TEST DATA ON
PIN DIODE SWITCH
ARGO SYSTEMS
SCD NO. 209352-01 REV. -



AMERICAN MICROWAVE CORPORATION
7311G GROVE ROAD, FREDERICK MD. 21701
TEL: (301)662-4700 FAX: (301)662-4938

JOB NO: 309226-1E MODEL NO: SW162TDR-ARG OPTION: NONE DATE: 4/30/95

SERIAL NO: 16MS41001 CUSTOMER: ARGO SYSTEMS TESTED BY: P. Mohler

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE
4A	VSWR (TYPICAL SWEEP DATA)	INPUT 1.7:1	J17-J1 -13.60 dB
			J17-J2 -13.93 dB
			J17-J3 -13.45 dB
			J17-J4 -13.36 dB
			J17-J5 -12.79 dB
			J17-J6 -13.64 dB
			J17-J7 -12.18 dB
			J17-J8 -13.24 dB
			J17-J9 -15.77 dB
			J17-J10 -17.01 dB
			J17-J11 -16.49 dB
			J17-J12 -15.71 dB
			J17-J13 -13.74 dB
			J17-J14 -12.31 dB
			J17-J15 -13.66 dB
			J17-J16 -12.75 dB

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TEST DATA ON
PIN DIODE SWITCH
ARGO SYSTEMS
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TEL: (301)662-4700 FAX: (301)662-4938

JOB NO: 309226-1E MODEL NO: SW162TDR-ARG OPTION: NONE DATE: 4/30/95

SERIAL NO: 16MS4100J CUSTOMER: ARGO SYSTEMS TESTED BY: R. Alford

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE
4B	VSWR (TYPICAL SWEEP DATA)	OUTPUT 1.7:1	J1-J17 -13.80 dB
			J2-J17 -13.52 dB
			J3-J17 -12.46 dB
			J4-J17 -13.14 dB
			J5-J17 -12.01 dB
			J6-J17 -12.82 dB
			J7-J17 -12.65 dB
			J8-J17 -12.07 dB
			J9-J17 -11.84 dB
			J10-J17 -11.70 dB
			J11-J17 -13.42 dB
			J12-J17 -13.60 dB
			J13-J17 -13.56 dB
			J14-J17 -11.79 dB
			J15-J17 -13.21 dB
			J16-J17 -13.03 dB

Arg

TEST DATA ON
PIN DIODE SWITCH
ARGO SYSTEMS
SCD NO. 209352-01 REV. -



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7311G GROVE ROAD, FREDERICK MD. 21701
TEL: (301)662-4700 FAX: (301)662-4938

JOB NO: 309226-1E MODEL NO: SW162TDR-ARG OPTION: NONE DATE: 4/30/95

SERIAL NO: 1619541001 CUSTOMER: ARGO SYSTEMS TESTED BY: P. Habel

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE
5	SWITCHING SPEED	50% TTL TO 90% RF 150 nS MAX	J17-J1 ON 150 nS OFF 150 nS
			J17-J2 ON 150 nS OFF 150 nS
			J17-J3 ON 140 nS OFF 150 nS
			J17-J4 ON 150 nS OFF 160 nS
			J17-J5 ON 160 nS OFF 160 nS
			J17-J6 ON 130 nS OFF 140 nS
			J17-J7 ON 150 nS OFF 130 nS
			J17-J8 ON 150 nS OFF 150 nS
			J17-J9 ON 130 nS OFF 130 nS
			J17-J10 ON 130 nS OFF 140 nS
			J17-J11 ON 150 nS OFF 120 nS
			J17-J12 ON 150 nS OFF 150 nS
			J17-J13 ON 120 nS OFF 110 nS
			J17-J14 ON 130 nS OFF 120 nS
			J17-J15 ON 150 nS OFF 140 nS
			J17-J16 ON 140 nS OFF 120 nS
6	D.C. POWER	+5 VOLTS @450 MA MAX	590 mA
		-15 VOLTS @150 MA MAX	90 mA

PRODUCTION MANAGER APPROVAL: P. Habel DATED: 4/30/95

QA/QC APPROVAL: _____ DATED: _____

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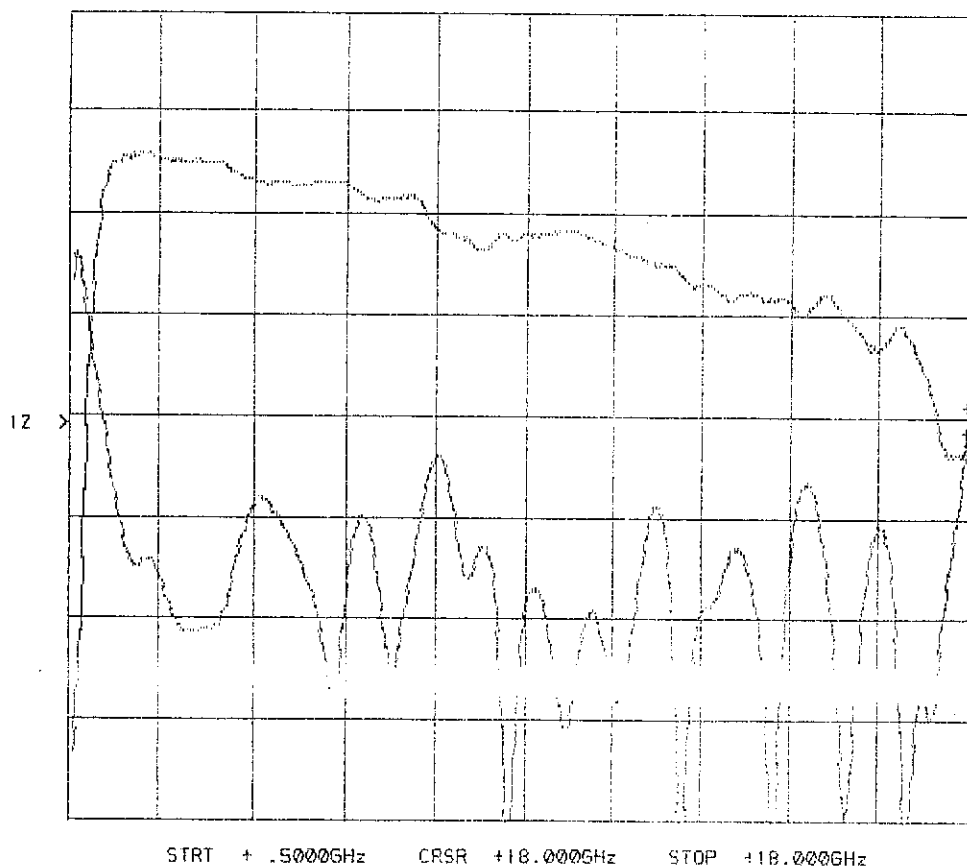


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J1

CH1: A -M - 4.17 dB CH2: B -M - 11.25 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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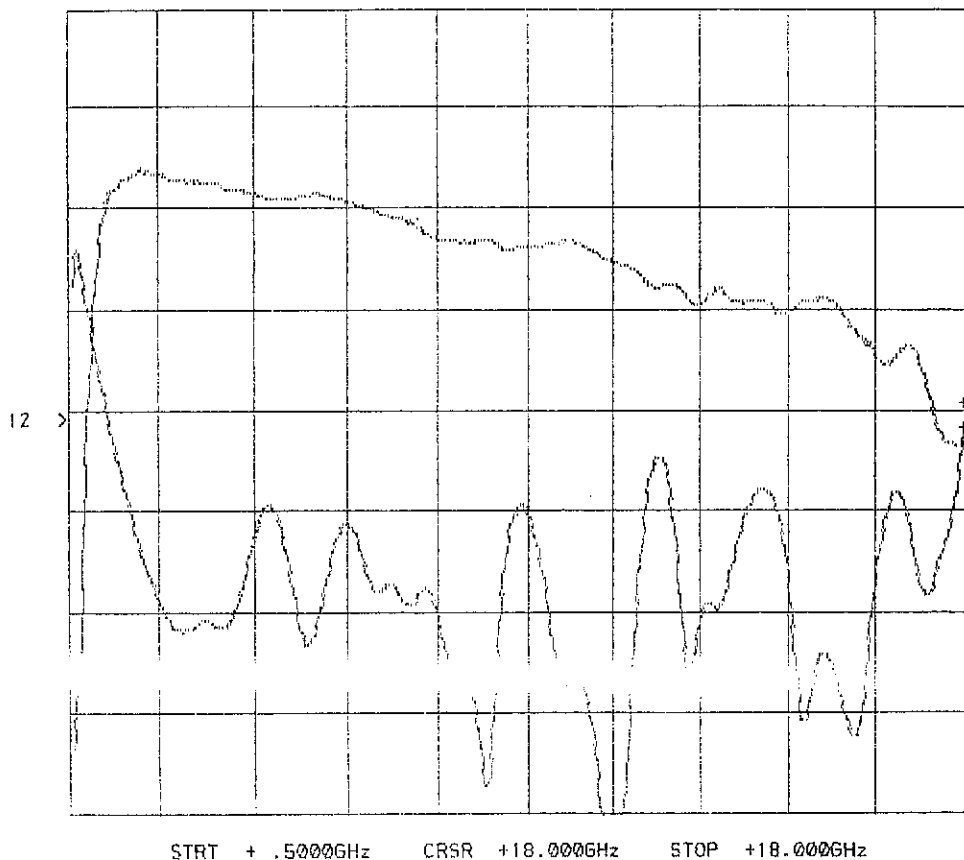


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J2

CH1: A -M - 4.19 dB CH2: B -M - 11.37 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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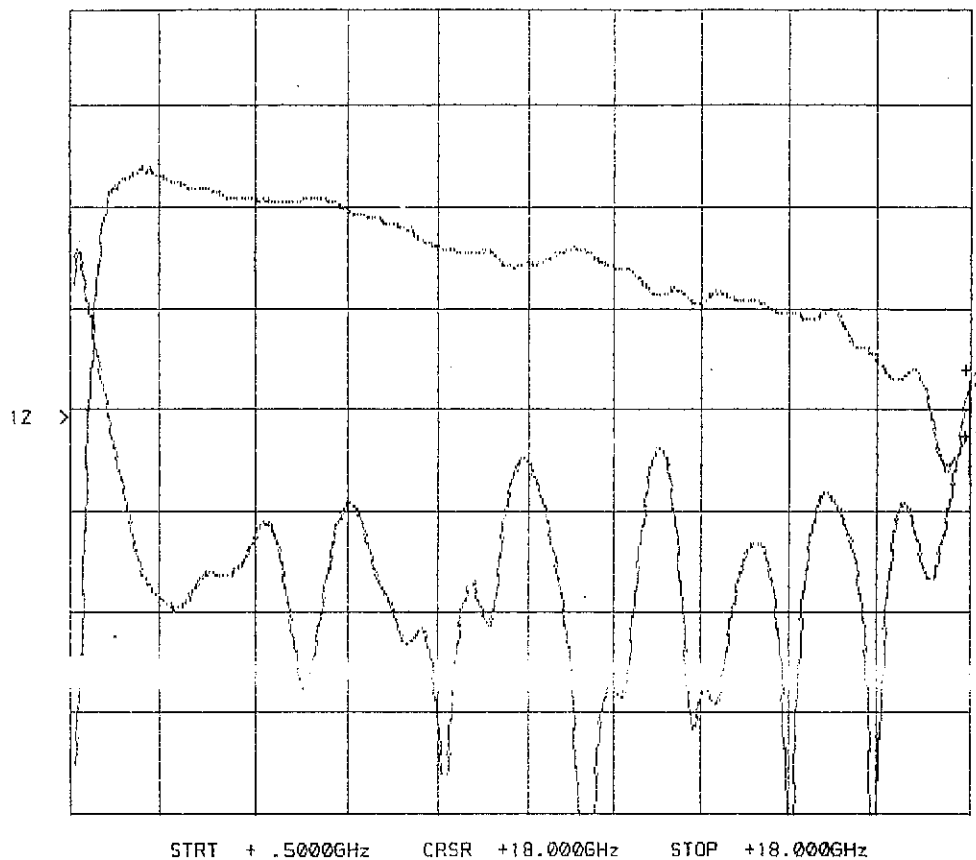


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J3

CH1: A -M - 4.29 dB CH2: B -M - 9.85 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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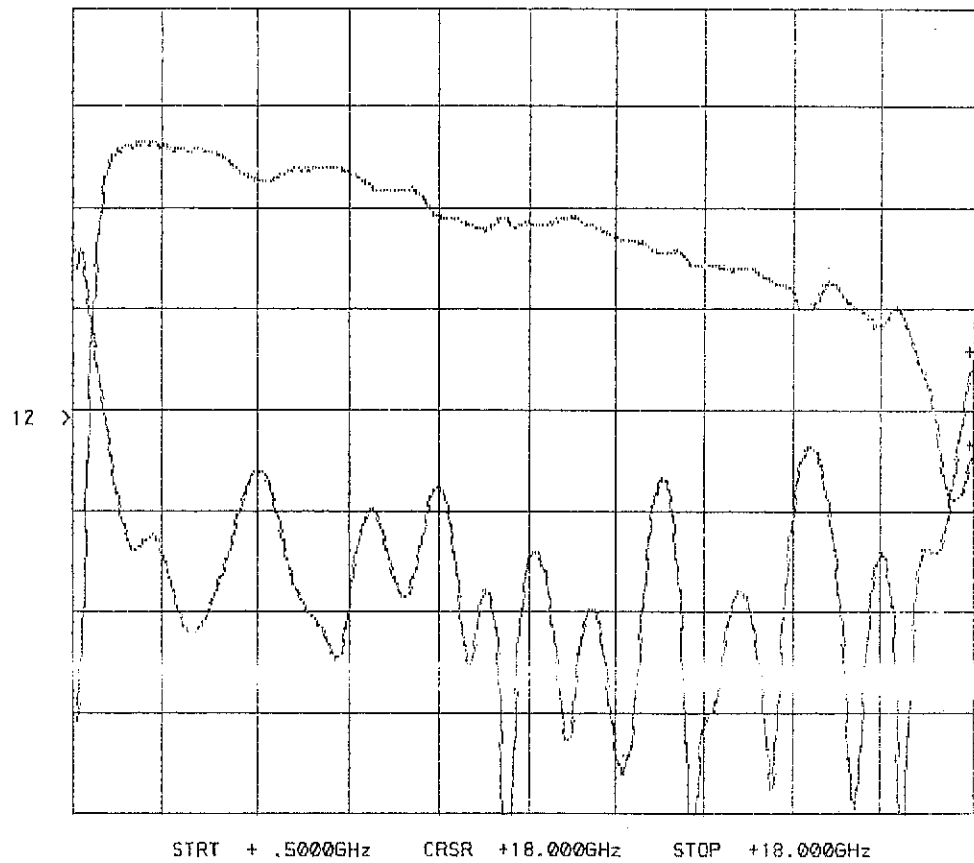


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J4

CH1: A -M - 4.36 dB CH2: B -M - 8.90 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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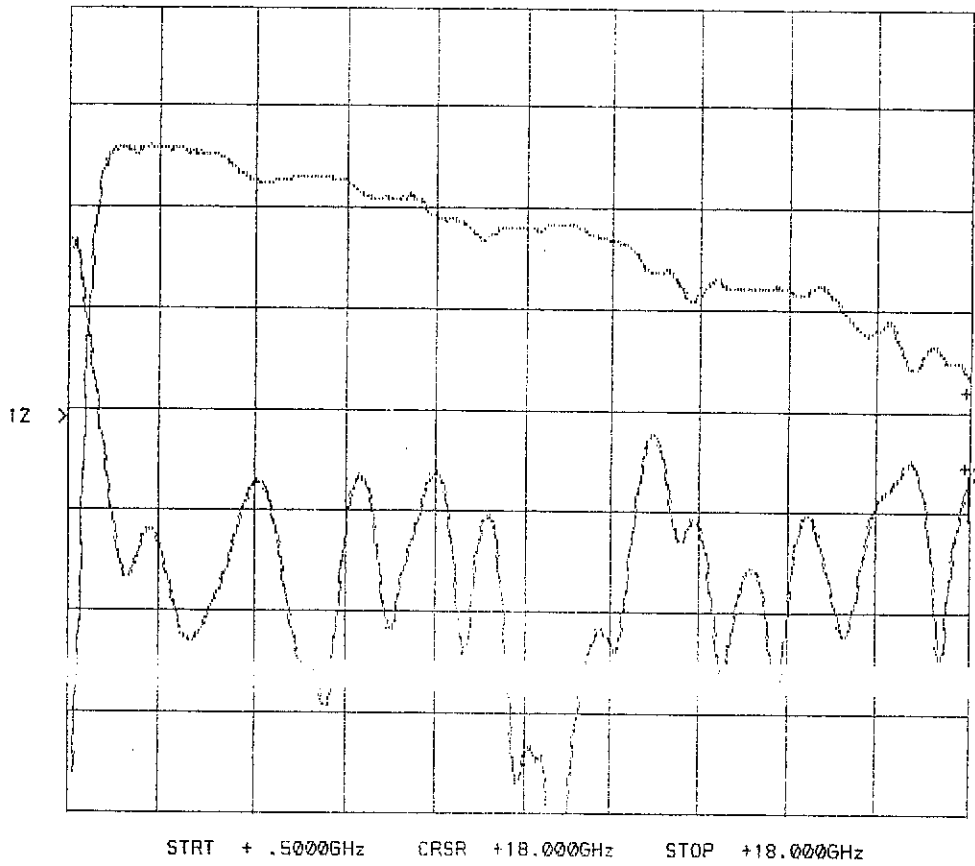


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J5

CH1: A -M - 3.80 dB CH2: B -M - 14.47 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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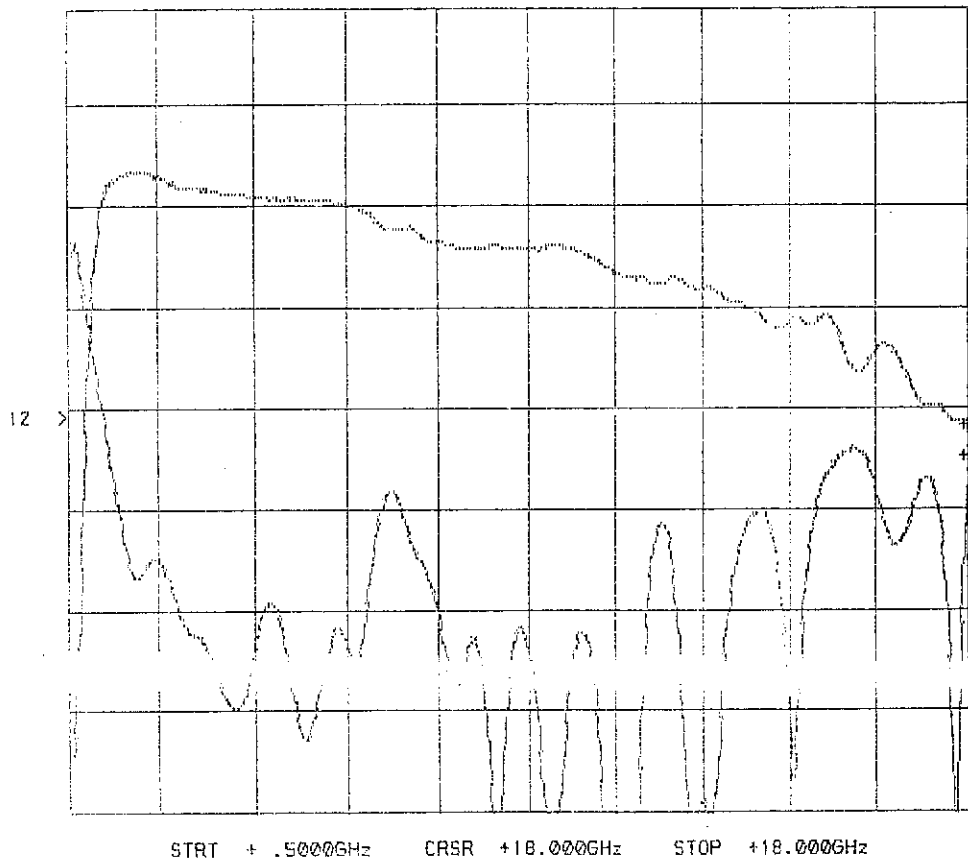


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J6

CH1: A -M - 4.18 dB CH2: B -M - 14.14 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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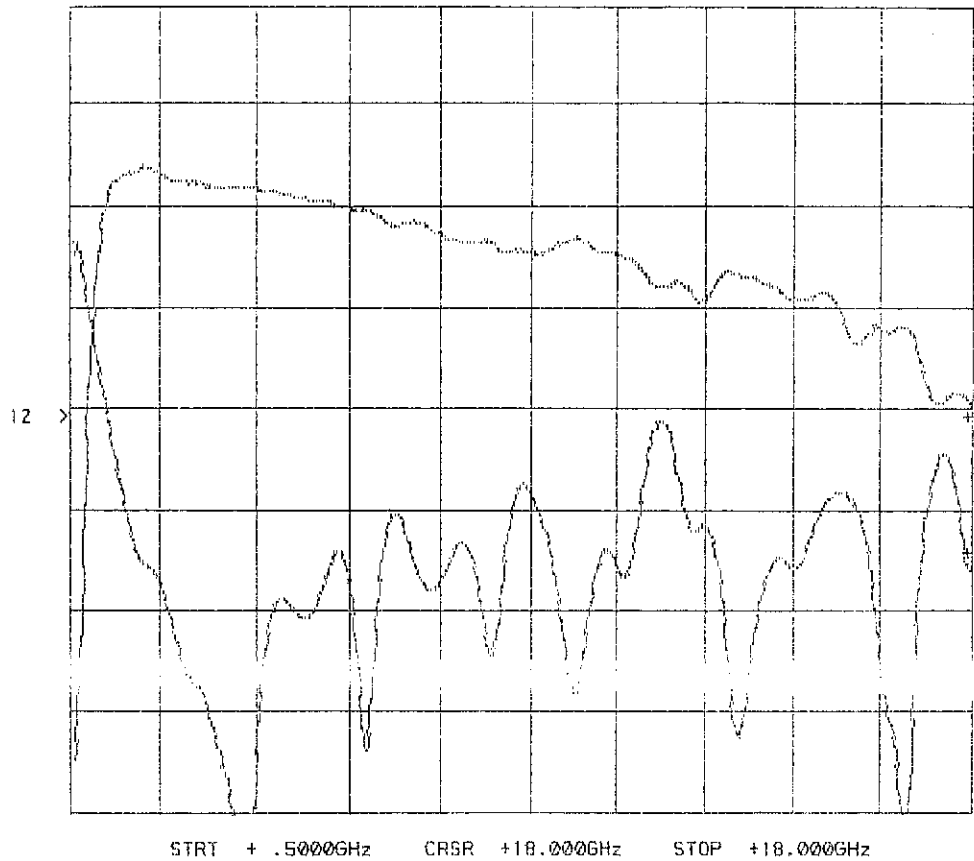


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J7

CH1: A -M - 4.09 dB CH2: B -M - 18.87 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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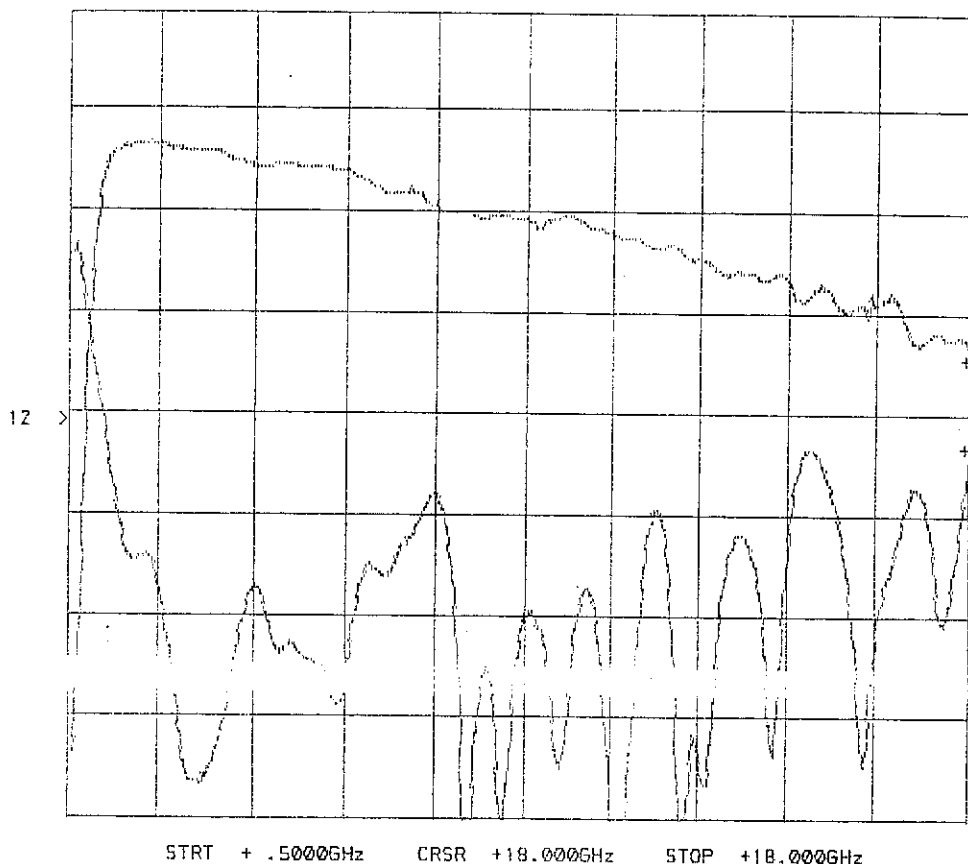


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J8

CH1: A -M - 3.46 dB CH2: B -M - 13.37 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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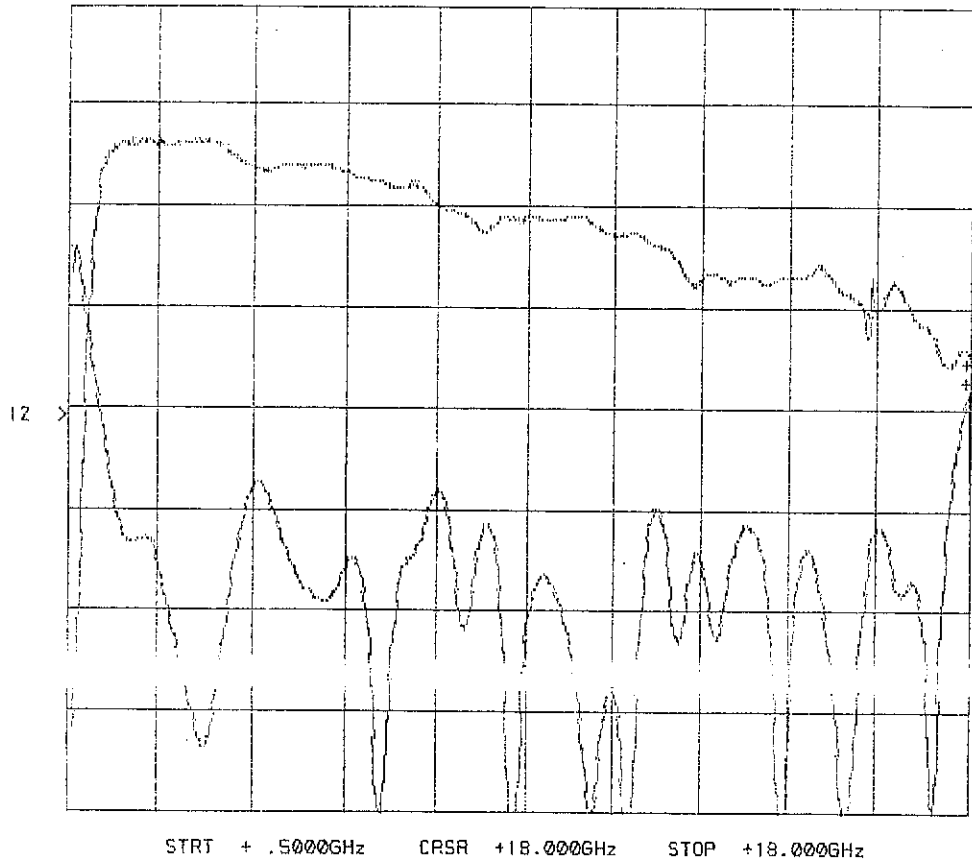


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J9

CH1: A -M - 3.56 dB CH2: B -M - 10.52 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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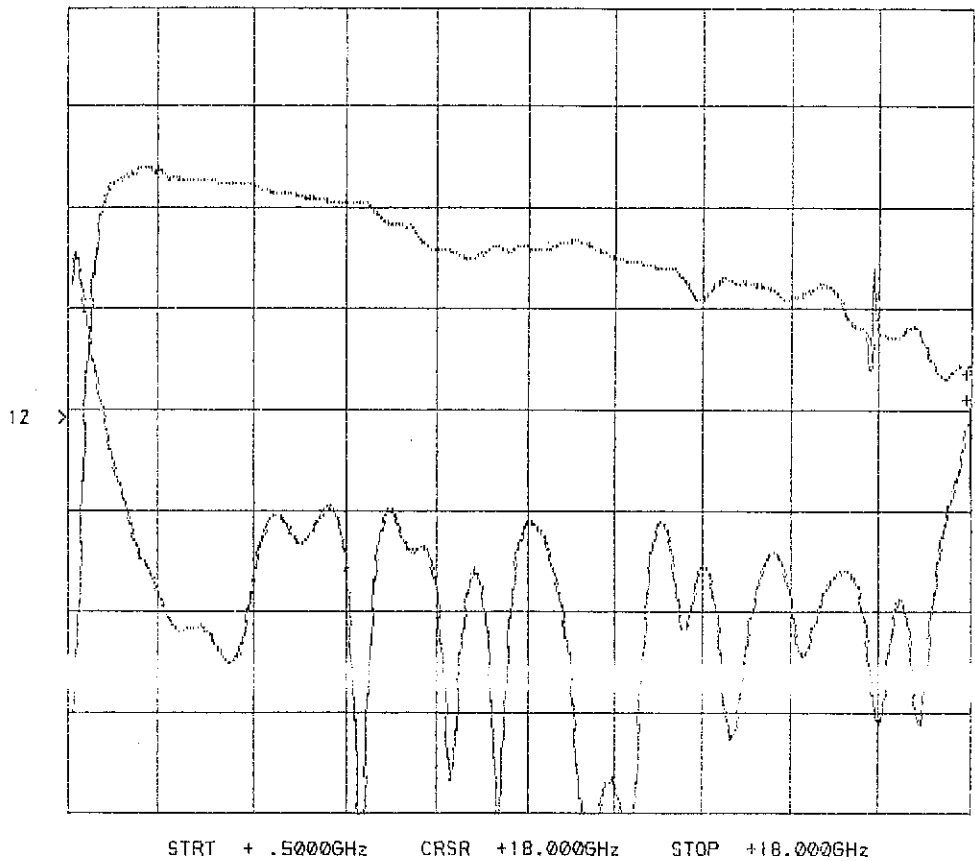


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J10

CH1: A -M - 3.67 dB CH2: B -M - 11.29 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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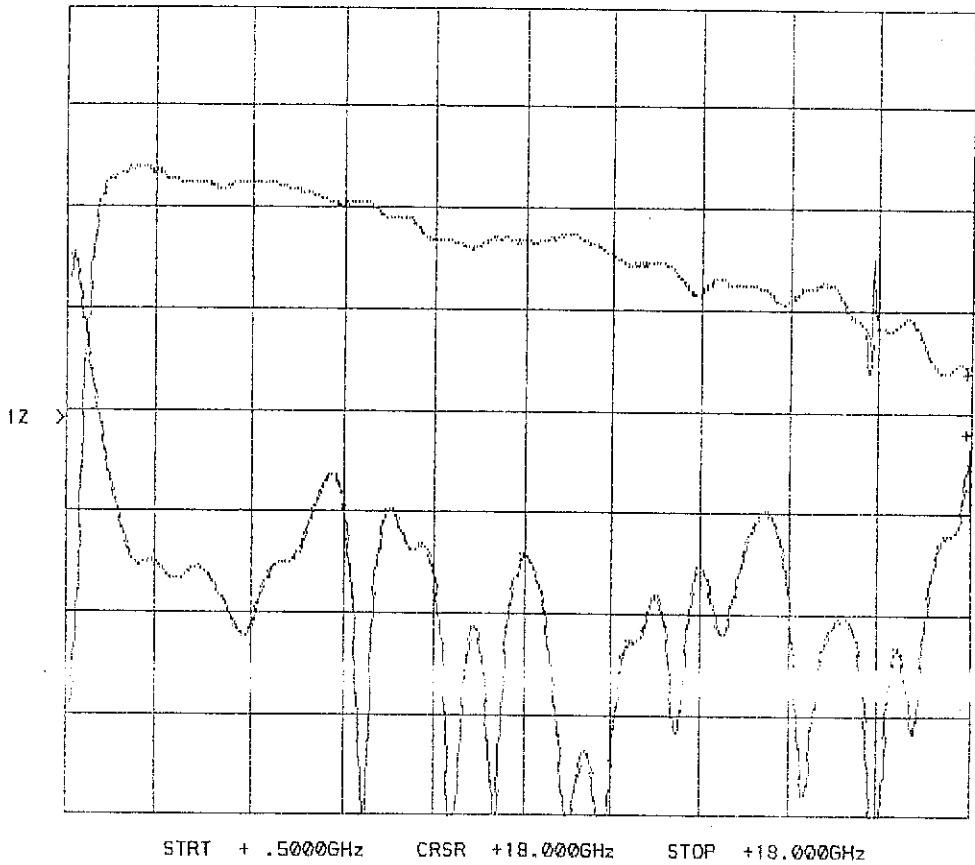


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J11

CH1: A -M - 3.62 dB CH2: B -M - 12.79 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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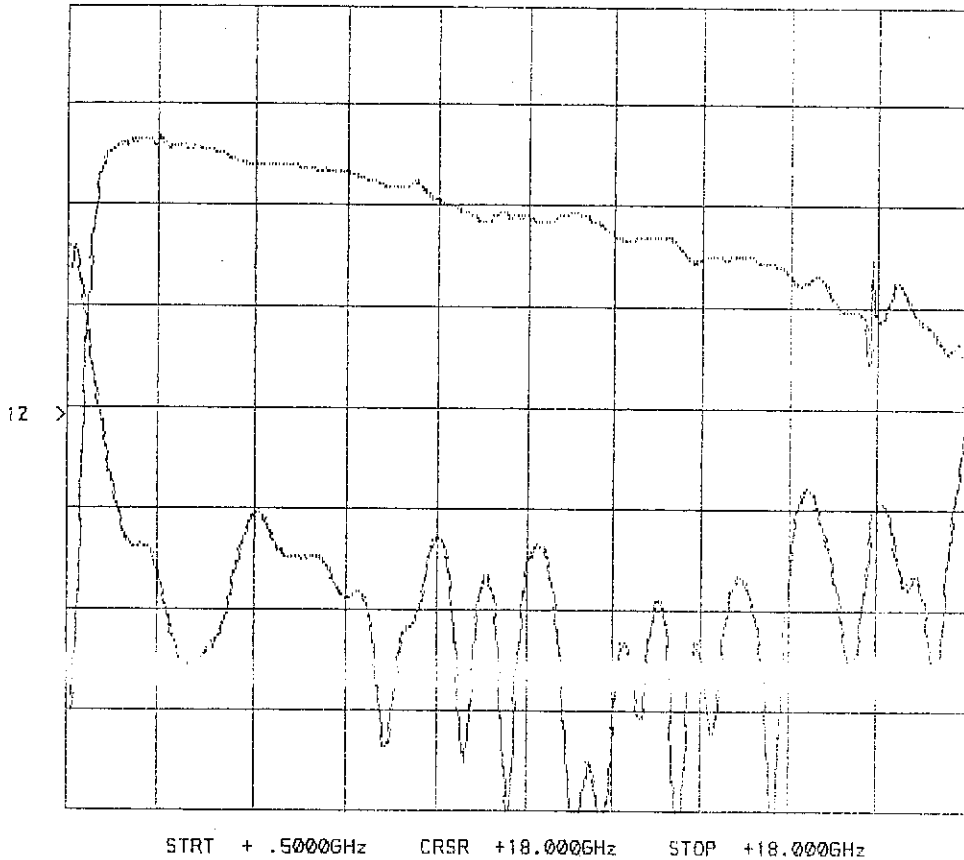


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J12

CH1: A -M - 3.46 dB CH2: B -M - 11.54 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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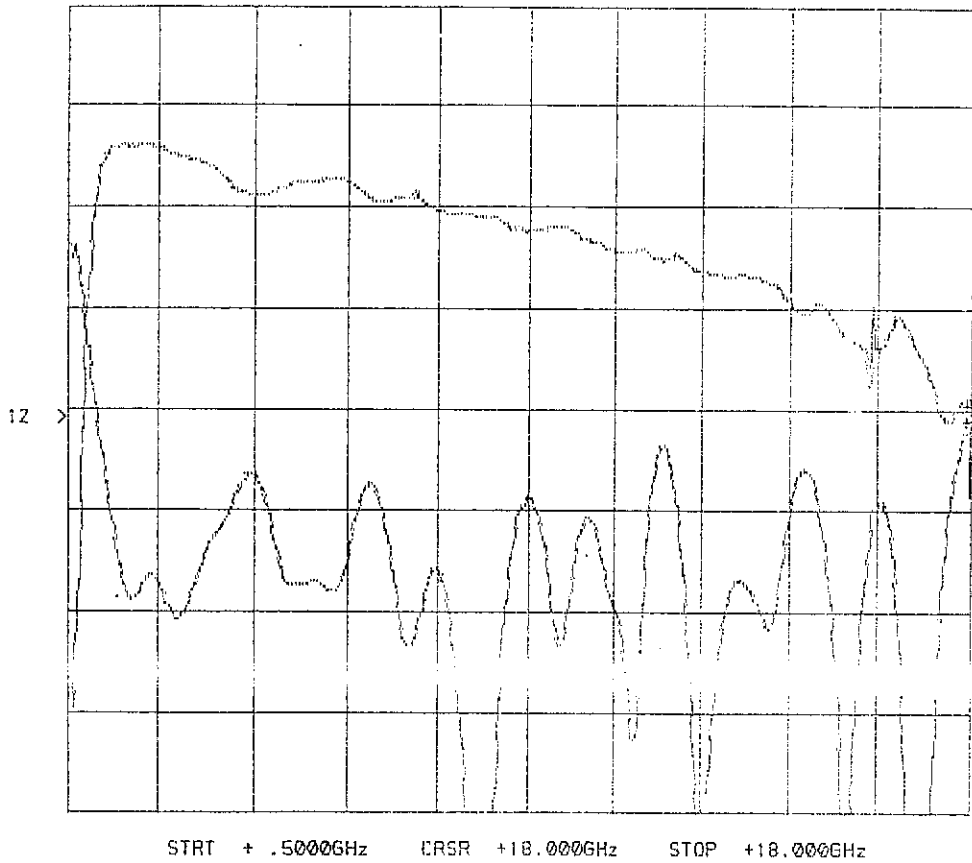


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J13

CH1: A -M - 3.97 dB CH2: B -M - 12.40 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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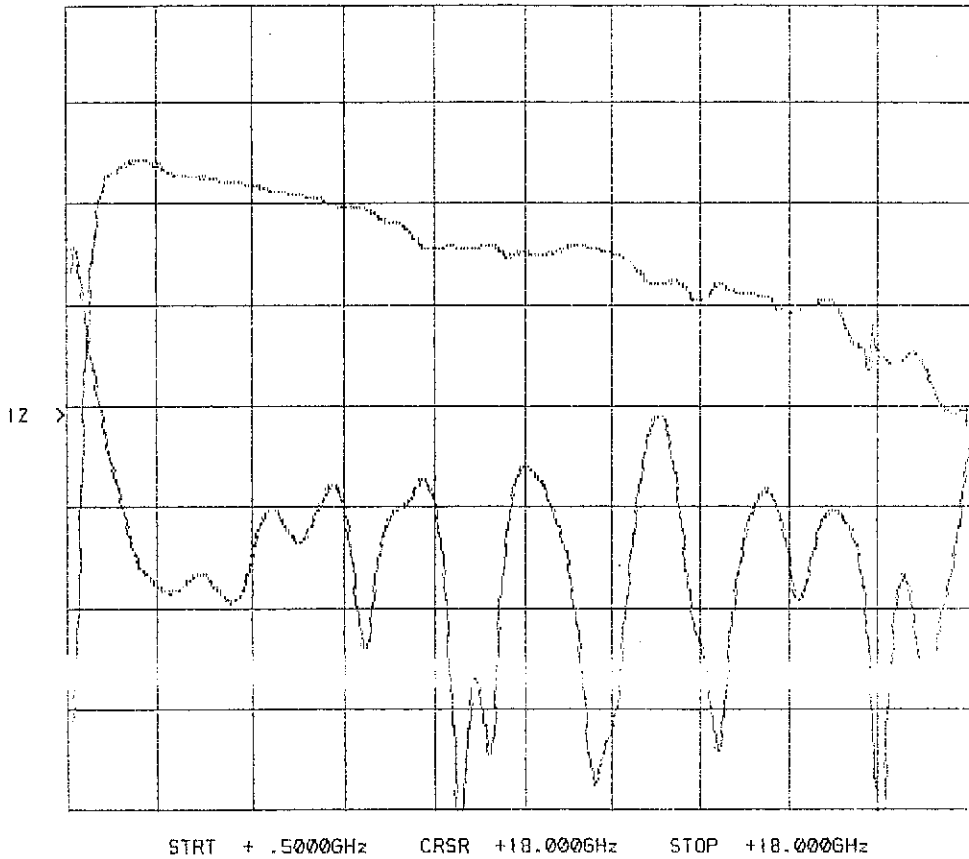


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J14

CH1: A -M - 4.04 dB CH2: B -M - 12.48 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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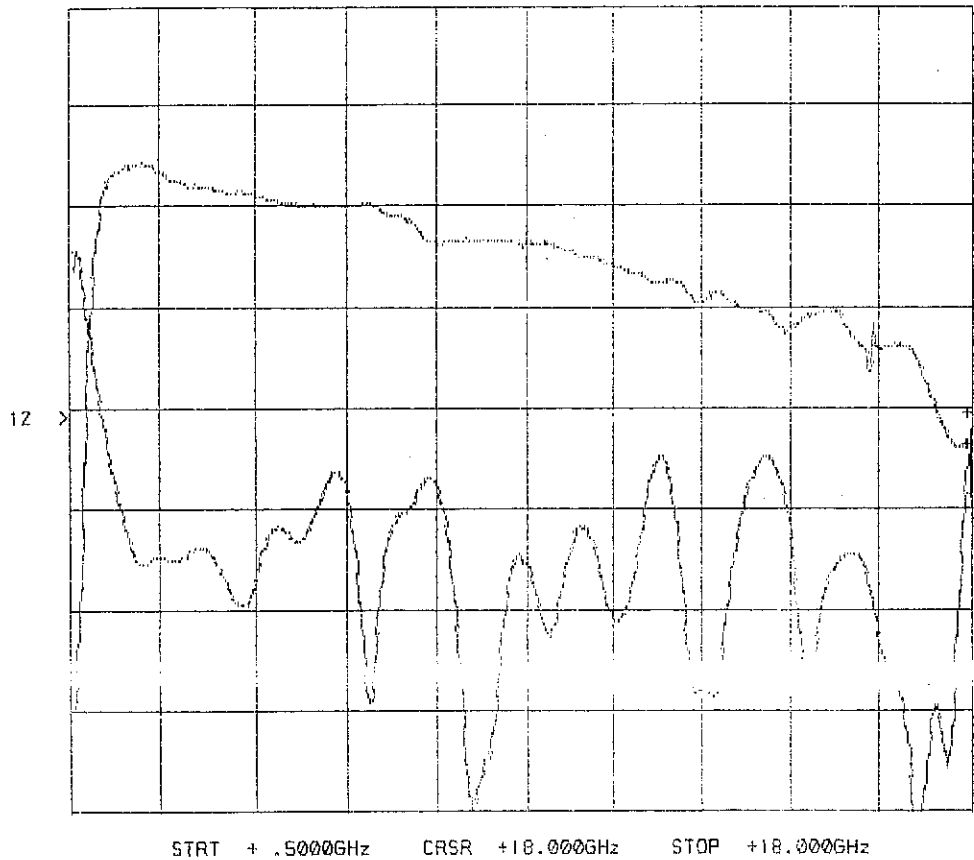


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J15

CH1: A -M - 4.38 dB CH2: B -M - 12.10 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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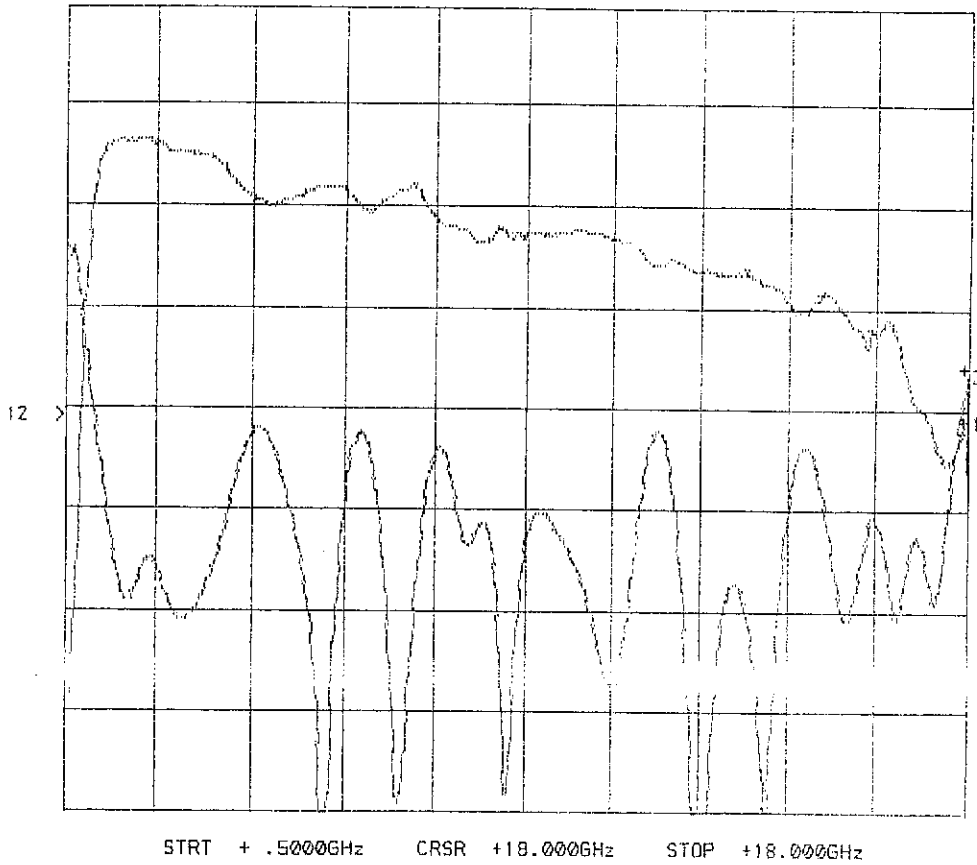


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

INSERTION LOSS vs. VSWR
(Measured From 0.5 to 18.0 GHz)

J17 TO J16

CH1: A -M - 4.12 dB CH2: B -M - 9.68 dB
1.0 dB/ REF - 4.00 dB 5.0 dB/ REF - 11.73 dB



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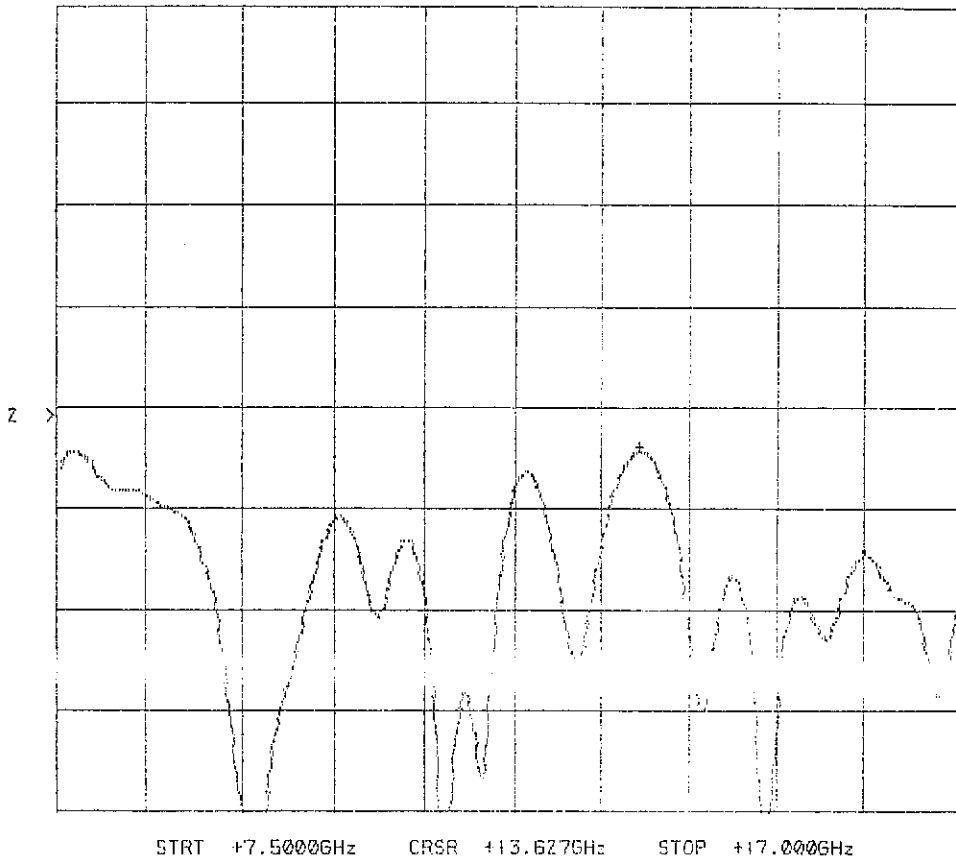


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J1 TO J17

CHZ: E -M - 13.80 dB
5.0 dB/ REF - 11.73 dB



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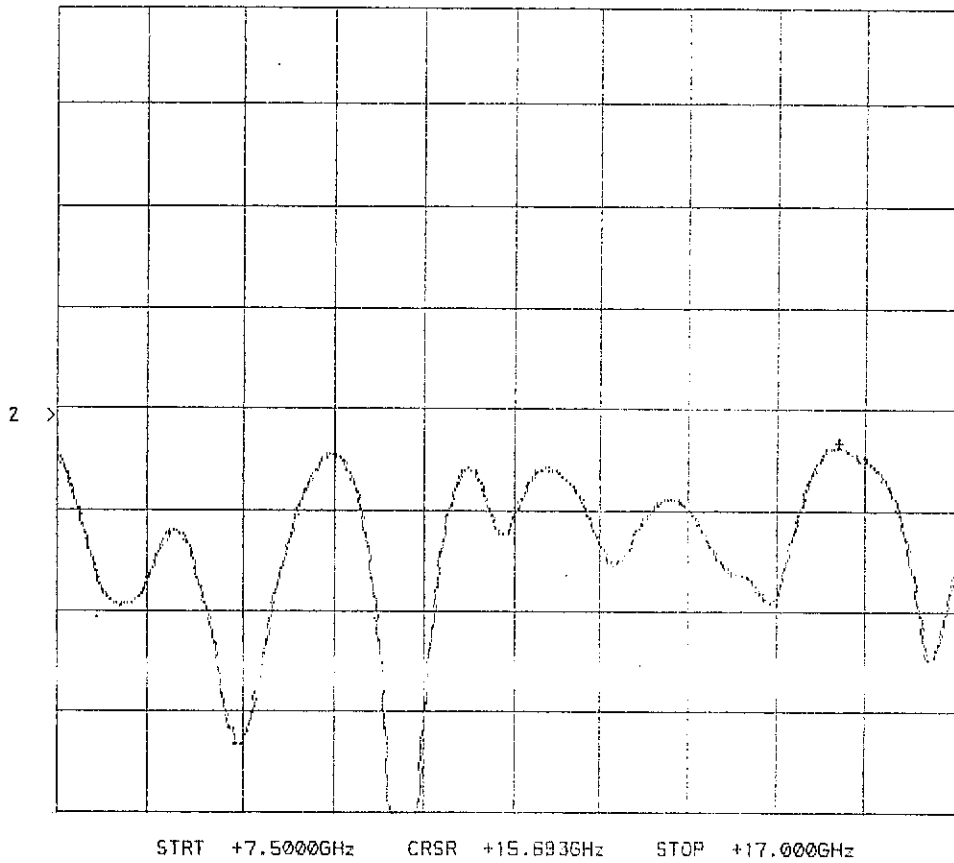


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J2 TO J17

CH2: B -M - 13.52 dB
S.0 dB/ REF - 11.73 dB



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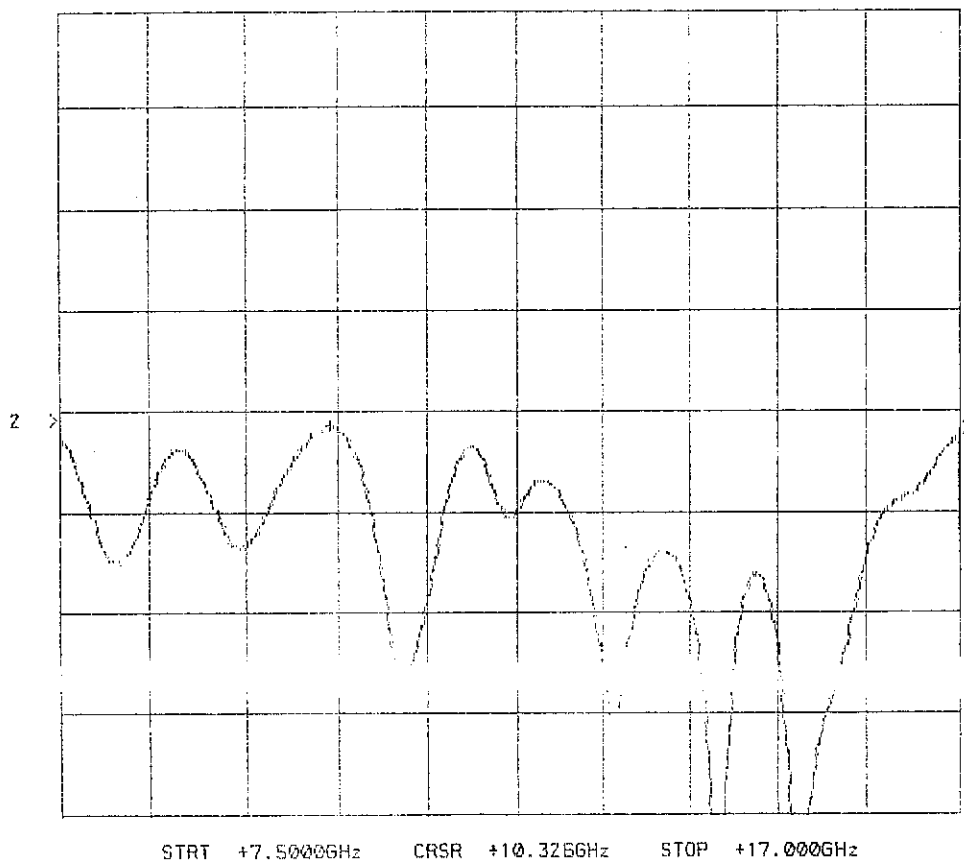


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J3 TO J17

CHZ: B -M - 12.46 dB
5.0 dB/ REF - 11.73 dB



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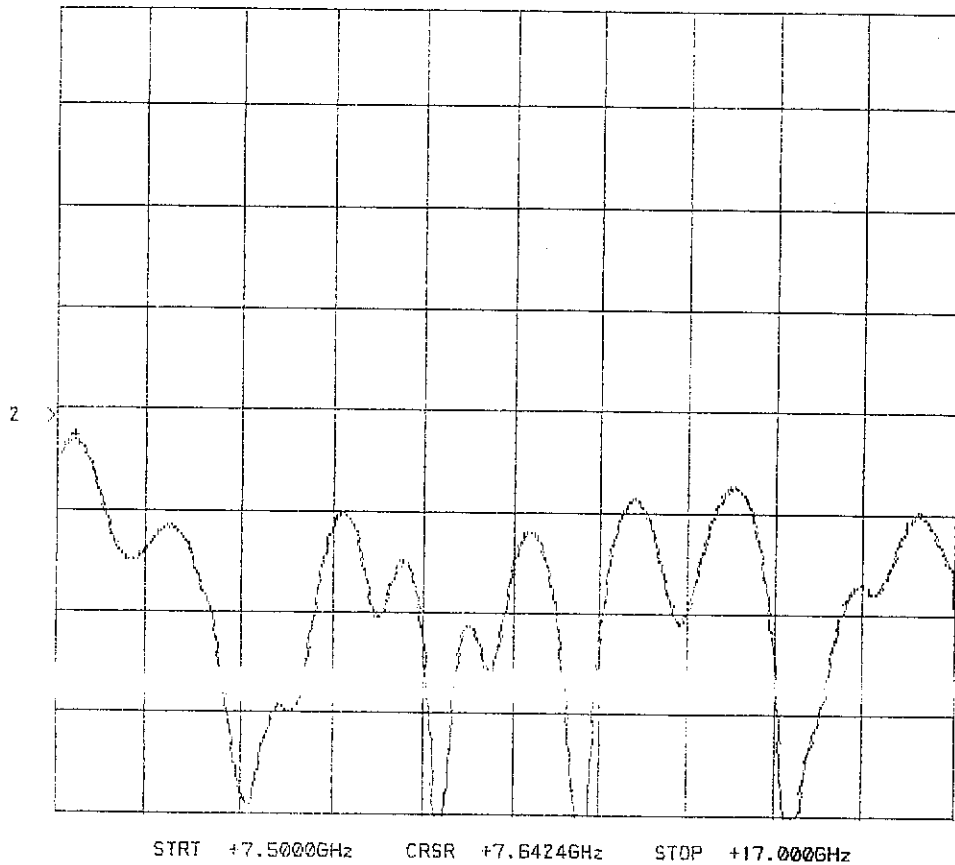


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J4 TO J17

CH2: B -M - 13.14 dB
5.0 dB/ REF - 11.73 dB



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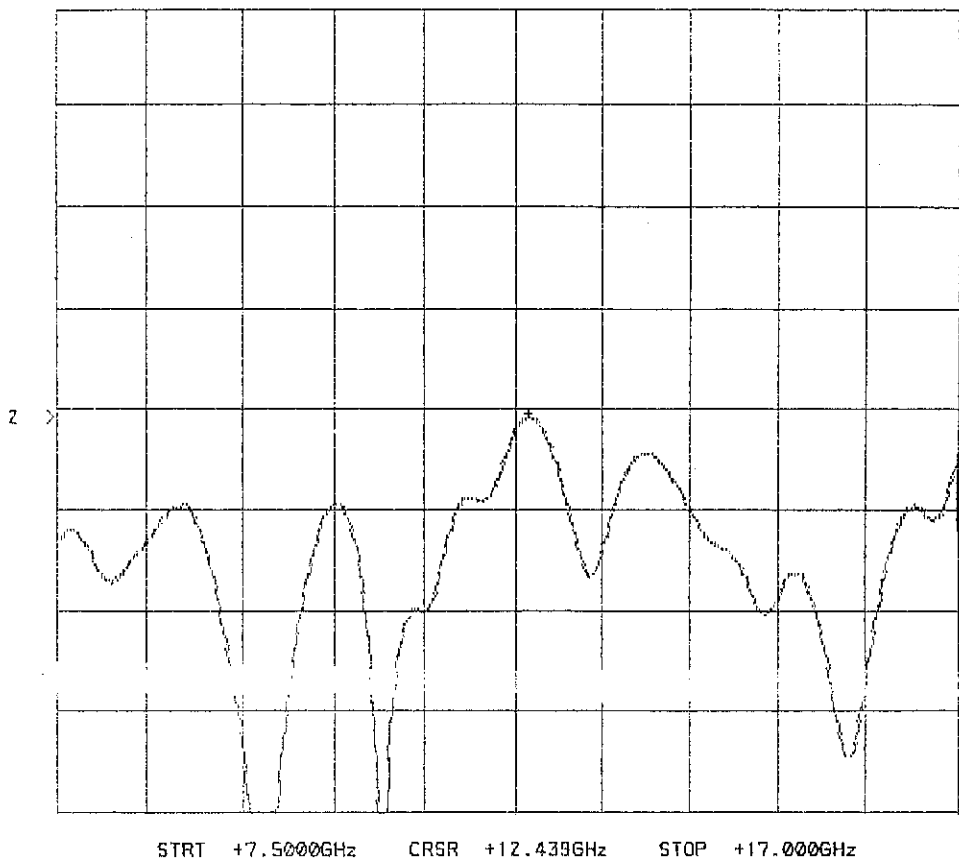


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J5 TO J17

CH2: B -M - 12.01 dB
5.0 dB/ REF - 11.73 dB



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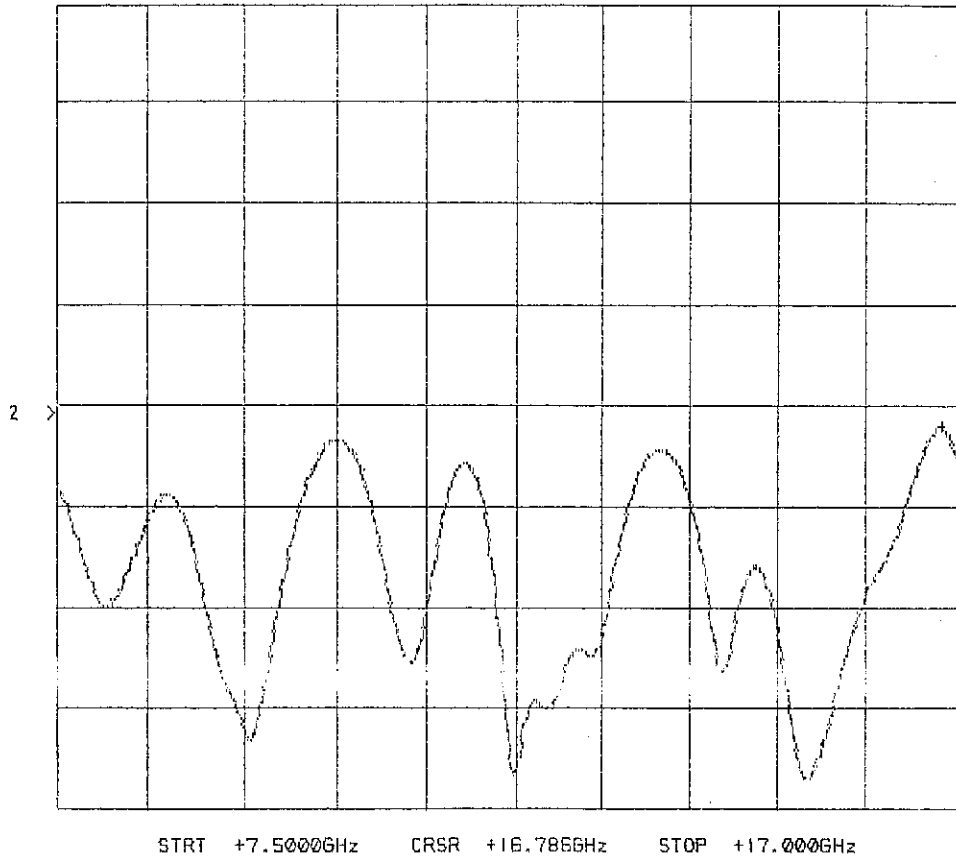


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J6 TO J17

CH2: B -M - 12.82 dB
5.0 dB/ REF - 11.73 dB



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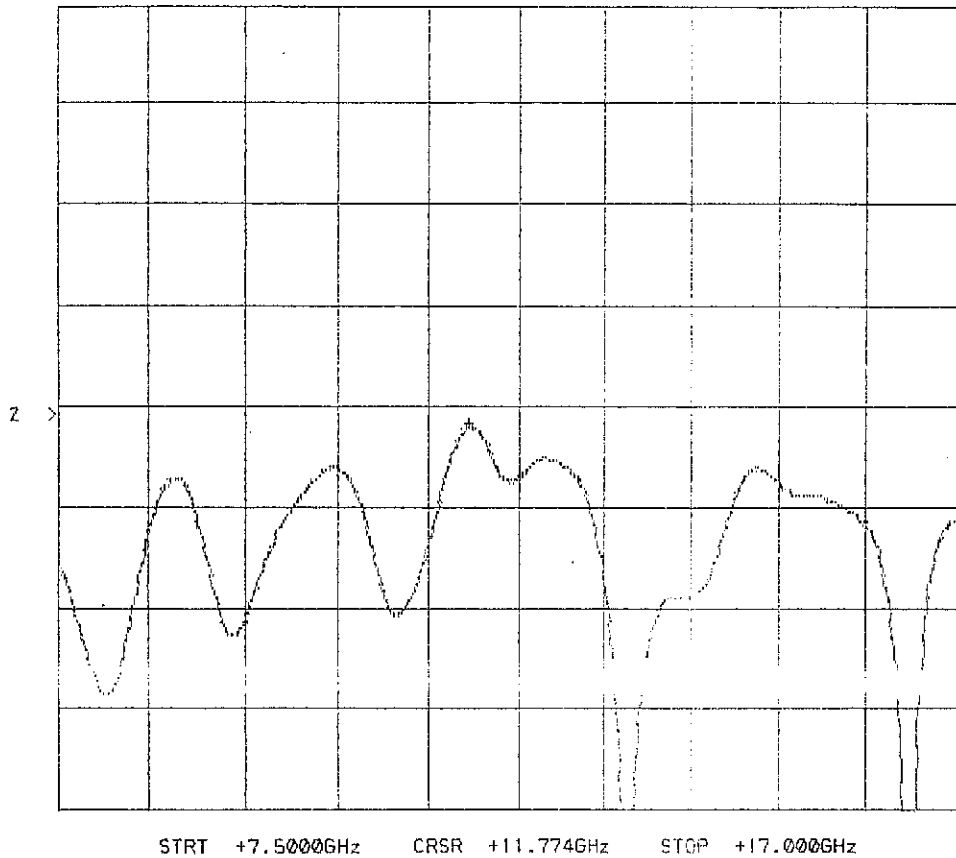


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J7 TO J17

CH2: B -M - 12.65 dB
5.0 dB/ REF - 11.73 dB



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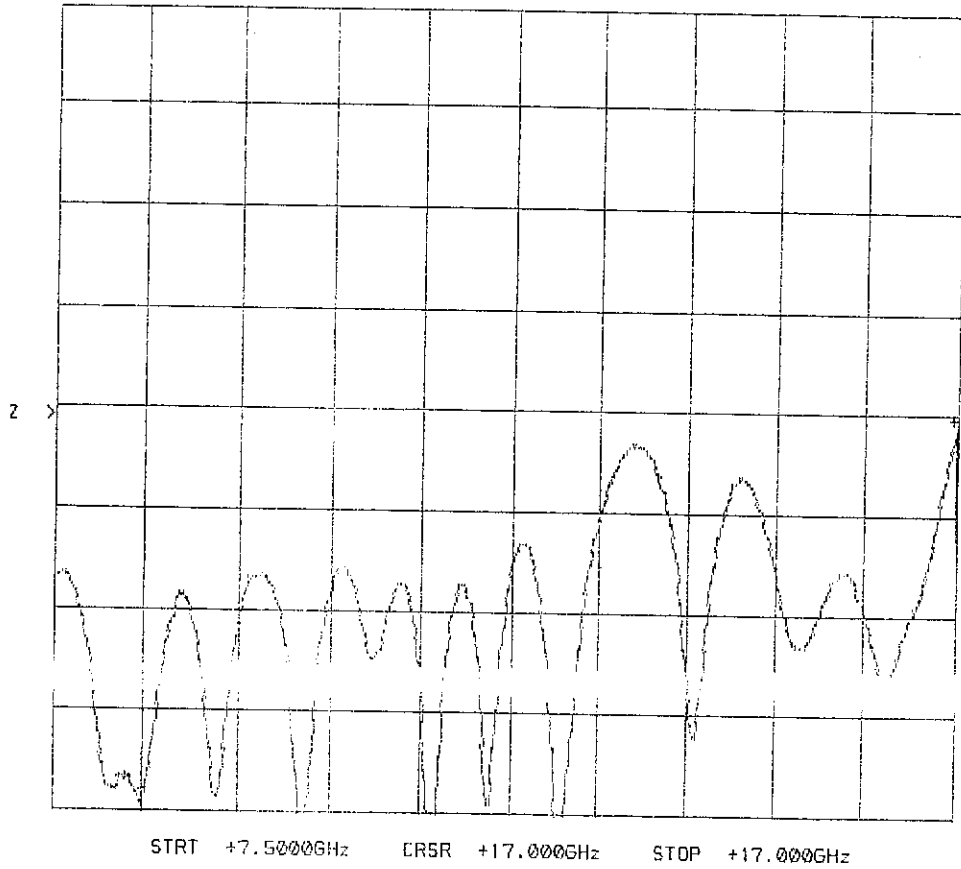


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J8 TO J17

CH2: B -M - 12.07 dB
5.0 dB/ REF - 11.73 dB



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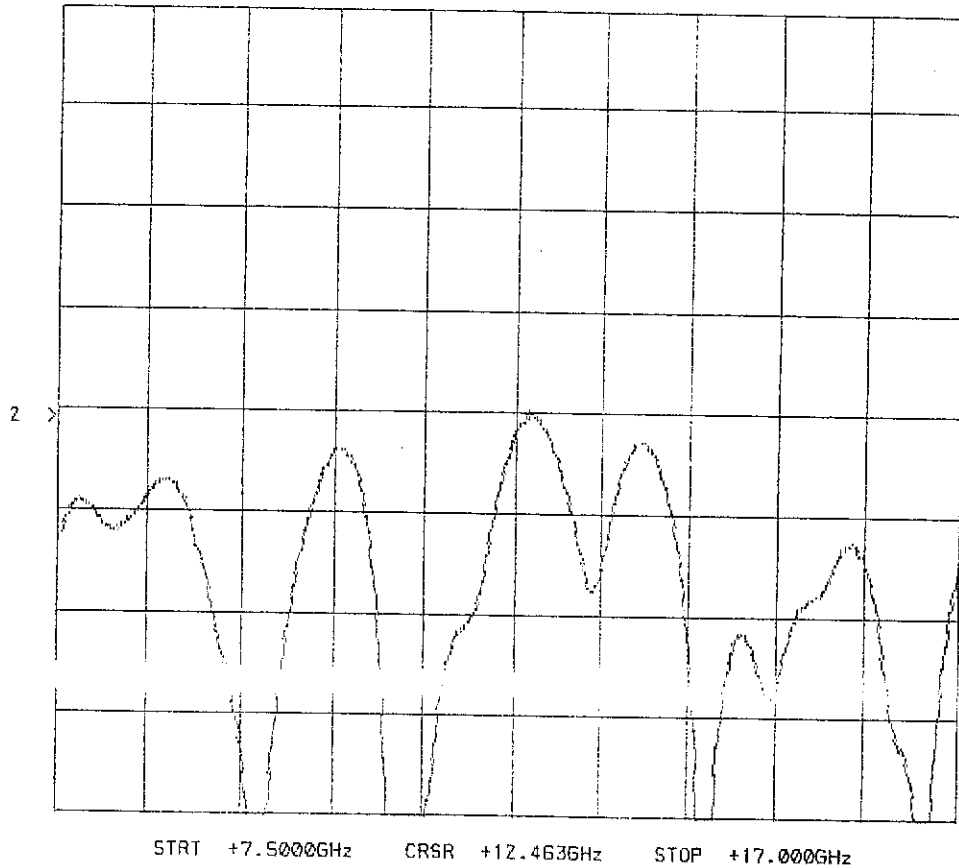


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J9 TO J17

CH2: B -M - 11.84 dB
5.0 dB/ REF - 11.73 dB



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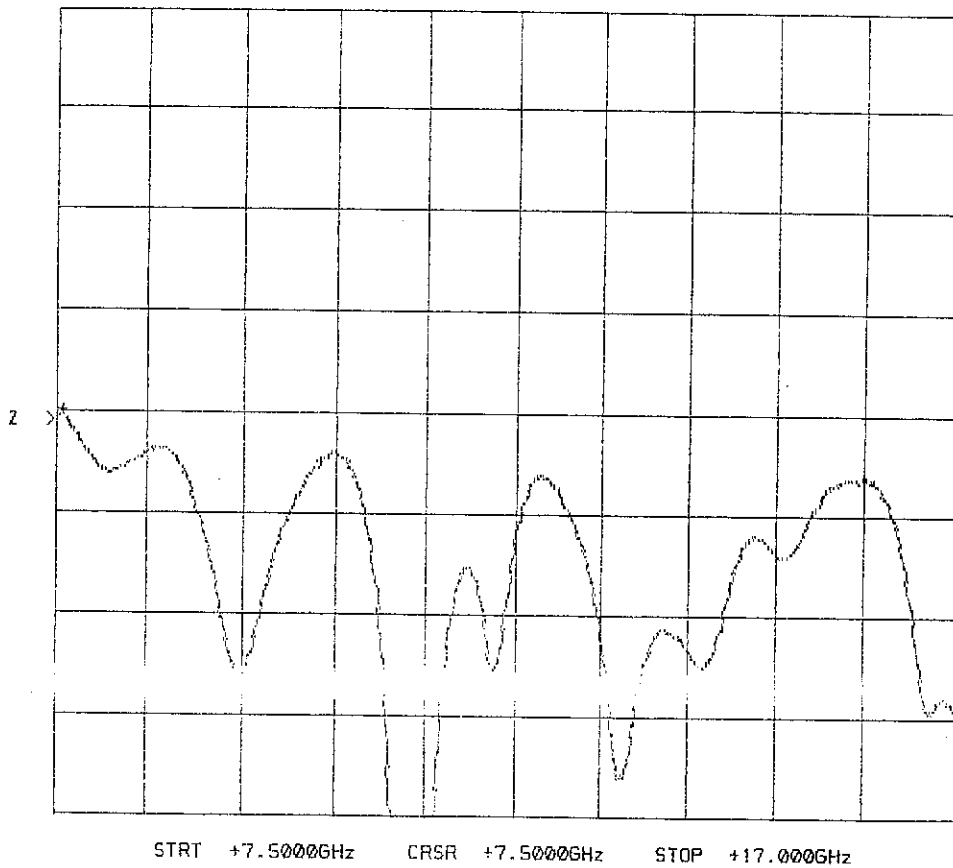


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J10 TO J17

CH2: B -M - 11.70 dB
5.0 dB/ REF - 11.73 dB



MAY 1, 1995

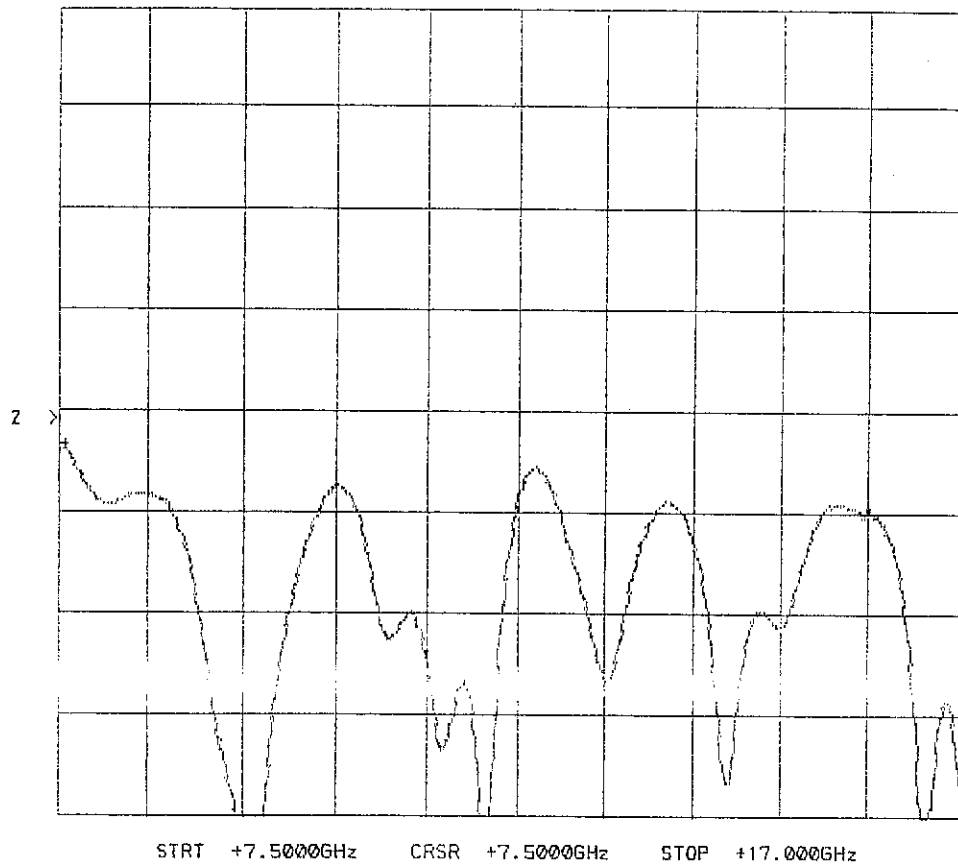


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J11 TO J17

CH2: B -M - 13.42 dB
5.0 dB/ REF - 11.78 dB



MAY 1, 1995

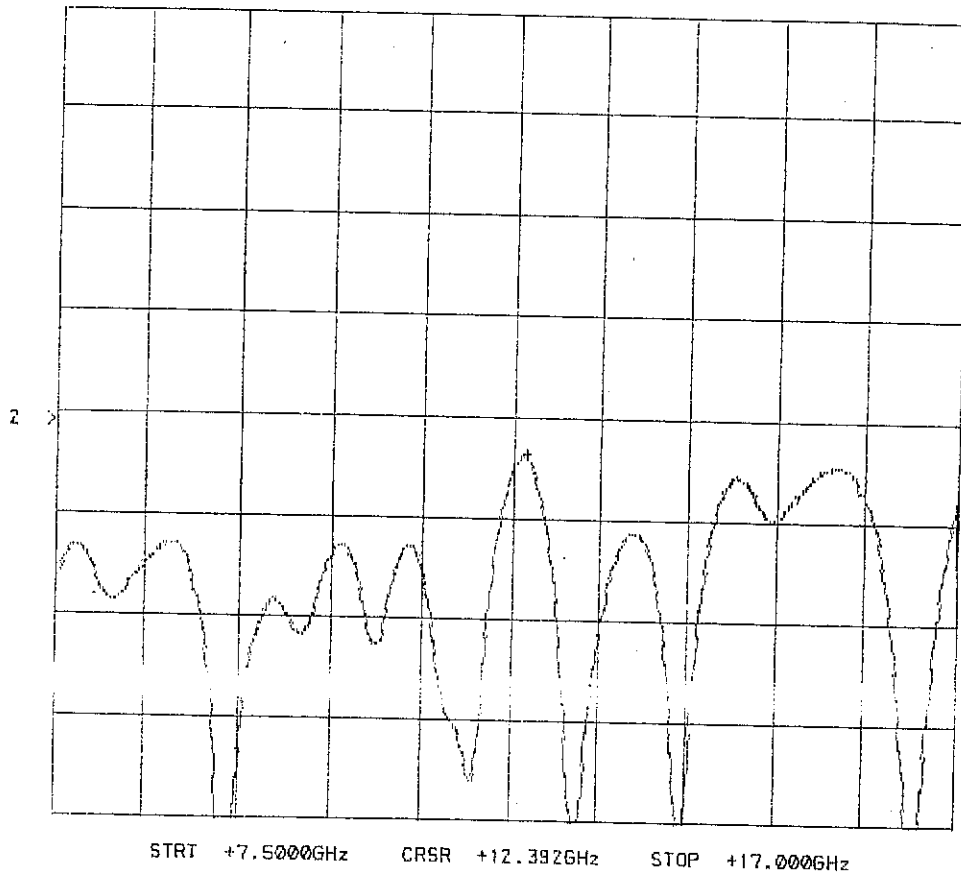


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J12 TO J17

CHZ: B -M - 13.60 dB
5.0 dB/ REF - 11.73 dB



MAY 1, 1995

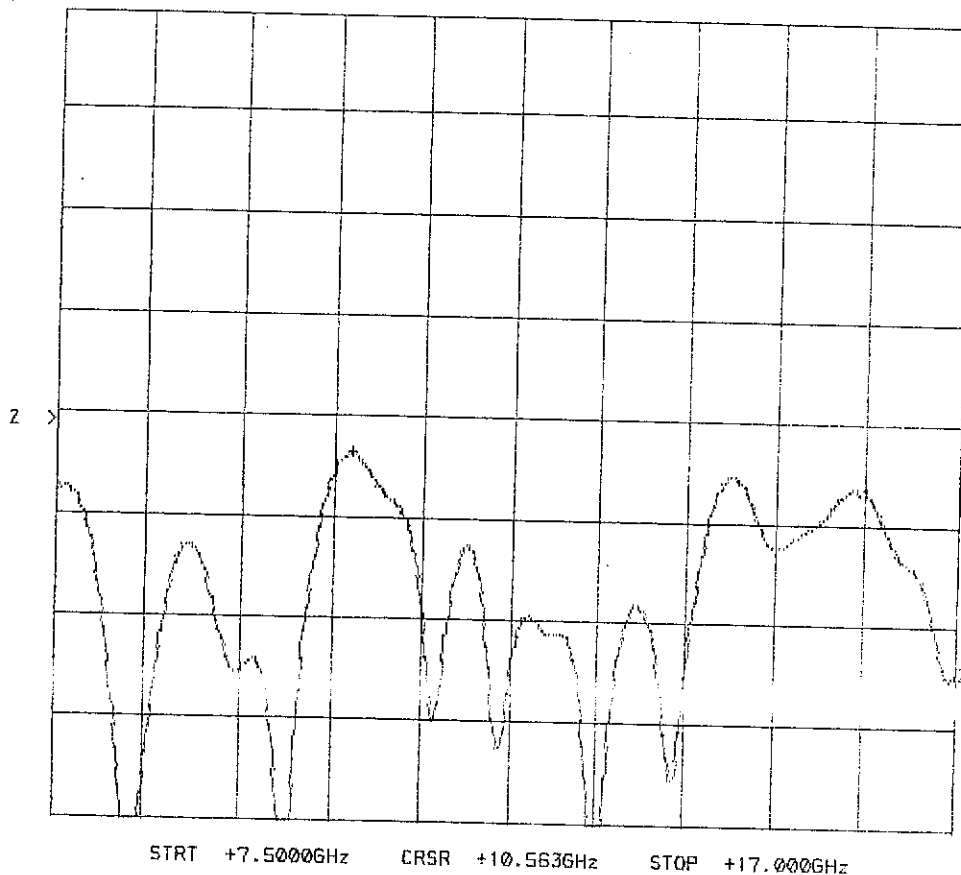


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J13 TO J17

CH2: B -M - 13.56 dB
5.0 dB/ REF - 11.73 dB



MAY 1, 1995

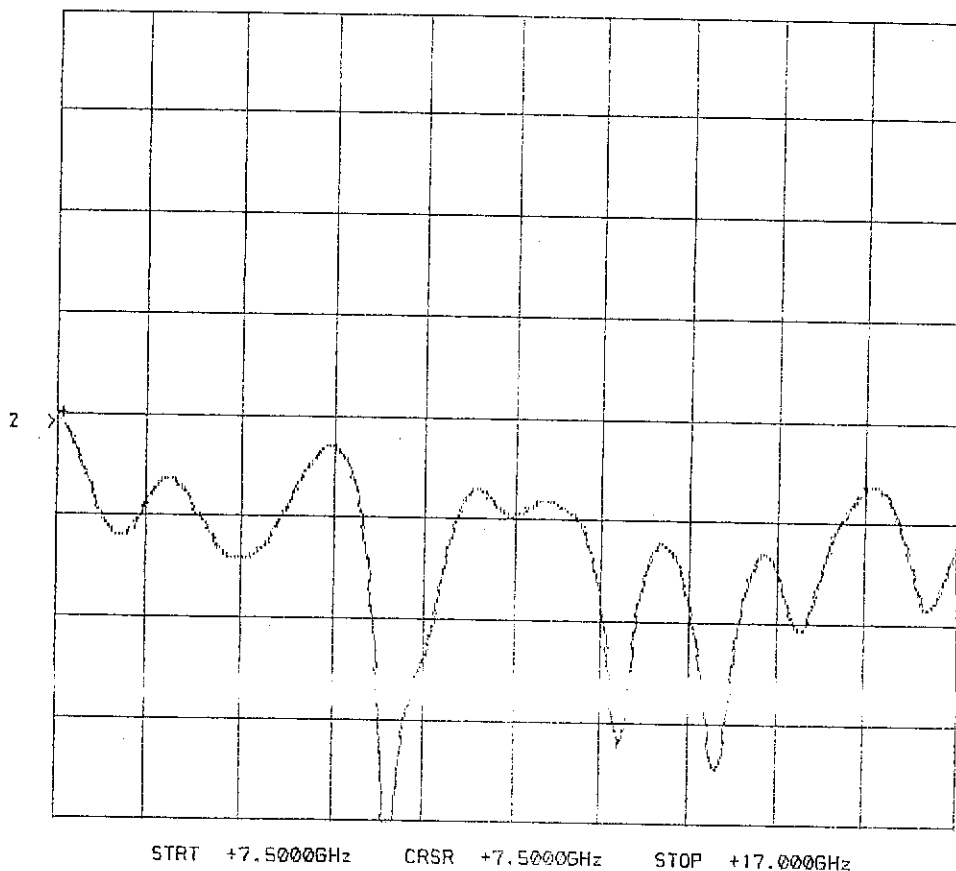


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J14 TO J17

CH2: B -M - 11.79 dB
5.0 dB/ REF - 11.73 dB



MAY 1, 1995

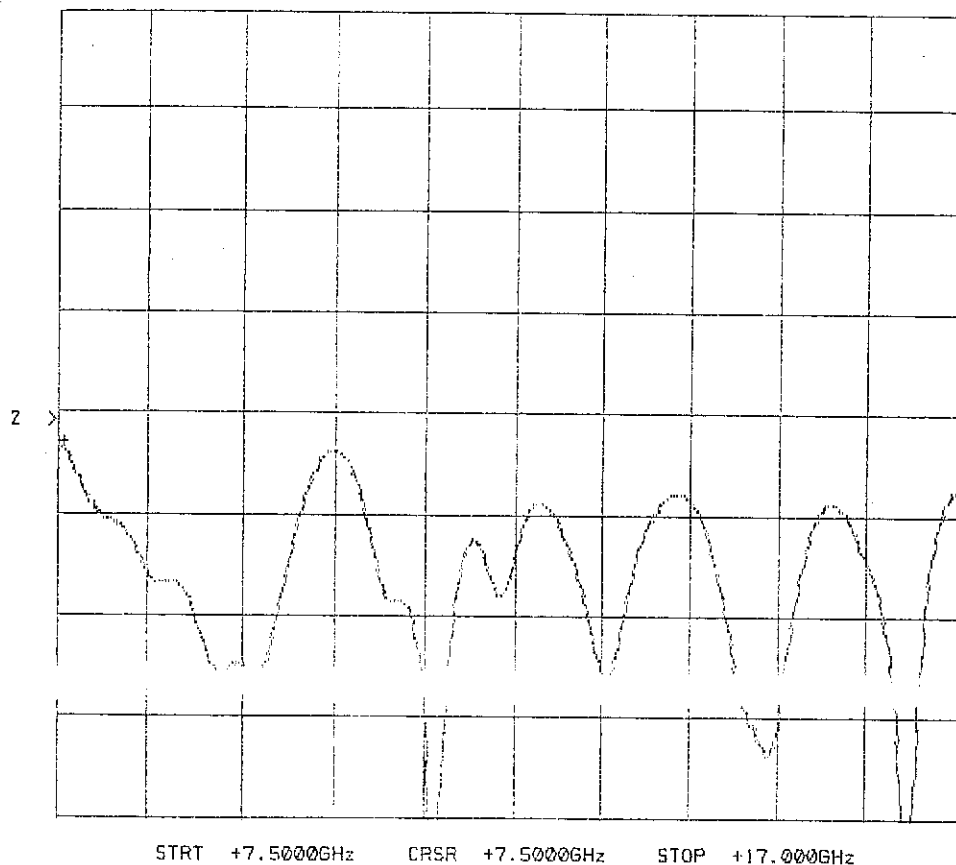


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J15 TO J17

CH2: B -M - 13.21 dB
S.0 dB/ REF - 11.73 dB



MAY 1, 1995

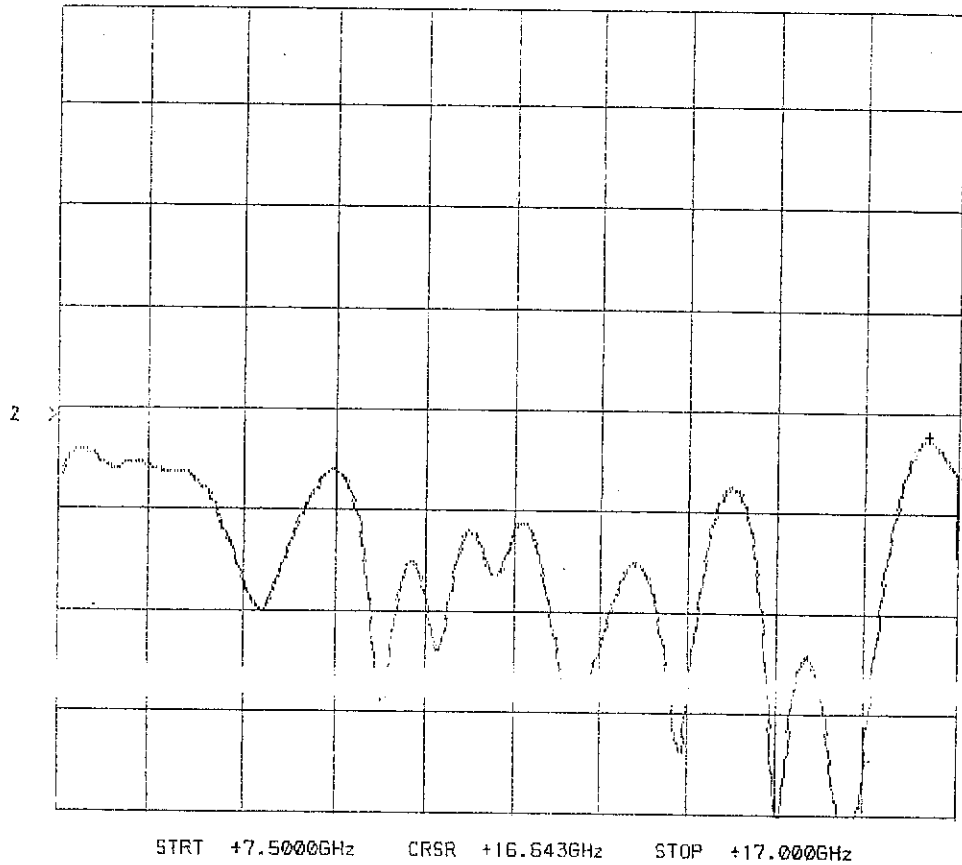


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "ON"
(Measured From 7.5 to 17.0 GHz)

J16 TO J17

CHZ: B -M - 13.03 dB
5.0 dB/ REF - 11.73 dB



MAY 1, 1995

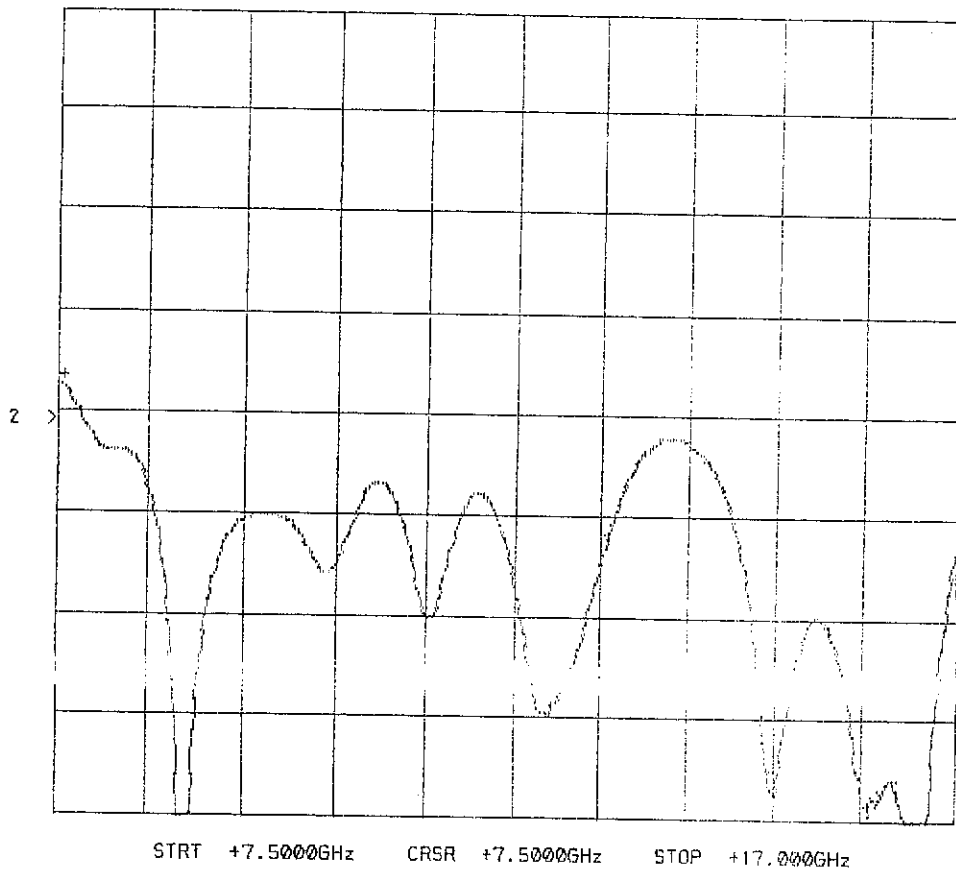


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J1

CH2: B -M - 12.33 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

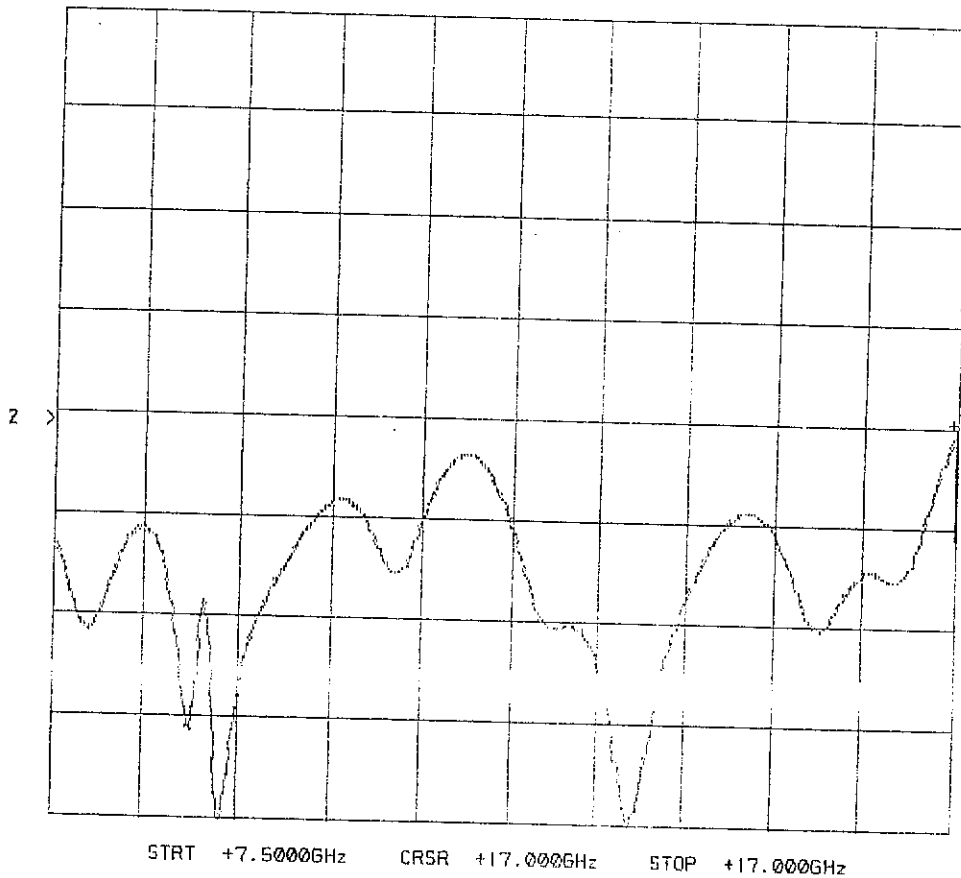


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J2

CH2: B -M - 13.79 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

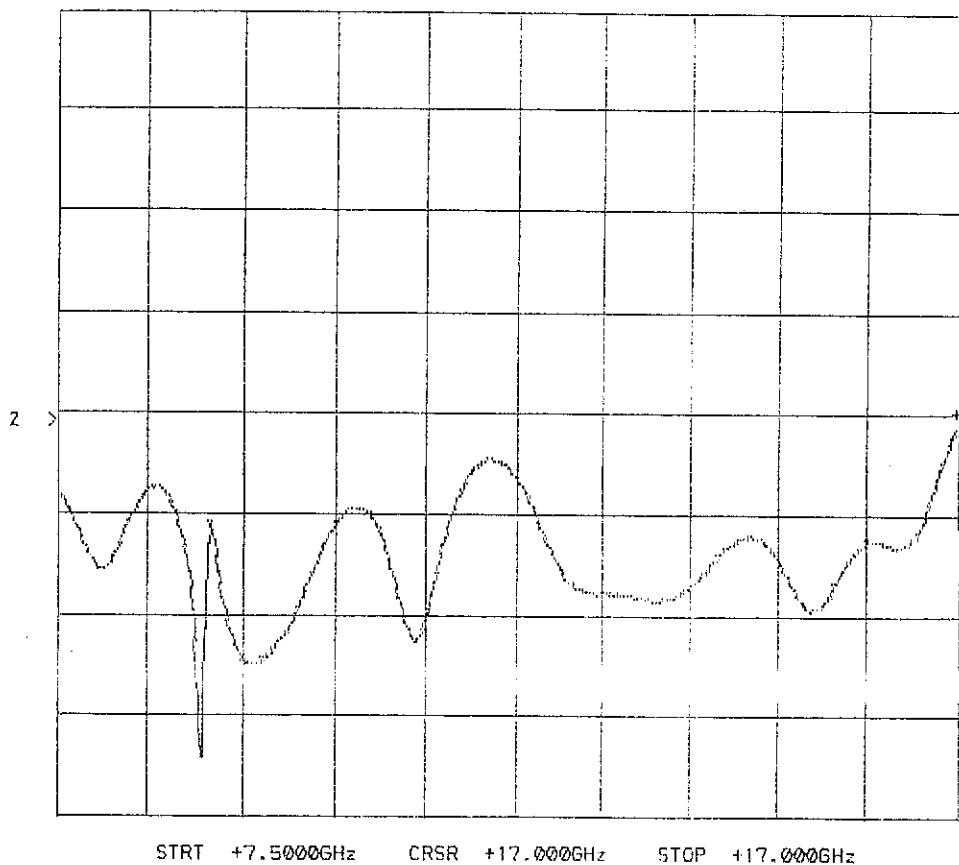


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J3

CH2: B -M - 13.93 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

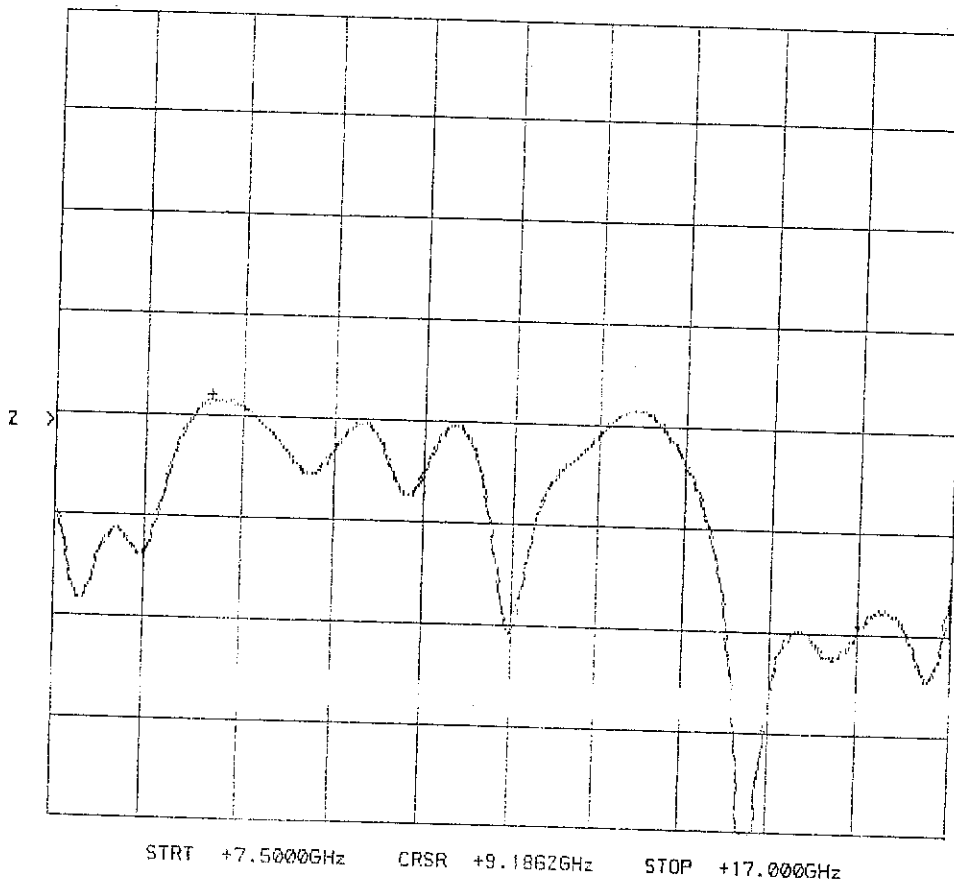


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J4

CH2: B -M - 13.03 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

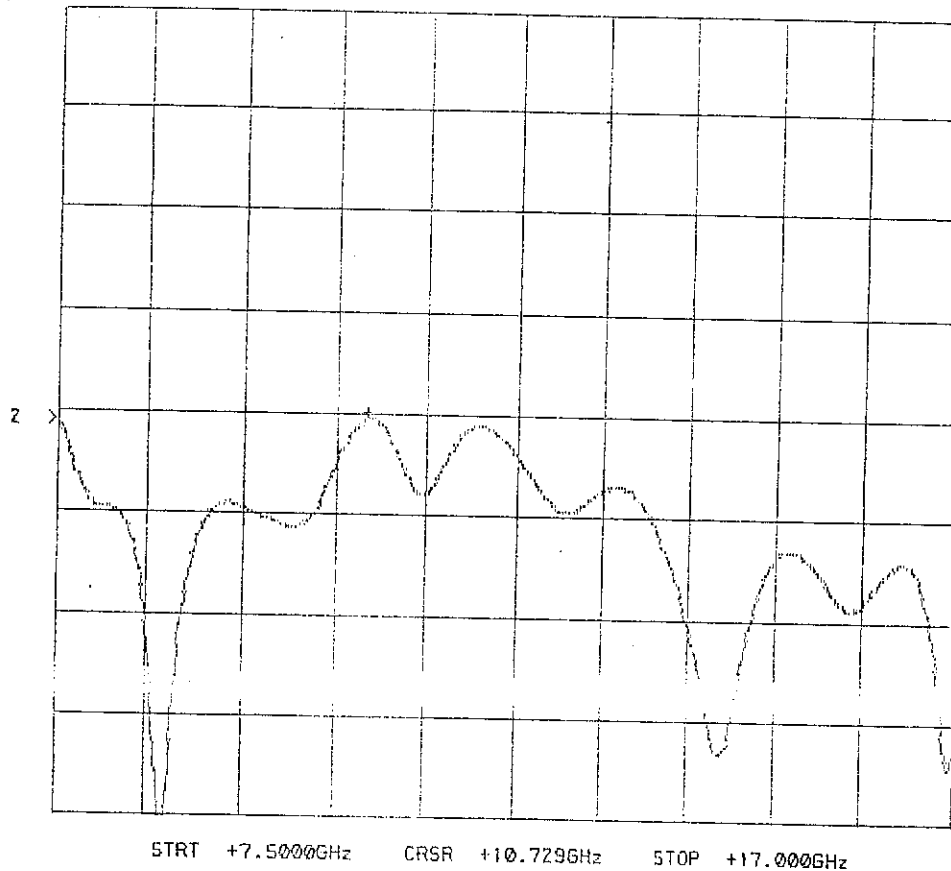


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J5

CH2: B -M - 14.02 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

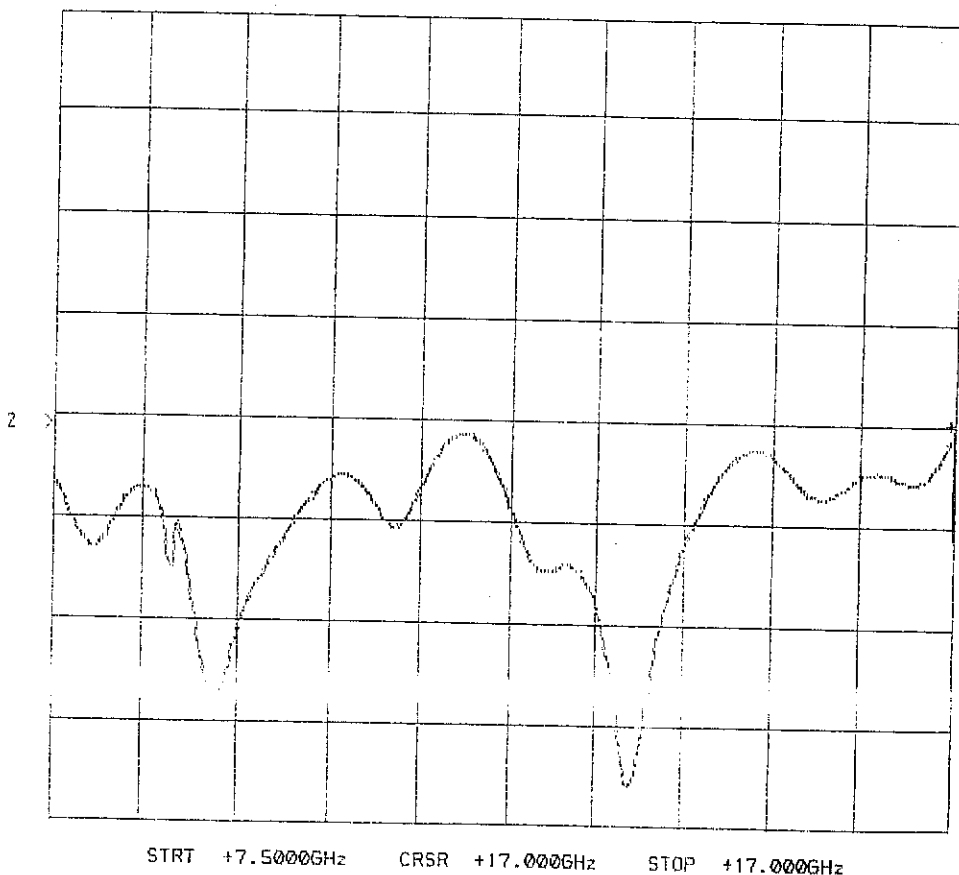


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J6

CH2: B -M - 13.89 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

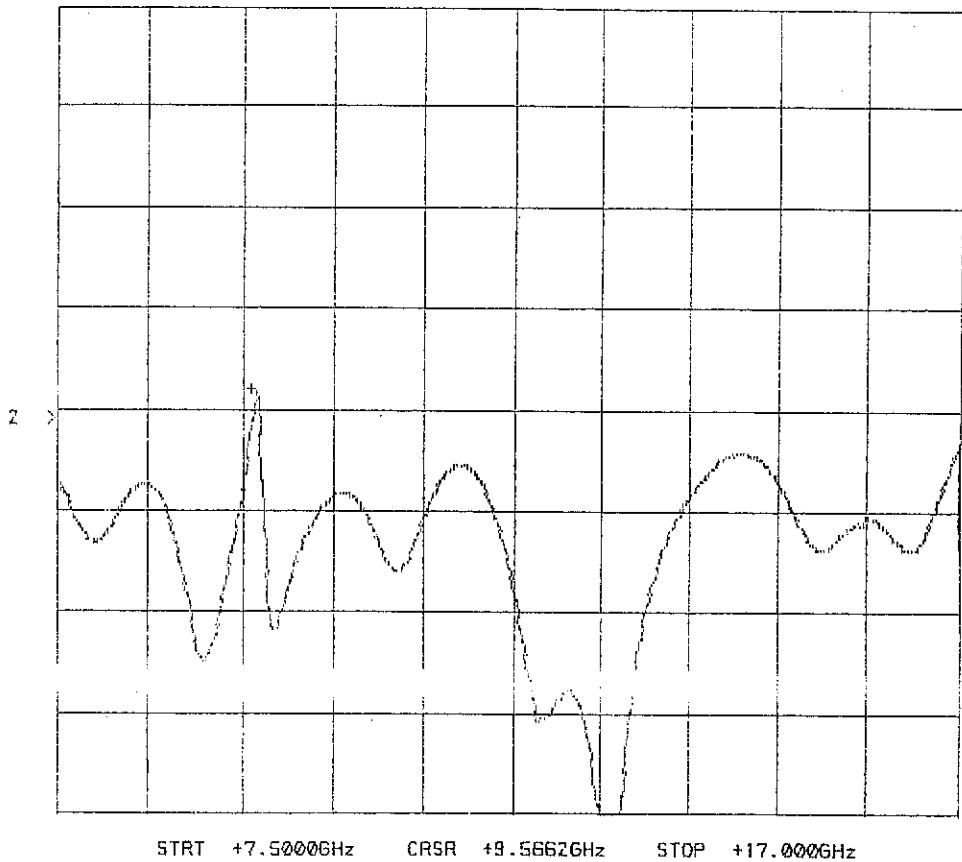


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J7

CH2: B -M - 12.96 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

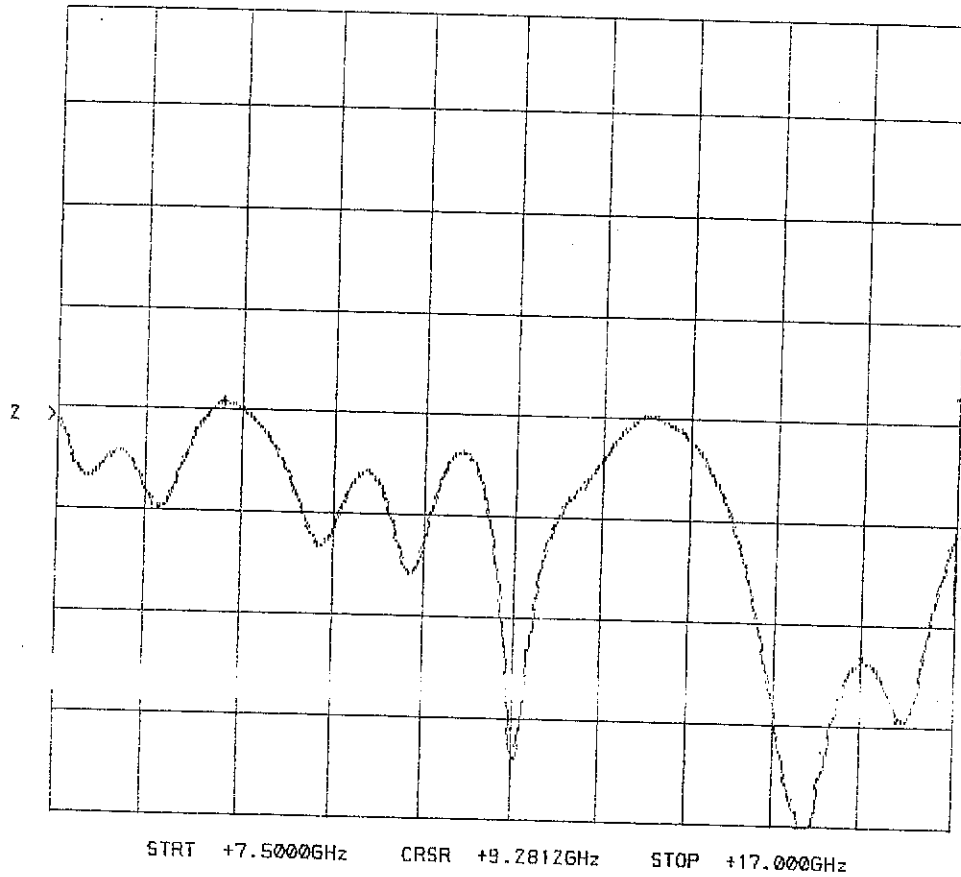


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J8

CH2: B -M - 13.59 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

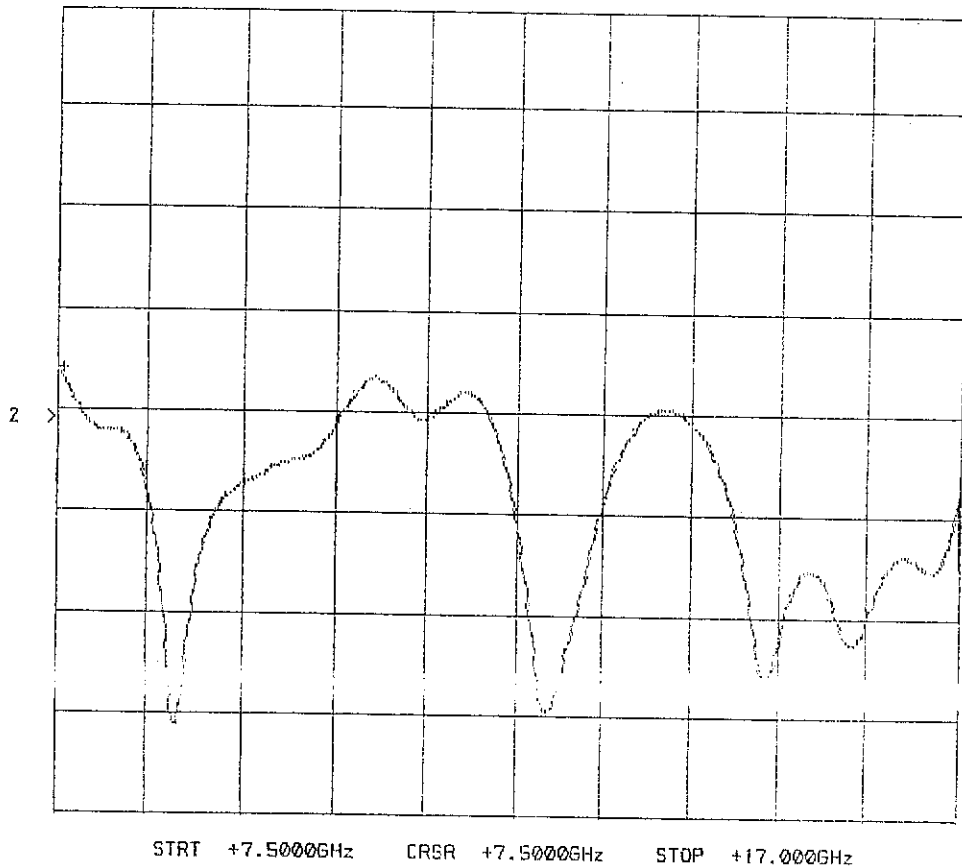


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J9

CH2: B -M - 11.94 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

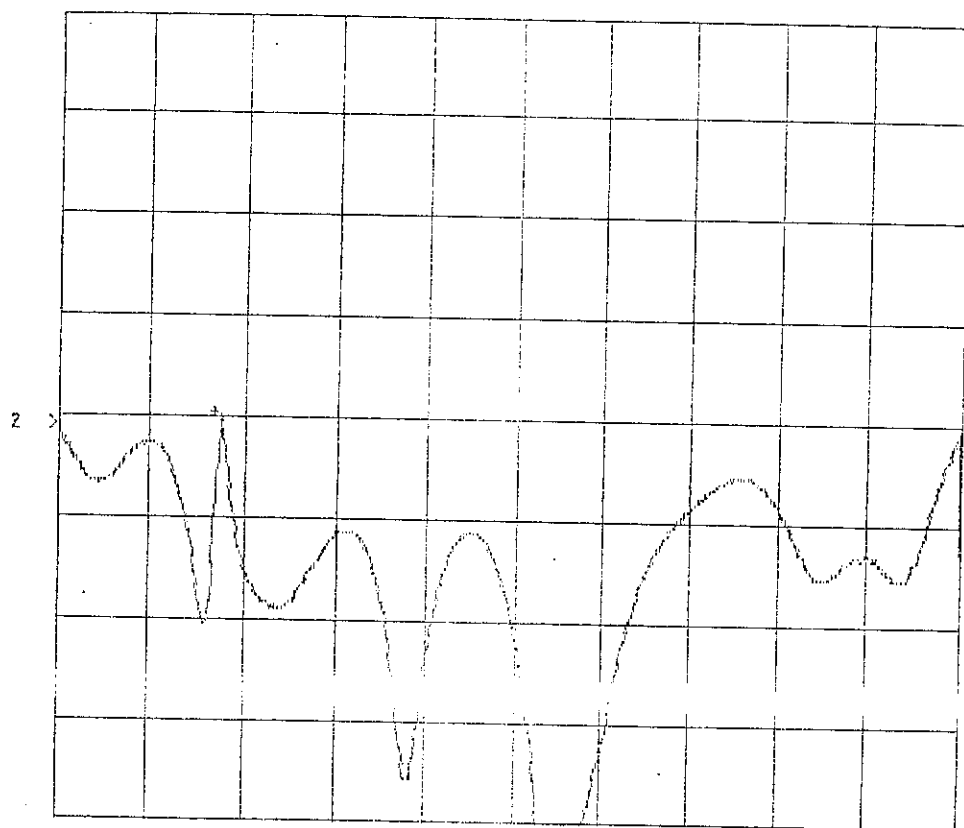


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J10

CH2: B -M - 13.70 dB
5.0 dB/ REF - 13.98 dB



STRT +7.5000GHz CRSR +9.1862GHz STOP +17.0000GHz

MAY 1, 1995

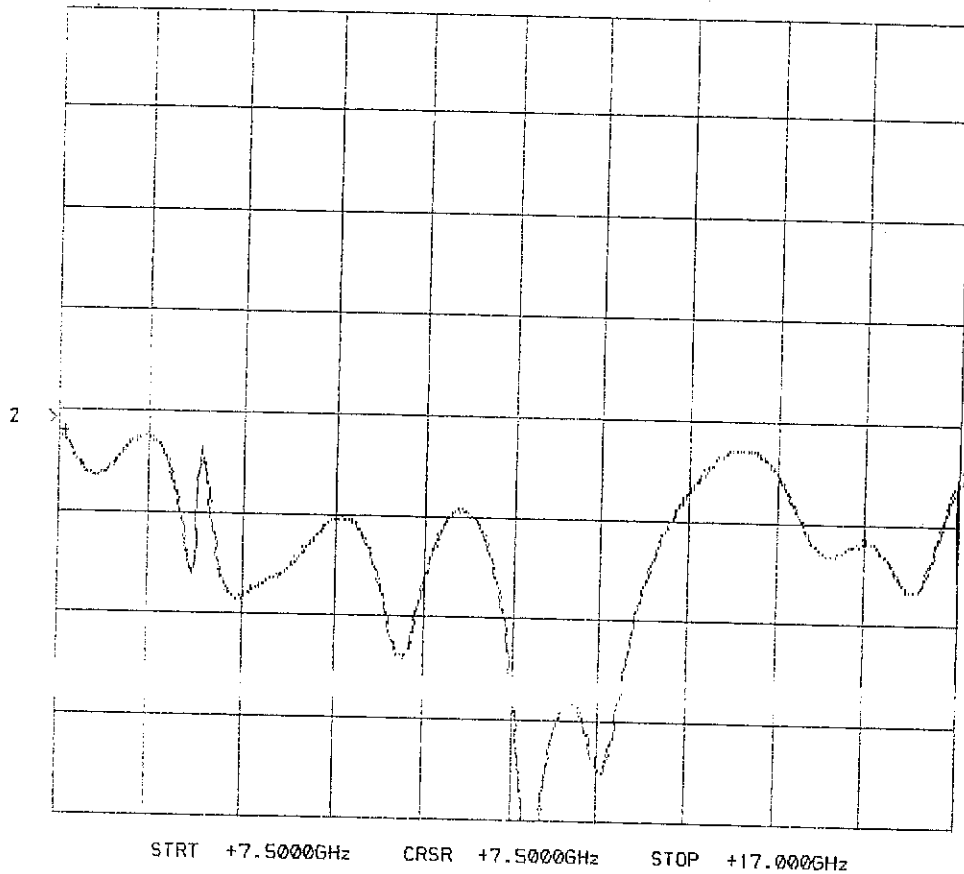


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J11

CH2: B -M - 15.03 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

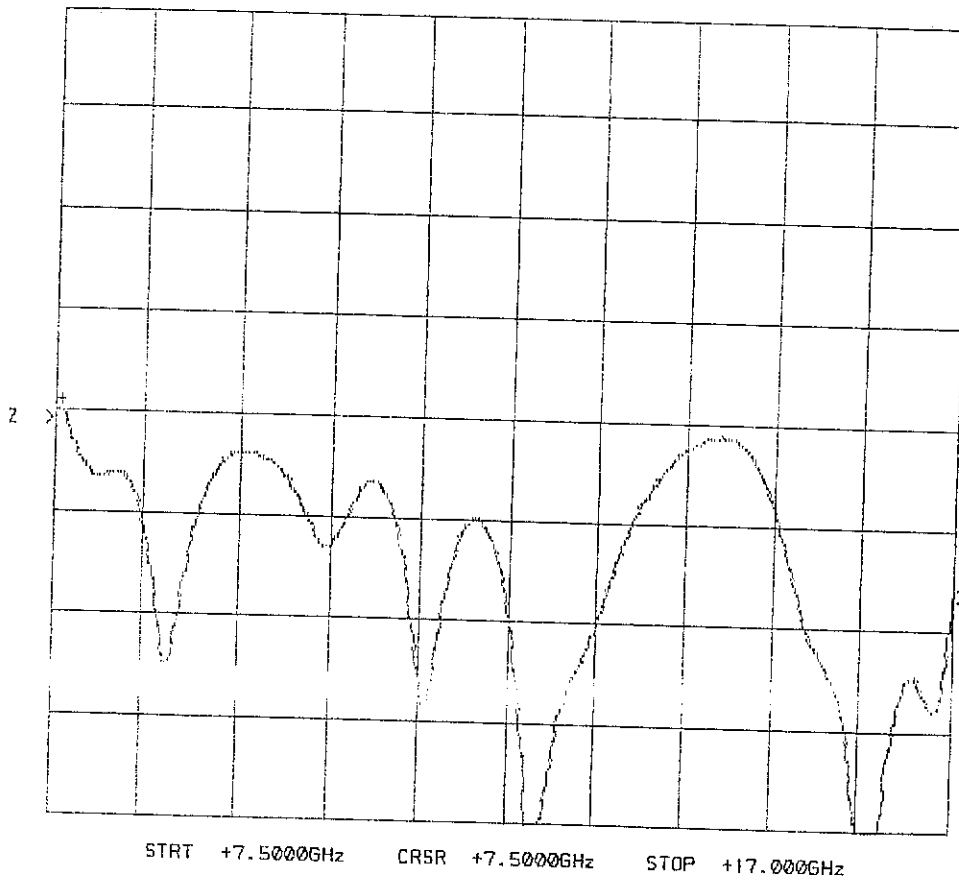


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J12

CHZ: B -M - 13.51 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

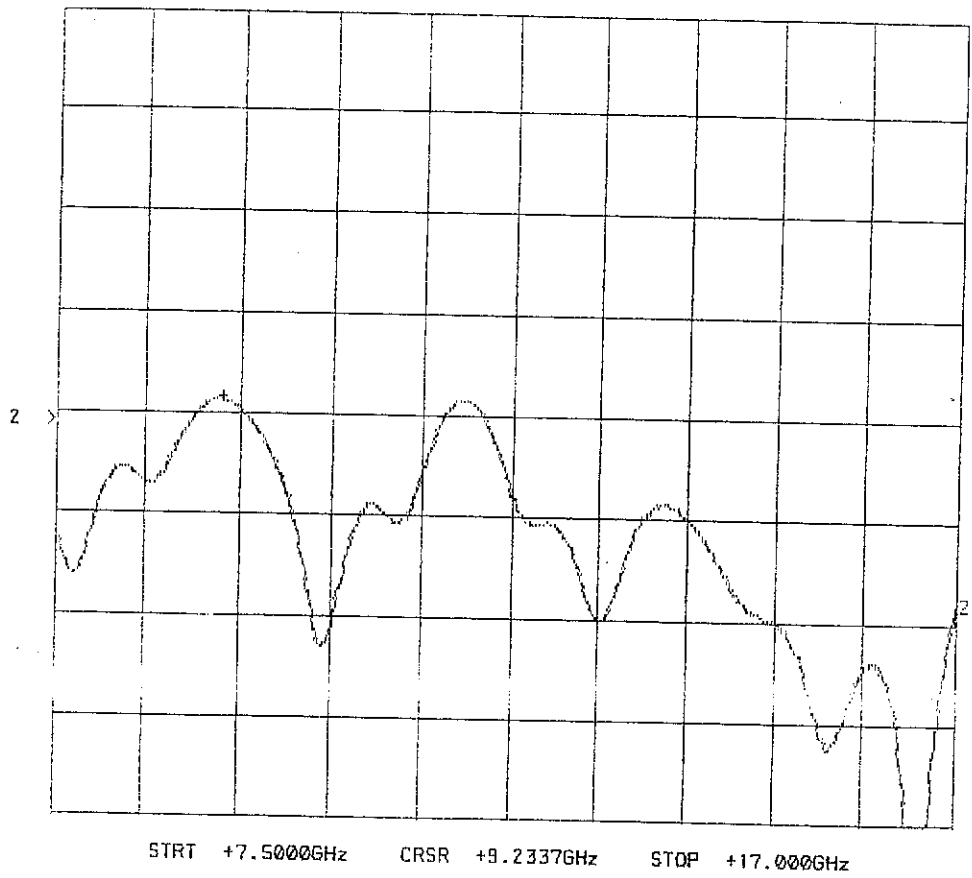


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J13

CH2: B -M - 13.15 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

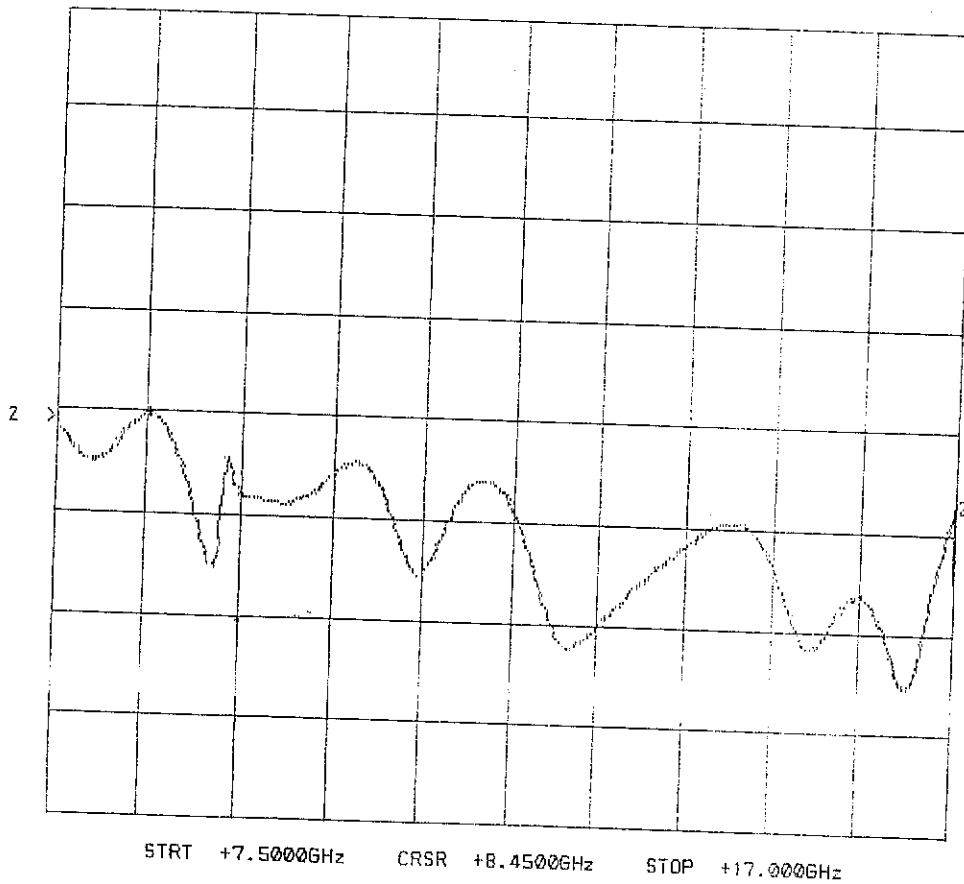


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J14

CH2: B -M - 14.10 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

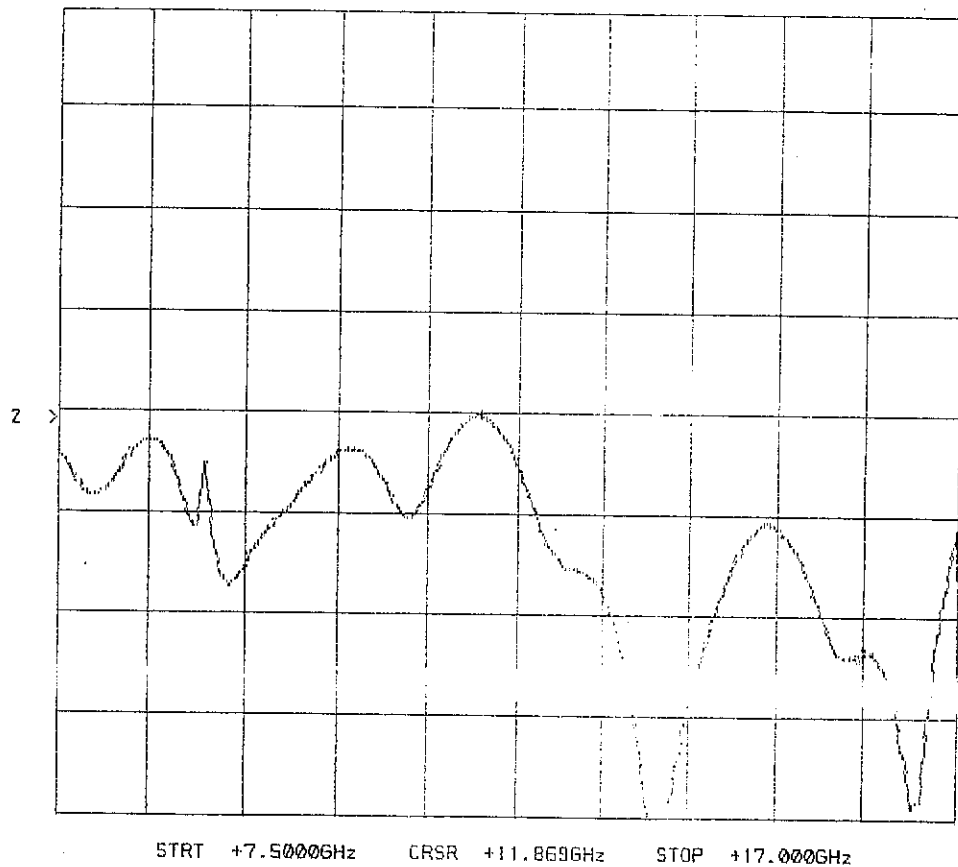


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J15

CH2: B -M - 14.07 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

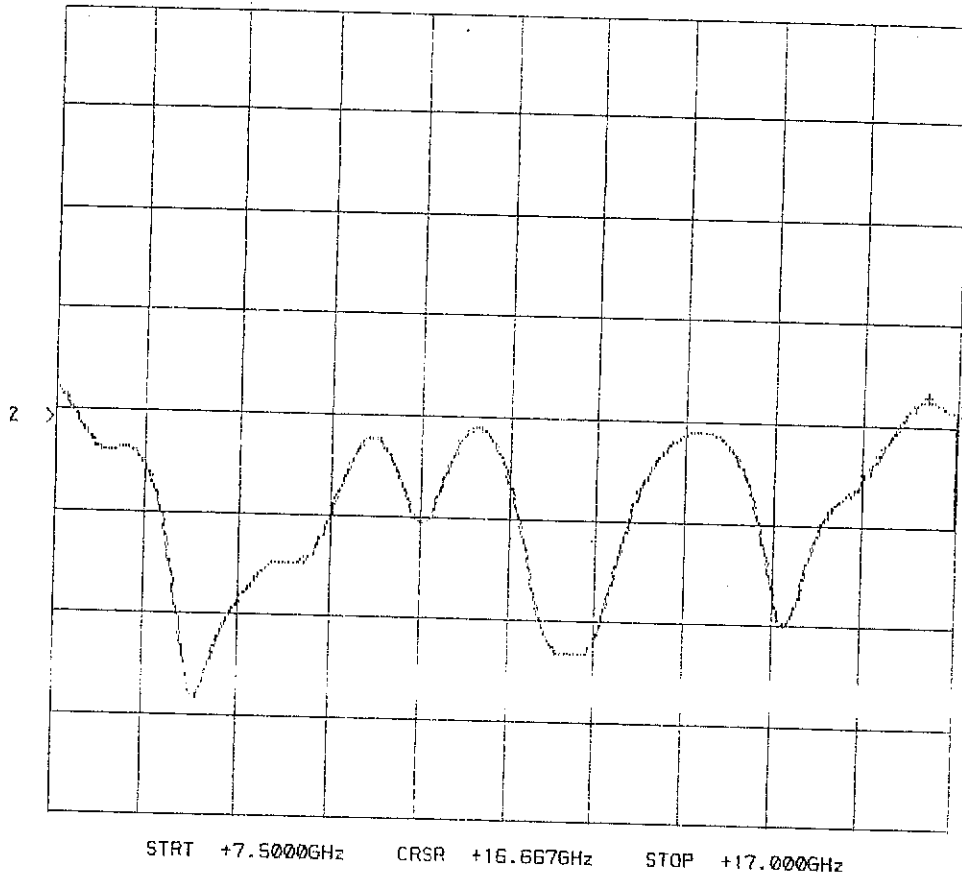


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

OUTPUT VSWR "OFF"
(OFF ARM TERMINATION)
(Measured From 7.5 to 17.0 GHz)

J16

CH2: B -M - 12.62 dB
5.0 dB/ REF - 13.98 dB



MAY 1, 1995

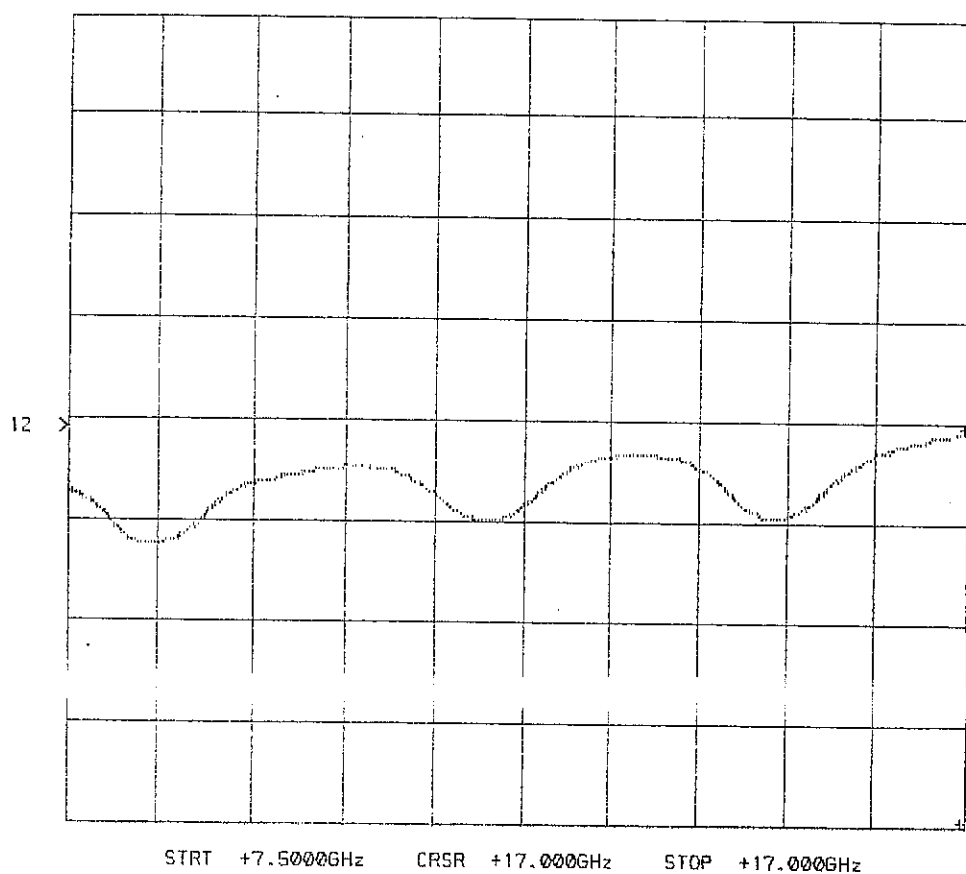


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J1

CH1: A -M S - 31.46 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

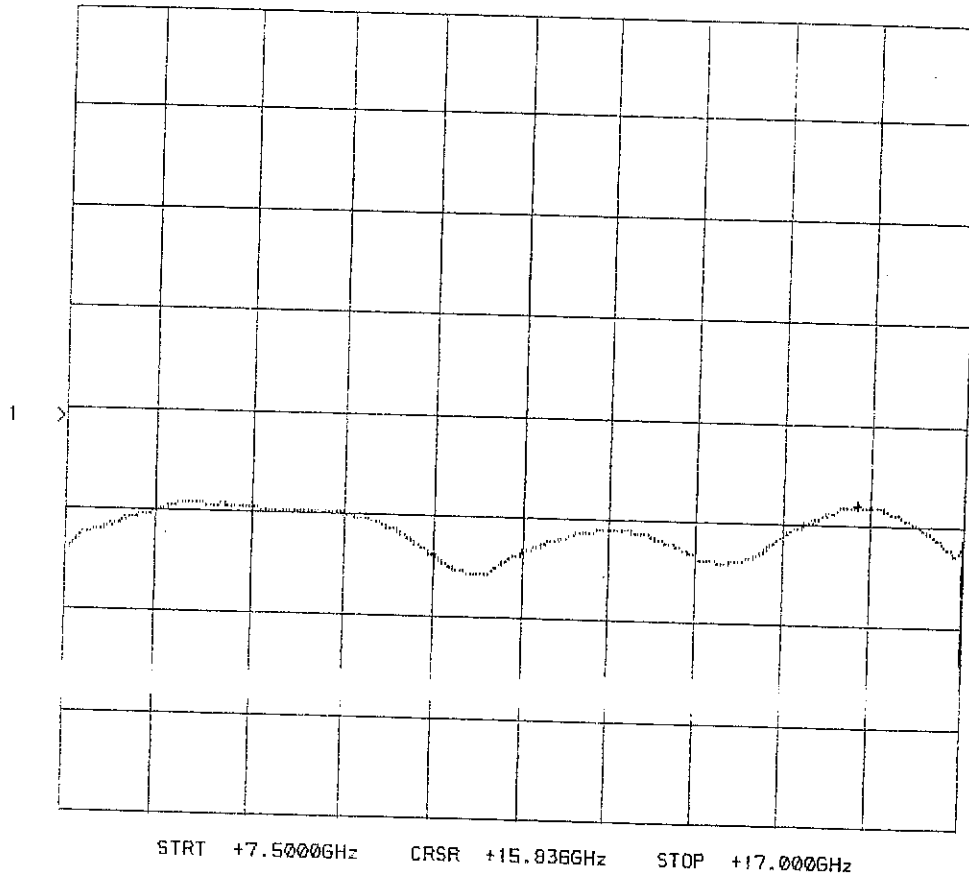


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J2

CH1: A -M S - 46.01 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

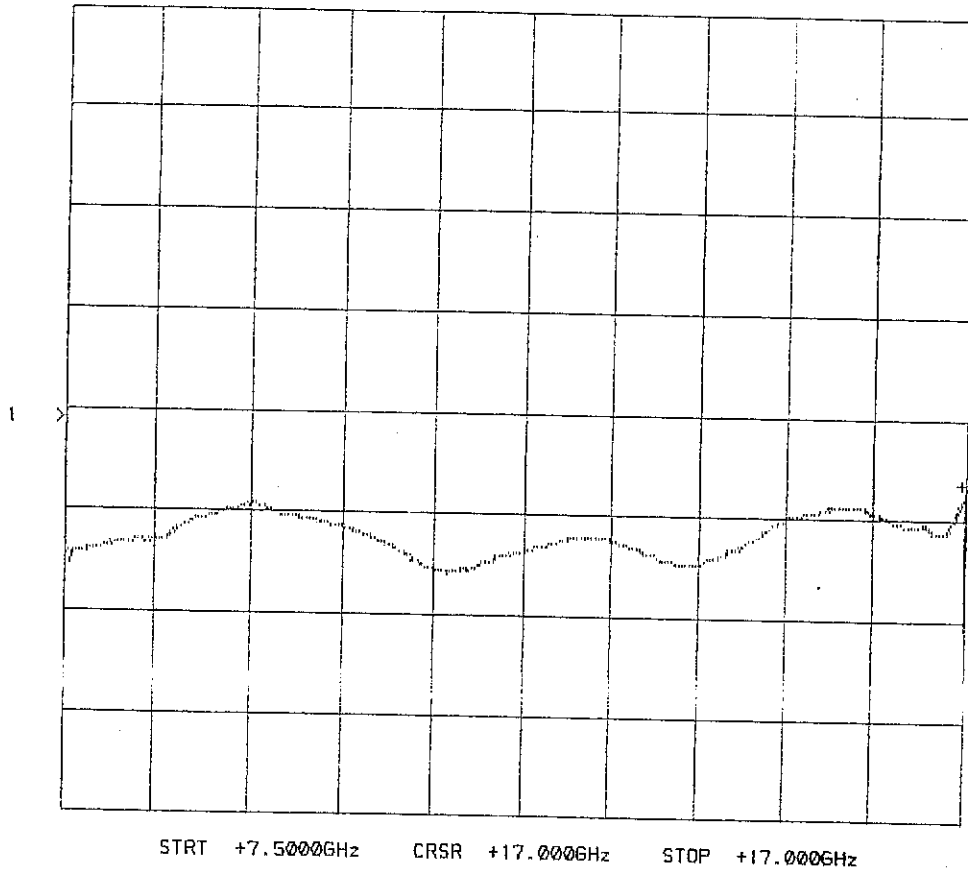


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J3

CH1: A -M S - 43.32 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

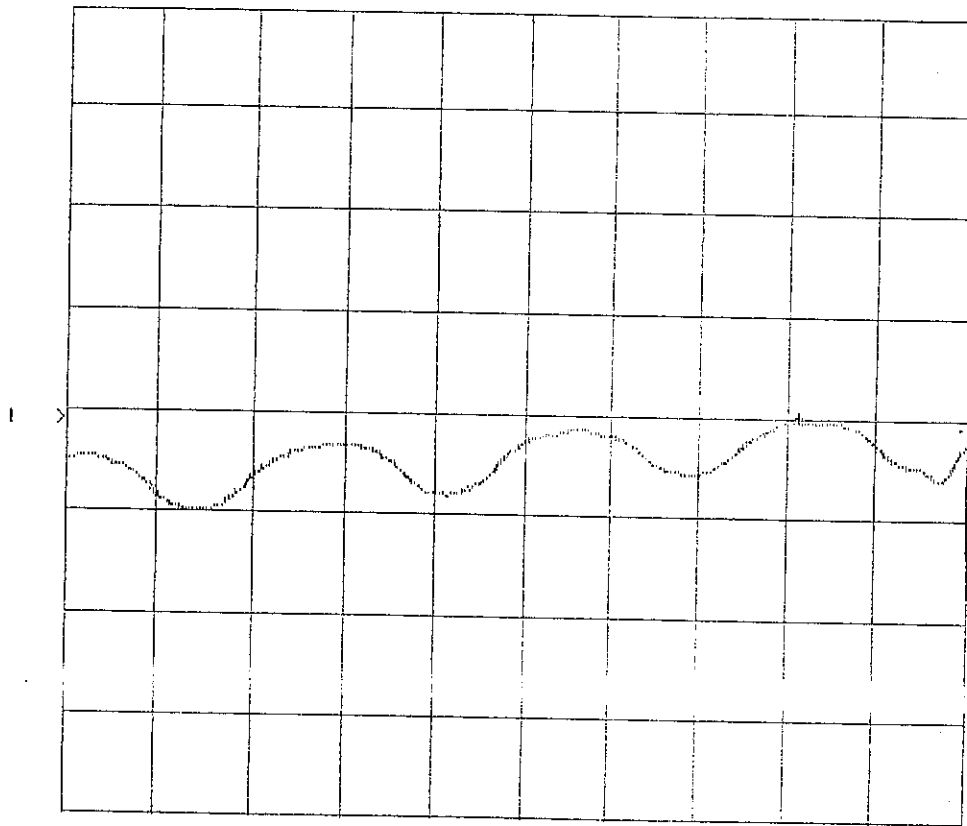


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J4

CHI: A -M S - 30.27 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +15.266GHz STOP +17.000GHz

MAY 1, 1995

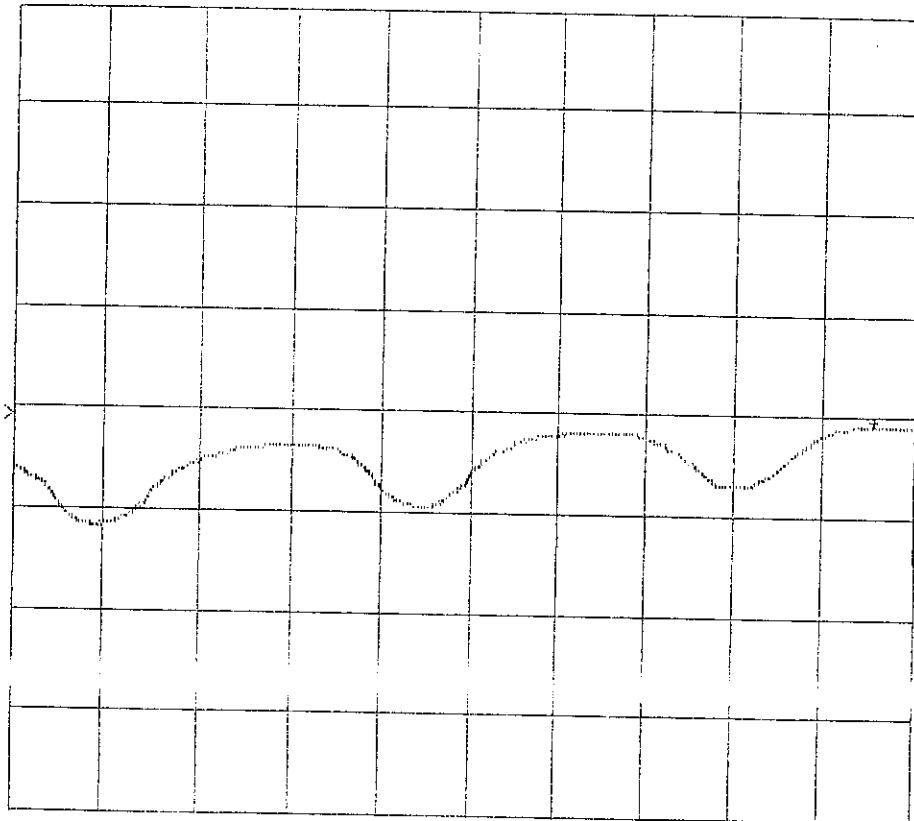


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J5

CHI: A -M S - 31.20 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +16.5966GHz STOP +17.0000GHz

MAY 1, 1995

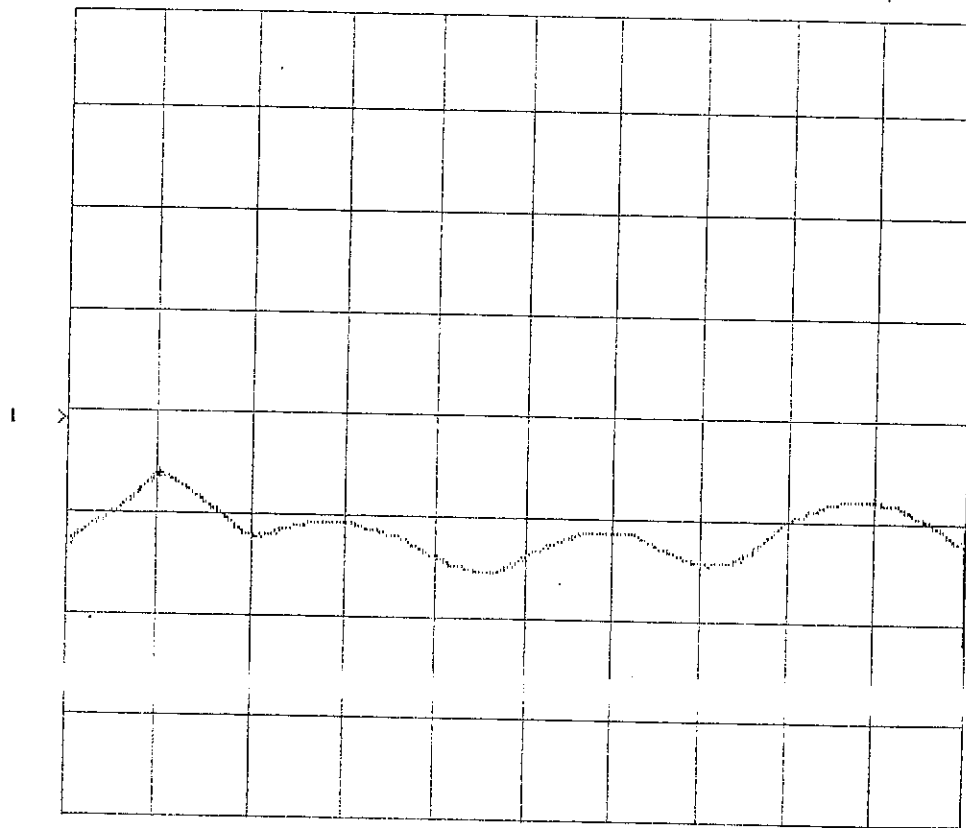


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J6

CH1: A -M S - 42.45 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +8.4737GHz STOP +17.0000GHz

MAY 1, 1995

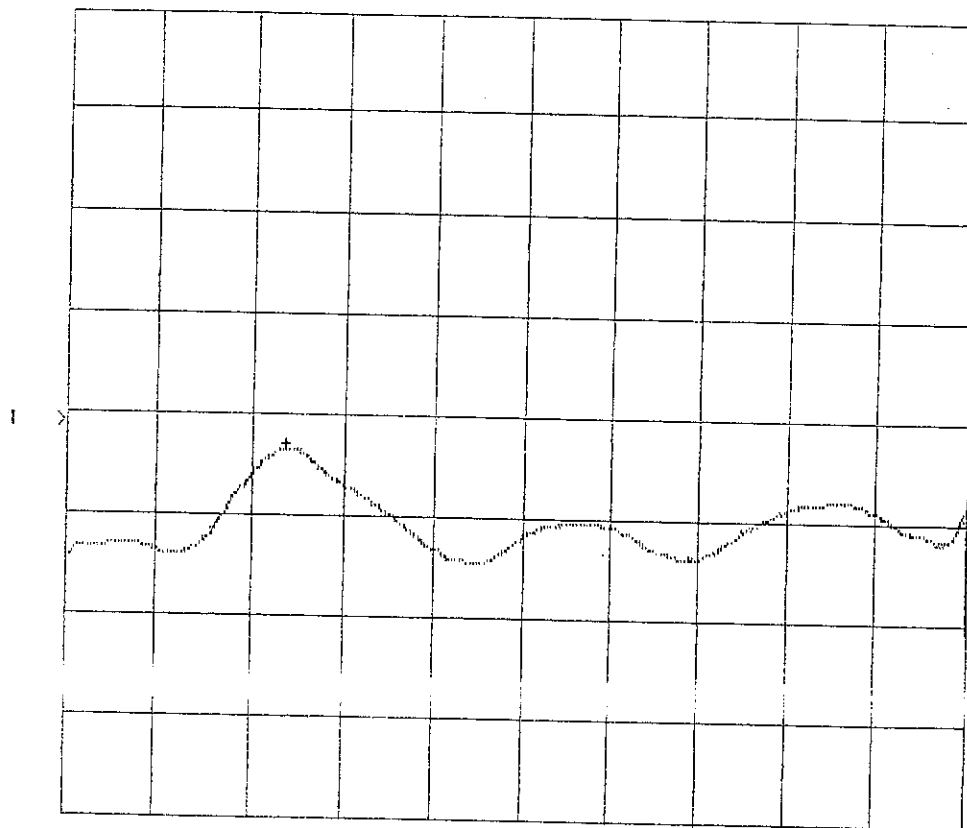


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J7

CHI: A -M S - 36.52 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +9.8274GHz STOP +17.0000GHz

MAY 1, 1995

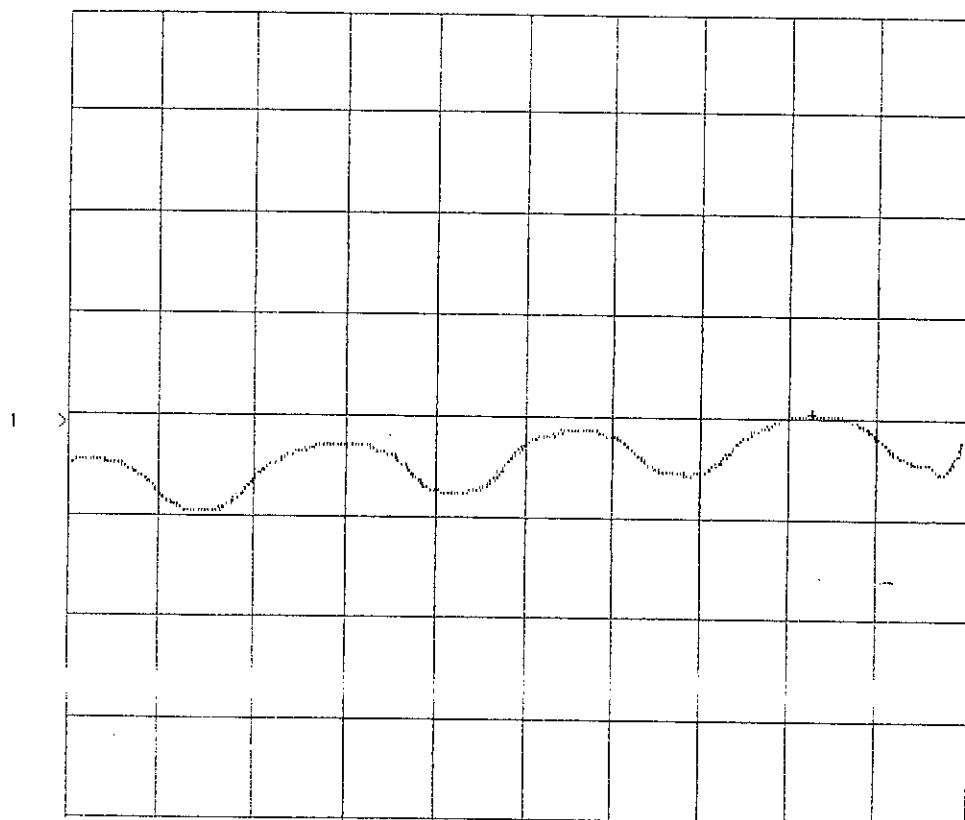


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J8

CH1: A -M S - 29.11 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +15.337GHz STOP +17.000GHz

MAY 1, 1995

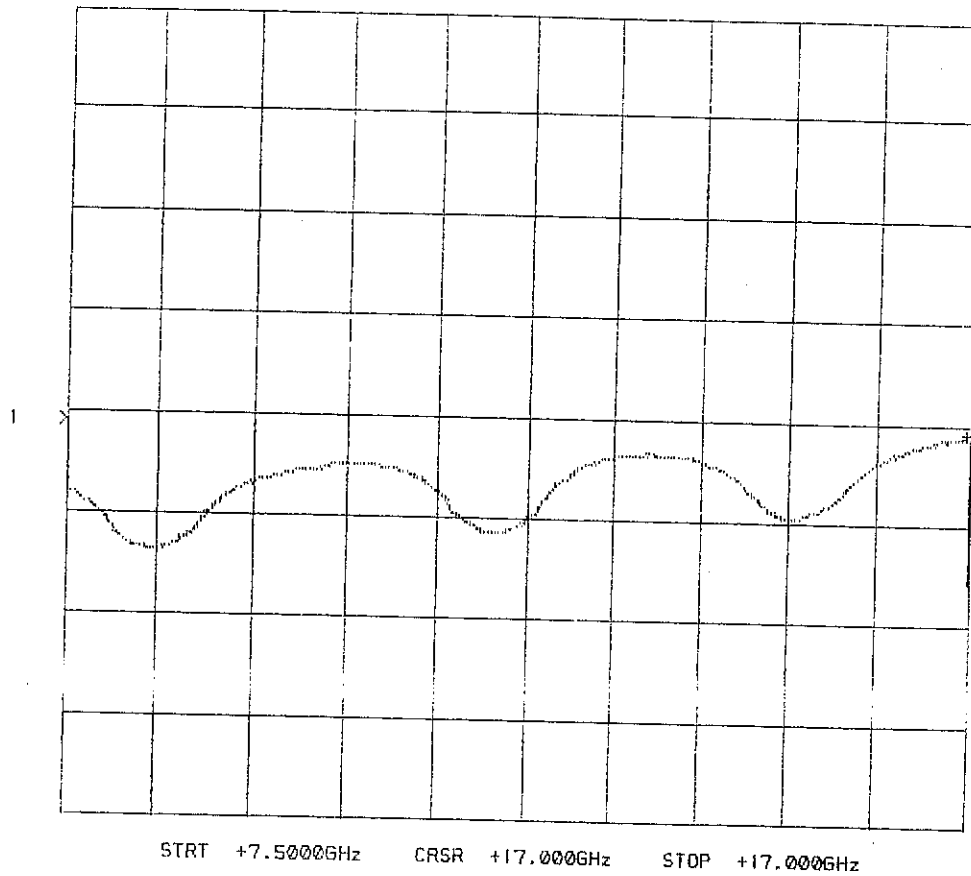


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J9

CH1: A -M S - 32.06 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

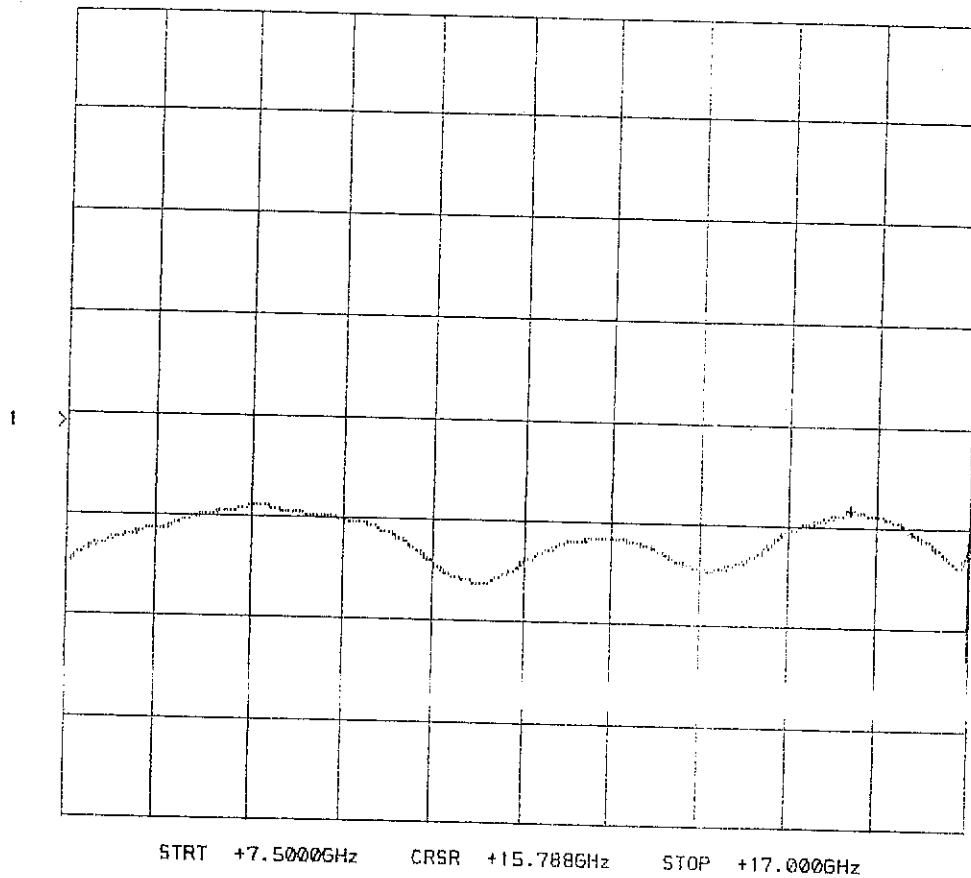


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J10

CH1: A RMS - 46.69 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

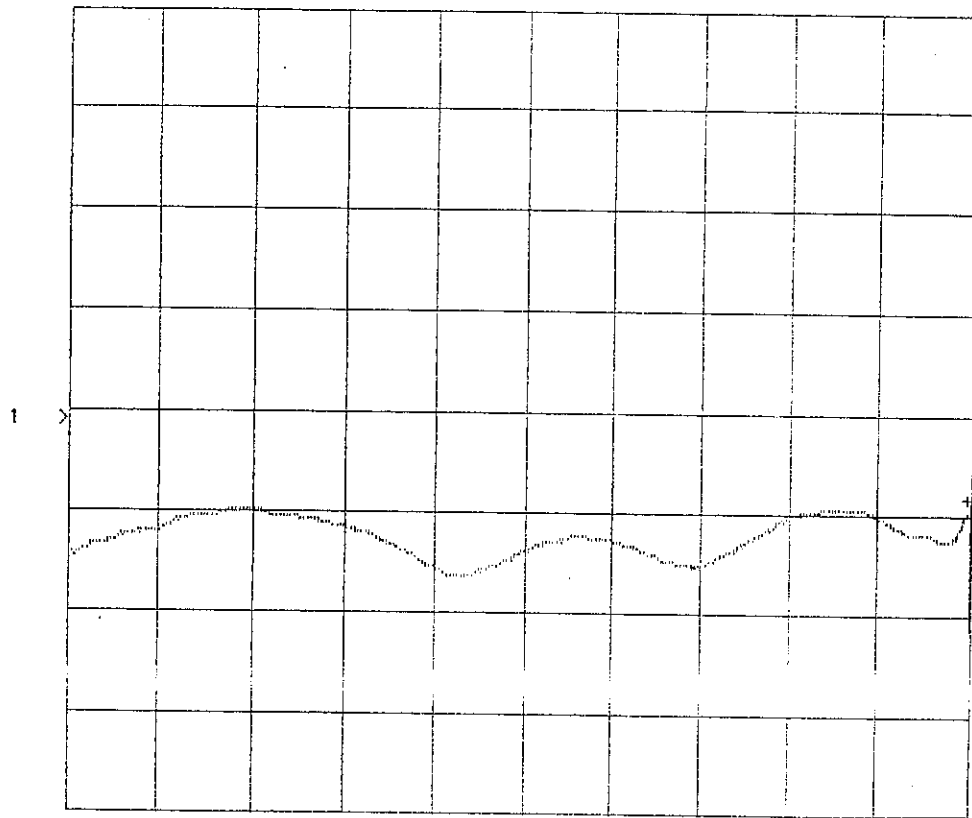


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J11

CH1: A -M S - 47.04 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +17.0000GHz STOP +17.0000GHz

MAY 1, 1995

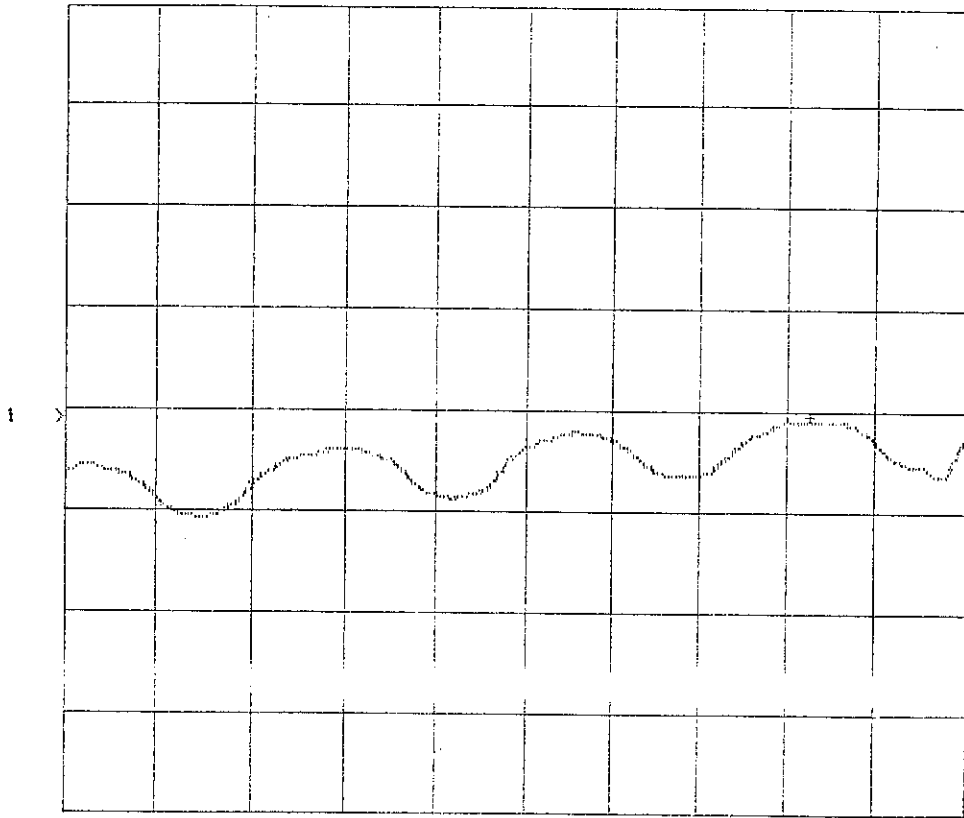


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J12

CH1: A -M 5 - 31.36 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +15.337GHz STOP +17.000GHz

MAY 1, 1995

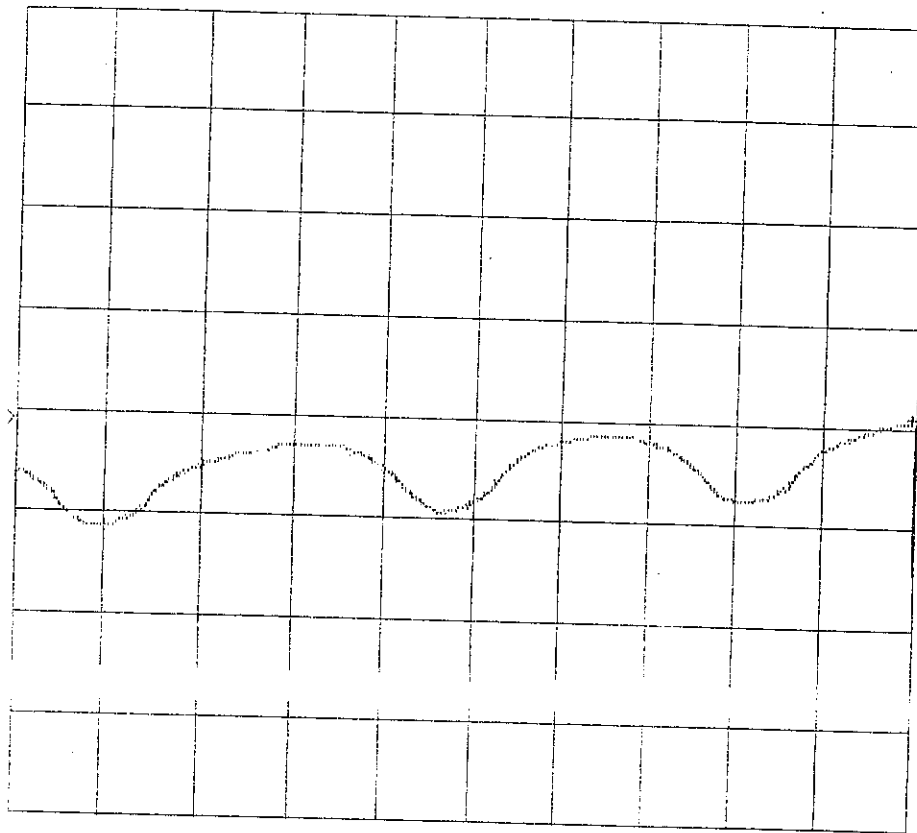


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J13

CH1: A -M S - 28.04 dB
20.0 dB/ REF - 30.00 dB



STRT +7.5000GHz CRSR +17.0000GHz STOP +17.0000GHz

MAY 1, 1995

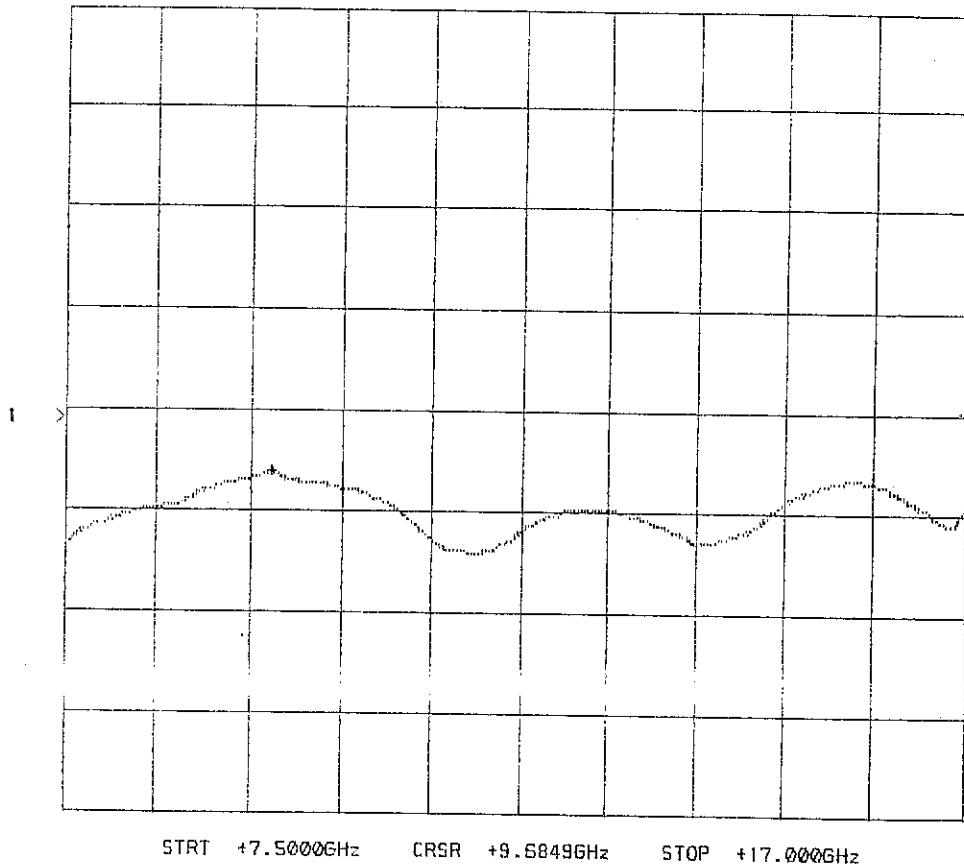


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J14

CHI: A -M S - 42.53 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

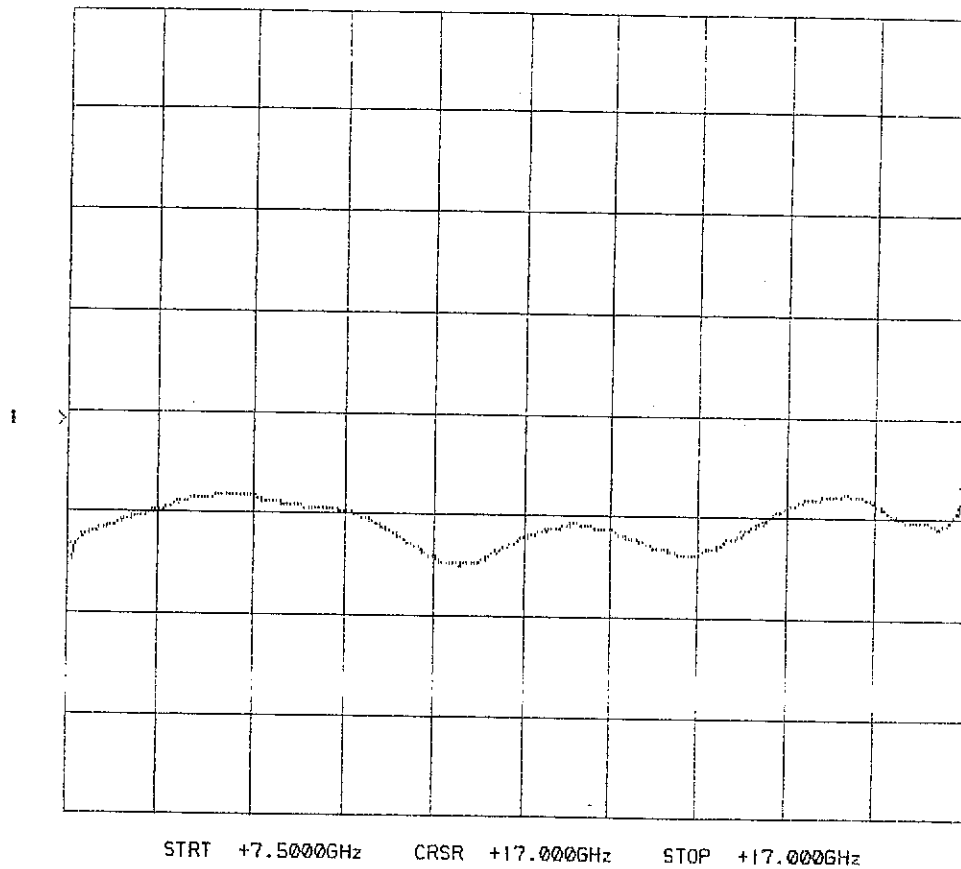


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J15

CHI: A -M 5 - 43.58 dB
20.0 dB/ REF - 30.00 dB



MAY 1, 1995

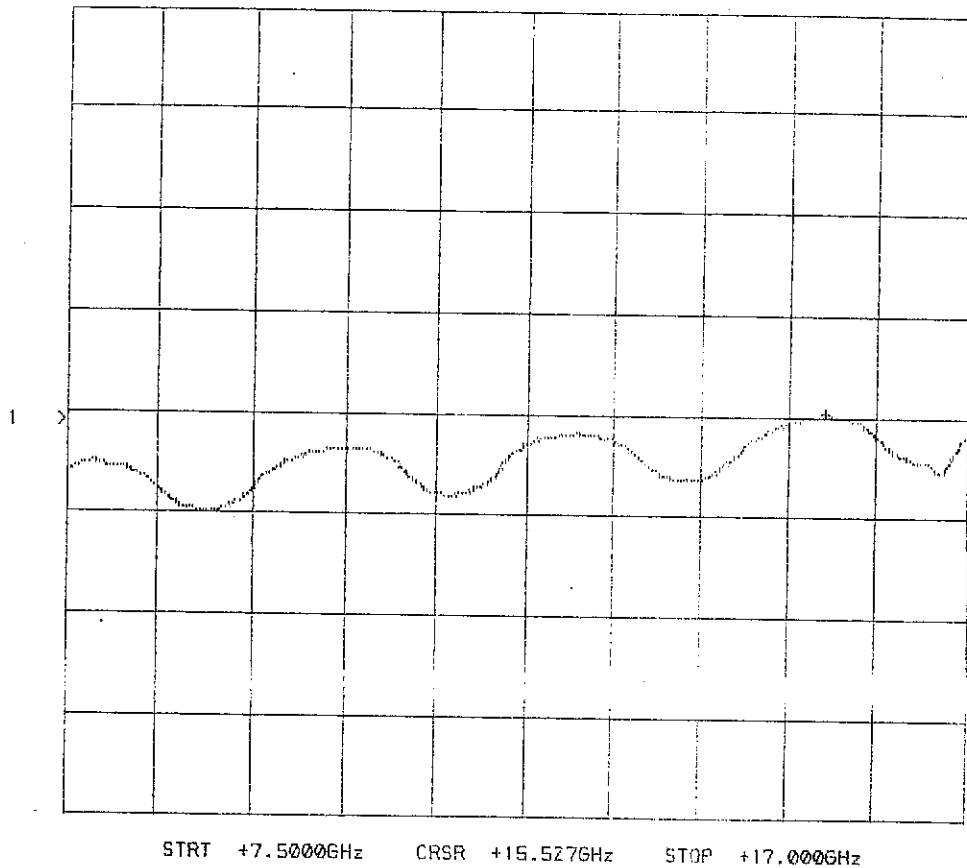


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

ISOLATION
(Measured From 7.5 to 17.0 GHz)

J17 TO J16

CH1: A -M S - 29.60 dB
20.0 dB/ REF - 30.00 dB

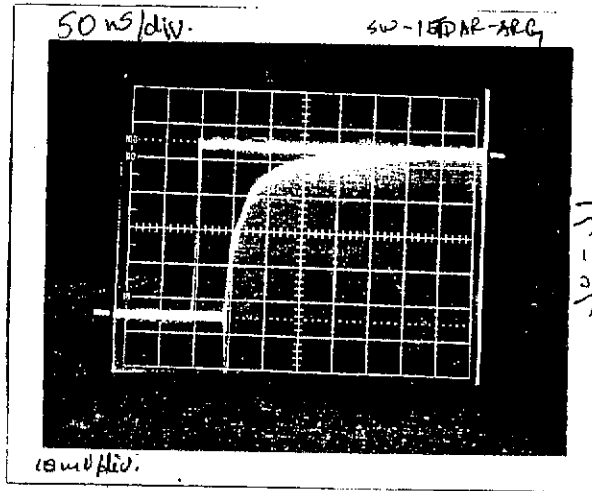


MAY 1, 1995

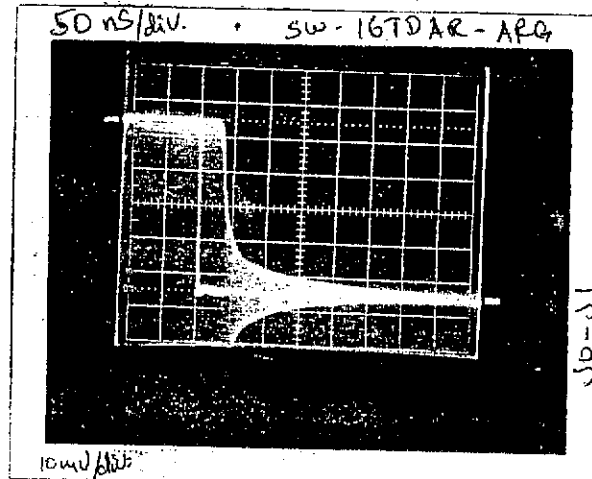


SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

SWITCHING SPEED
(Typical For All Arms)
150 Nanoseconds "On/Off"
(50% TTL TO 90% RF)



120 Nanoseconds "Off/On"
(90% TTL TO 10% RF)



MAY 1, 1995



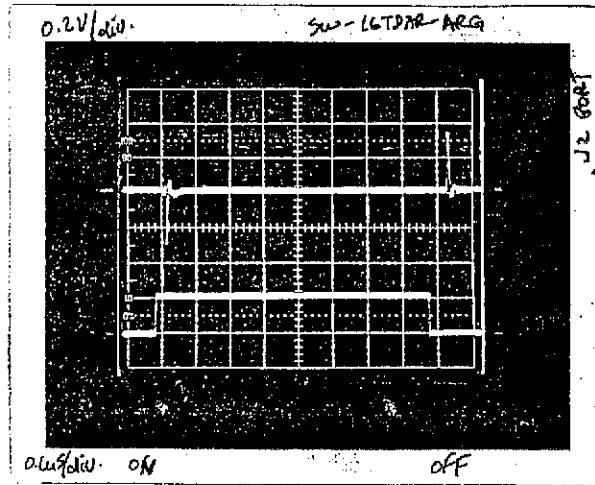
SERIAL NUMBER : 16MS41001
TECHNICIAN : RENE AFABLE
VOLTAGE & CURRENT DRAW : +5vdc @ 590mA
-15vdc @ 90mA

SWITCHING TRANSIENTS

TYPICAL FOR ALL ARMS:

Vertical Scale:
0.2mV/Division

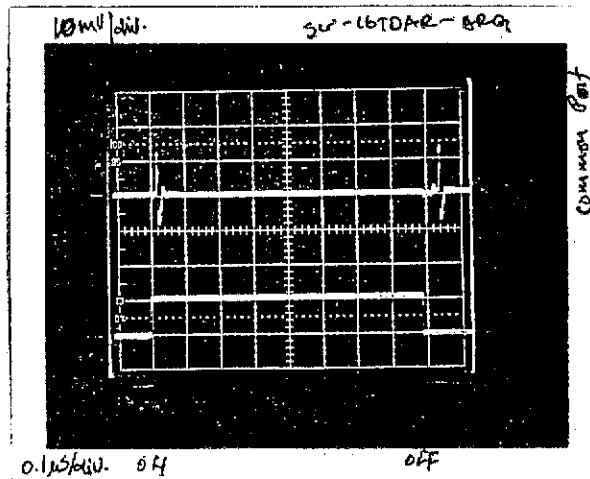
Horizontal Scale:
0.1μS/Division



COMMON ARM:

Vertical Scale:
10mV/Division

Horizontal Scale:
0.1μS/Division



MAY 1, 1995

