



Communications

Model # AML118L2501

Serial # 101A Tested By Phalanga Date 6/20/03

Example 7

Frequency	Gain *	Flatness	Input VSWR	Output VSWR	Noise Figure	P-1dB	Gain Match	Phase Match
GHz	dB Min/Max	dB Max	Nom	Nom	dB Max	dBm Min	dB	±5°
1	26.45		1.27:1	1.41:1	2.56 dB	13.20 dBm	±1	
2	25.86	↗	1.36:1	1.35:1	2.60 dB	13.50 dBm	±1	Reverse
4	26.82	↓	1.55:1	1.53:1	2.55 dB	13.10 dBm	±1	Reverse
6	26.20		1.51:1	1.52:1	2.46 dB	13.90 dBm	±1	Reverse
8	26.79	↘	1.84:1	1.15:1	2.47 dB	14.40 dBm	±1	Reverse
10	27.73	↓	1.62:1	1.21:1	2.62 dB	14.30 dBm	±1	Reverse
12	26.67	↓	1.77:1	1.58:1	2.64 dB	13.40 dBm	±1	Reverse
14	25.58	↓	1.36:1	1.18:1	2.51 dB	15.10 dBm	±1	Reverse
16	25.52		1.56:1	1.64:1	2.50 dB	15.30 dBm	±1	Reverse
18	26.18	↖	1.70:1	1.17:1	2.65 dB	12.35 dBm	±1	Reverse

All Data and Specifications @ +25 °C

Stability: PASS / FAIL

VDC +12 to +15

DC current 150mA Nom. Measured current: 164 mA

\* INCLUDE PLOTTED DATA

QA QA2

DATE 6/20/03

SPECIAL REQUIREMENT(S): 1. UNITS TO BE SERIALIZED AS FOLLOWS: 101A, 101B, 101C AND 101D. SERIAL NO 101A TO BE THE "GOLDEN UNIT".

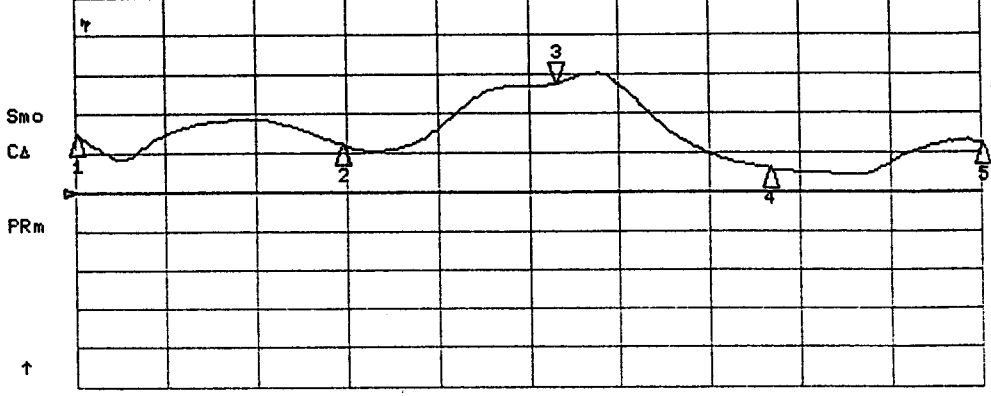
2. SERIAL NO 101B, C AND D TO BE GAIN AND PHASED MATCHED TO GOLDEN UNIT AS FOLLOWS.

GAIN MATCH=±1dB PHASE MATCHED=±5°

S/N 101A Gain & Input USWZ  
Plots

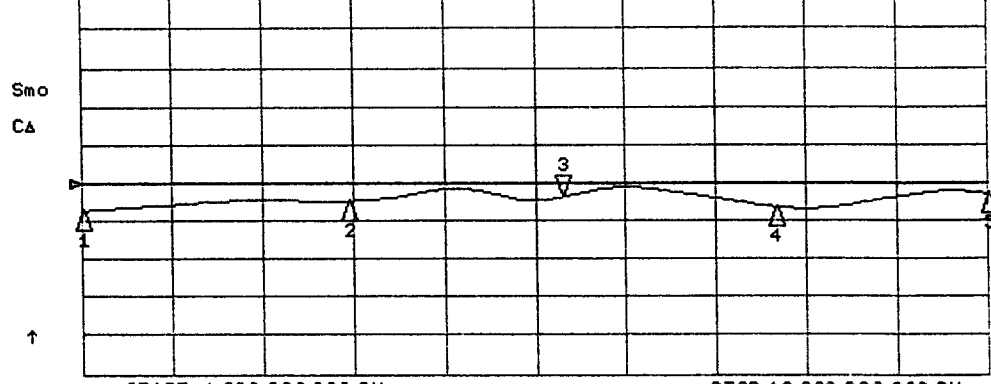
20 Jun 2003 15:25:40

CH1 TRN LOG 1 dB/REF 25 dB 3: 27.738 dB 10.000 000 000 GHz



- CH1 Markers
- 1: 26.454 dB  
1.00000 GHz
  - 2: 26.204 dB  
6.00000 GHz
  - 4: 25.588 dB  
14.0000 GHz
  - 5: 26.186 dB  
18.0000 GHz

CH3 RFL SWR 1 / REF 2 3: 1.6280 10.000 000 000 GHz



- CH3 Markers
- 1: 1.2738  
1.00000 GHz
  - 2: 1.5109  
6.00000 GHz
  - 4: 1.3649  
14.0000 GHz
  - 5: 1.7020  
18.0000 GHz

START 1.000 000 000 GHz

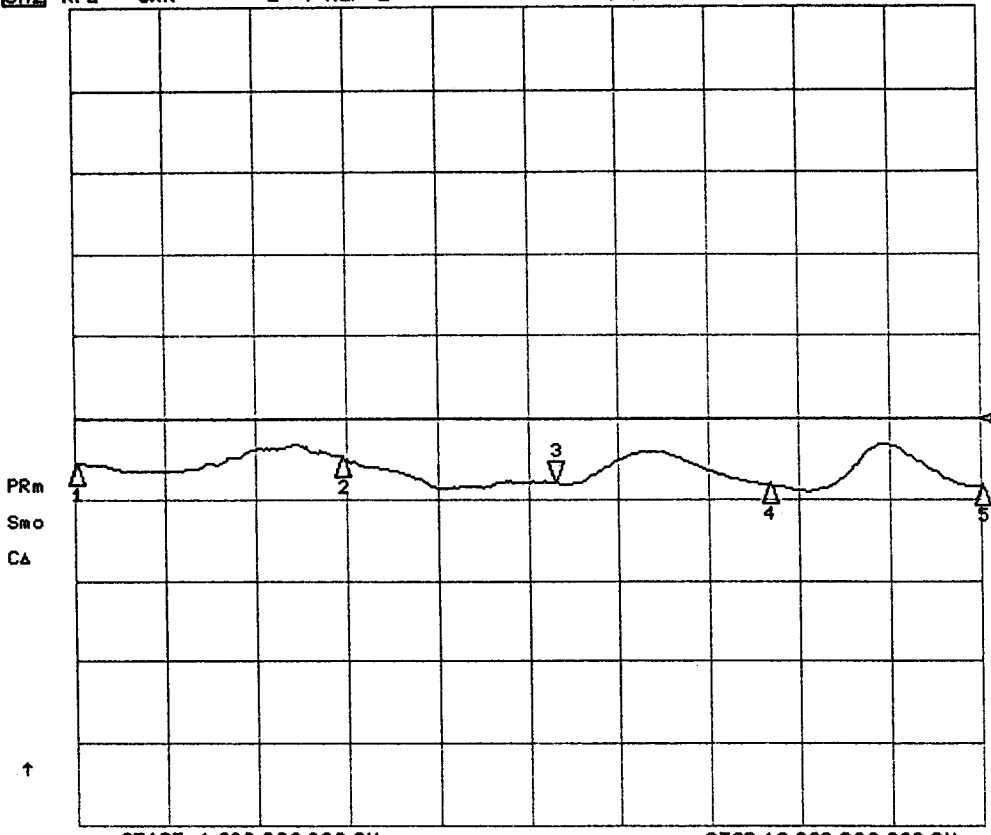
STOP 18.000 000 000 GHz

S/N 101A Output VSWR Plot

20 Jun 2003 15:27:32

CH2 RFL SWR 1 / REF 2 3: 1.2113 10.000 000 000 GHz

CH2 Markers  
1: 1.4193  
1.00000 GHz  
2: 1.5297  
6.00000 GHz  
4: 1.1885  
14.0000 GHz  
5: 1.1705  
18.0000 GHz

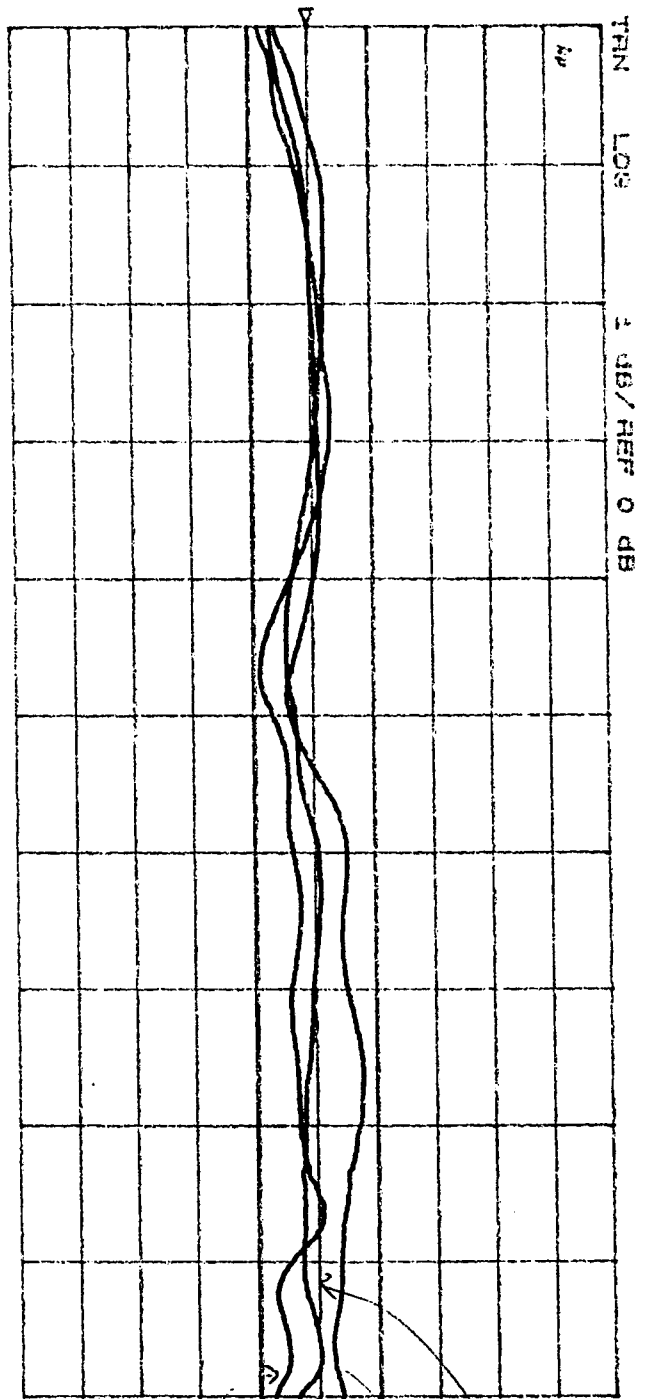


START 1.000 000 000 GHz

STOP 18.000 000 000 GHz

20 JUN 2003 15:12:15

[GHS]



Gain Matching

reference line as 101A

101C

101B

101D

Phase Matching

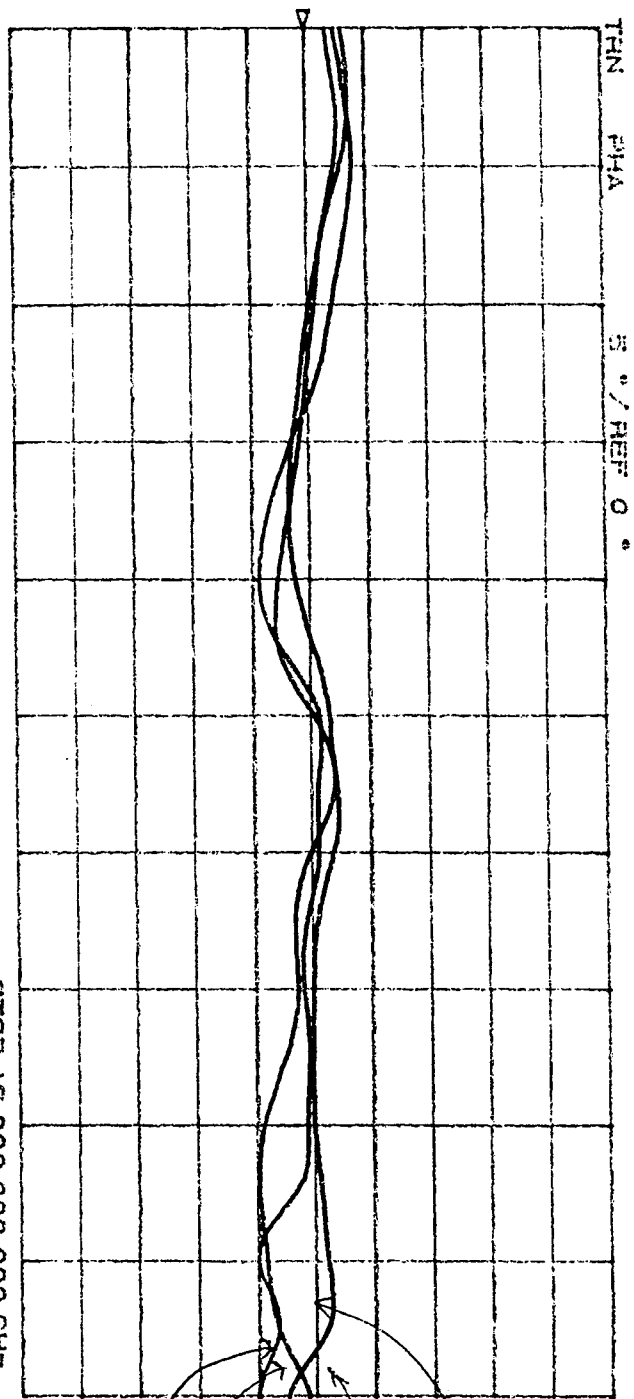
reference line as 101A

101B

101C

101D

[GHS]



START 1.000 000 GHz

STOP 16.000 000 GHz



Communications

Model # AML 118L2501

Serial # 101B Tested By P. B. [Signature] Date 6/20/03

Frequency GHz	Gain * dB Min/Max	Flatness dB Max	Input VSWR Nom	Output VSWR Nom	Noise Figure dB Max	P-1dB dBm Min	Gain Match dB	Phase Match ±5°
1	25.88	↖	1.15:1	1.47:1	2.50 dB	11.10 dBm		
2	25.73	↘	1.26:1	1.38:1	2.46 dB	11.0 dBm	S	S
4	27.02	↘	1.28:1	1.47:1	2.62 dB	11.50 dBm	E	E
6	26.19		1.30:1	1.38:1	2.37 dB	12.20 dBm	E	E
8	26.50	↖	1.53:1	1.14:1	2.40 dB	12.15 dBm	P	P
10	27.67	↖	2.06:1	1.34:1	2.30 dB	11.90 dBm	P	P
12	26.82	↘	2.31:1	1.36:1	2.41 dB	11.40 dBm	P	P
14	25.46	↘	1.59:1	1.12:1	2.30 dB	13.90 dBm	F	F
16	25.41	↘	1.42:1	1.46:1	2.43 dB	14.60 dBm		
18	26.04		1.30:1	1.55:1	2.55 dB	13.00 dBm		

All Data and Specifications @ +25 °C

Stability: PASS / FAIL

VDC +12 to +15  
DC current 150mA Nom. Measured current: 155 mA

\* INCLUDE PLOTTED DATA

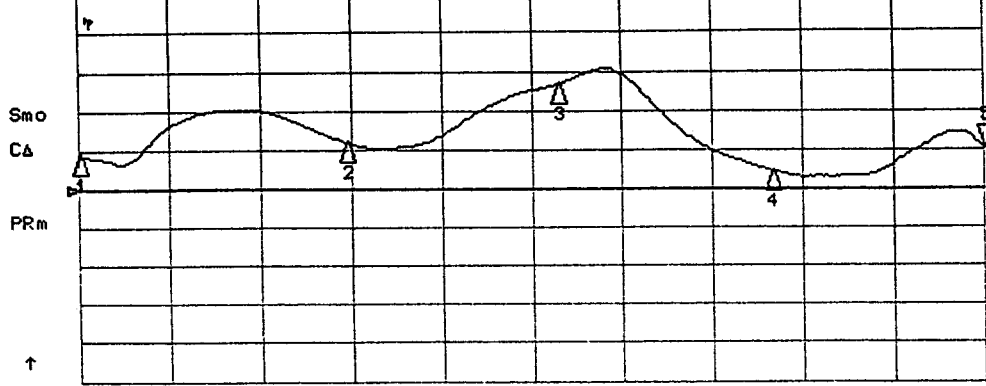
QA QA2 DATE 6/20/03

SPECIAL REQUIREMENT(S): 1. UNITS TO BE SERIALIZED AS FOLLOWS: 101A, 101B, 101C AND 101D. SERIAL NO 101A TO BE THE "GOLDEN UNIT".  
 2. SERIAL NO 101B, C AND D TO BE GAIN AND PHASED MATCHED TO GOLDEN UNIT AS FOLLOWS.  
 GAIN MATCH=±1dB PHASE MATCHED=±5°

S/N 101B Gain & Input VSWR Plots

20 Jun 2003 14:51:45

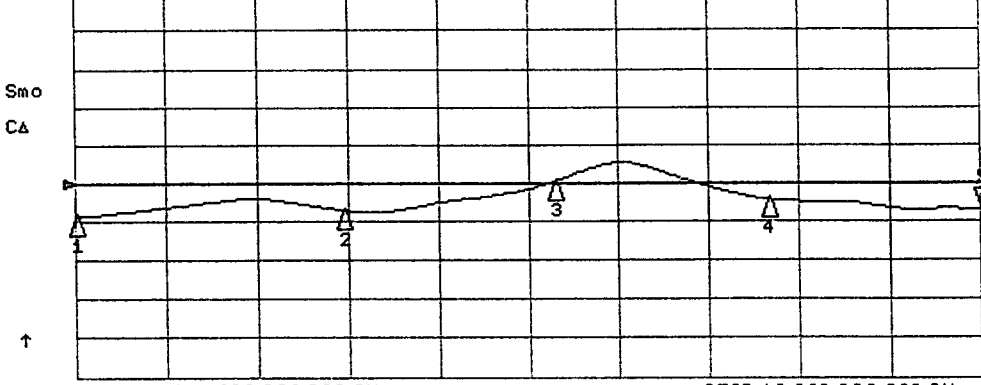
CH1 TRN LOG 1 dB/REF 25 dB 5: 26.044 dB 18.000 000 000 GHz



CH1 Markers

- 1: 25.888 dB  
1.00000 GHz
- 2: 26.193 dB  
6.00000 GHz
- 3: 27.676 dB  
10.0000 GHz
- 4: 25.460 dB  
14.0000 GHz

CH3 RFL SWR 1 / REF 2 5: 1.3037 18.000 000 000 GHz



CH3 Markers

- 1: 1.1562  
1.00000 GHz
- 2: 1.3005  
6.00000 GHz
- 3: 2.0625  
10.0000 GHz
- 4: 1.5931  
14.0000 GHz

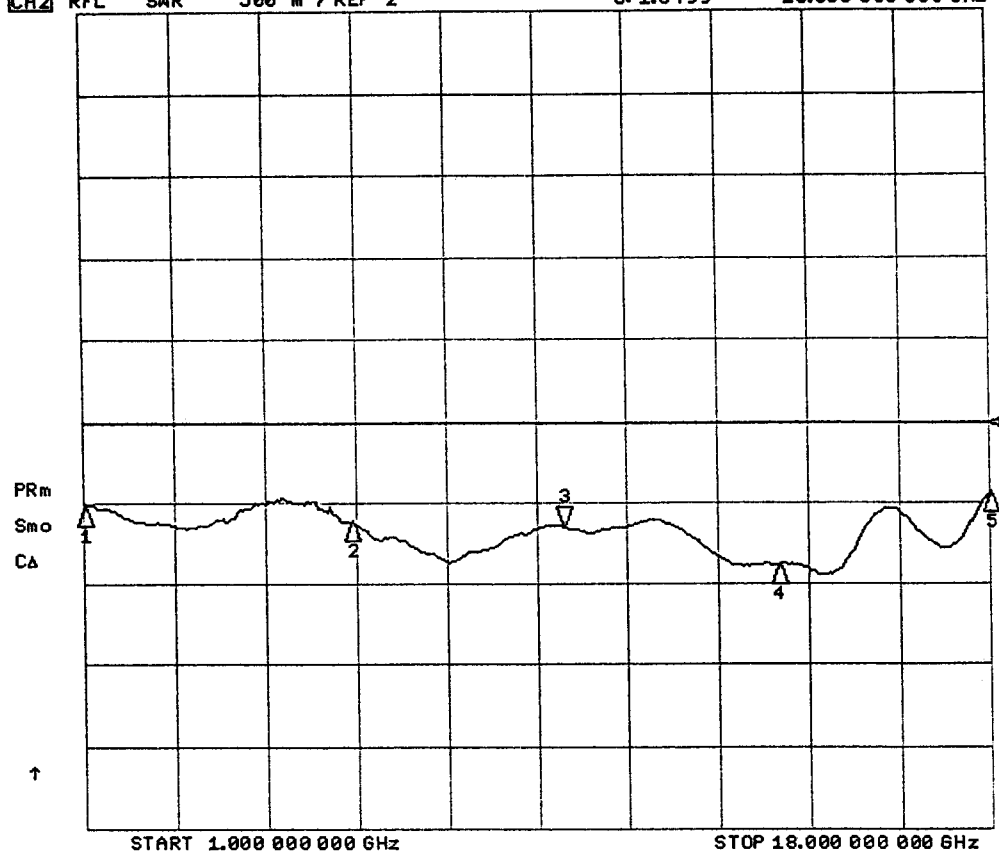
START 1.000 000 000 GHz

STOP 18.000 000 000 GHz

S/N 101B

20 Jun 2003 14:54:00  
3: 1.3499 10.000 000 000 GHz

CH2 RFL SWR 500 m / REF 2



CH2 Markers  
1: 1.4761  
1.00000 GHz  
2: 1.3898  
6.00000 GHz  
4: 1.1228  
14.00000 GHz  
5: 1.5597  
18.00000 GHz



Communications

Model # AML118L2501

Serial # 101C Tested By W. B. Lutz Date 6/20/03

Frequency GHz	Gain * DB Min/Max	Flatness DB Max	Input VSWR Nom	Output VSWR Nom	Noise Figure DB Max	P-1dB dBm Min	Gain Match DB	Phase Match
1	25.92	↑	1.29:1	1.41:1	2.53 dB	12.78 dBm	±1	±5°
2	25.55	↑	1.41:1	1.37:1	2.65 dB	13.20 dBm	±1	±5°
4	26.66	↑	1.70:1	1.60:1	2.60 dB	12.60 dBm	±1	±5°
6	26.09	↑	1.60:1	1.50:1	2.60 dB	13.10 dBm	±1	±5°
8	26.84	↑ 1.55	1.50:1	1.17:1	2.53 dB	13.00 dBm	±1	±5°
10	27.84	↑	1.45:1	1.36:1	2.66 dB	13.10 dBm	±1	±5°
12	27.28	↑	1.99:1	1.40:1	2.68 dB	12.40 dBm	±1	±5°
14	26.46	↑	1.46:1	1.04:1	2.38 dB	14.80 dBm	±1	±5°
16	26.08	↑	1.38:1	1.92:1	2.47 dB	15.20 dBm	±1	±5°
18	26.84	↑	1.43:1	1.14:1	2.65 dB	13.0 dBm	±1	±5°

All Data and Specifications @ +25 °C

Stability: PASS / FAIL

VDC +12 to +15 DC current 150mA Nom. Measured current: 56 mA

\* INCLUDE PLOTTED DATA QA QA2 DATE 6/20/03

SPECIAL REQUIREMENT(S): 1. UNITS TO BE SERIALIZED AS FOLLOWS: 101A, 101B, 101C AND 101D. SERIAL NO 101A TO BE THE "GOLDEN UNIT".

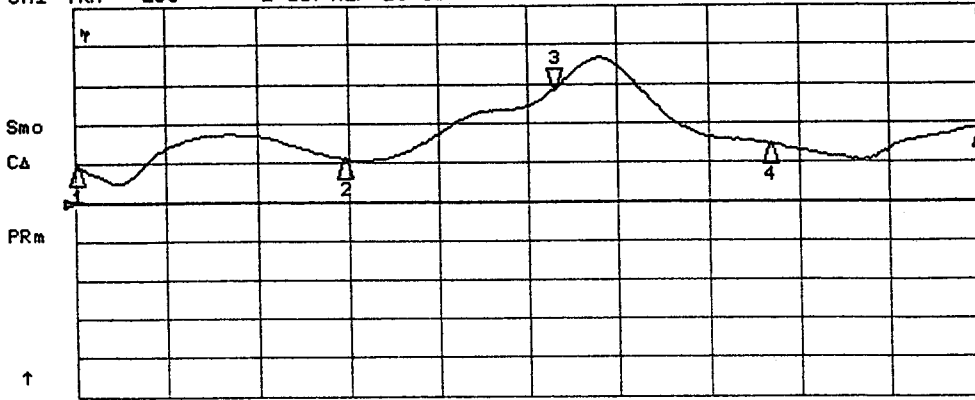
2. SERIAL NO 101B, C AND D TO BE GAIN AND PHASE MATCHED TO GOLDEN UNIT AS FOLLOWS.

GAIN MATCH=±1dB PHASE MATCHED=±5°

S/N 101 C Gain & Input VSWR Plots

20 Jun 2003 14:39:59

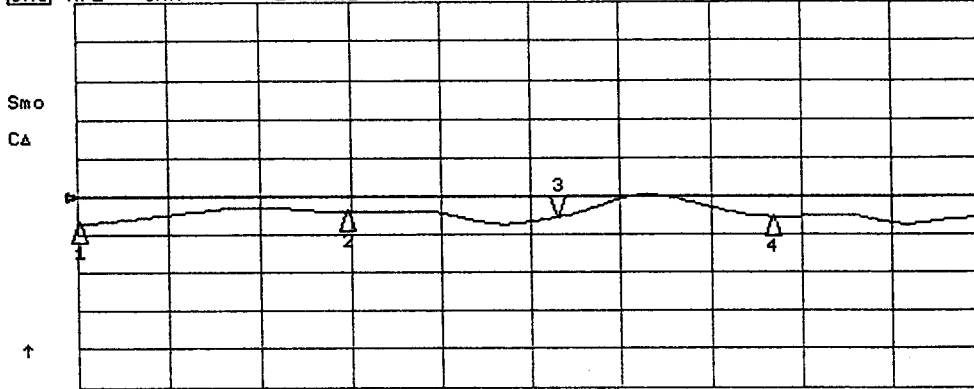
CH1 TRN LOG 1 dB/REF 25 dB 3: 27.841 dB 9.998 300 000 GHz



CH1 Markers

- 1: 25.929 dB  
1.00000 GHz
- 2: 26.094 dB  
6.00000 GHz
- 4: 26.465 dB  
14.0000 GHz
- 5: 26.847 dB  
18.0000 GHz

CH3 RFL SWR 1 / REF 2 3: 1.4537 9.998 300 000 GHz



CH3 Markers

- 1: 1.2955  
1.00000 GHz
- 2: 1.6086  
6.00000 GHz
- 4: 1.4578  
14.0000 GHz
- 5: 1.4344  
18.0000 GHz

START 1.000 000 000 GHz

STOP 18.000 000 000 GHz

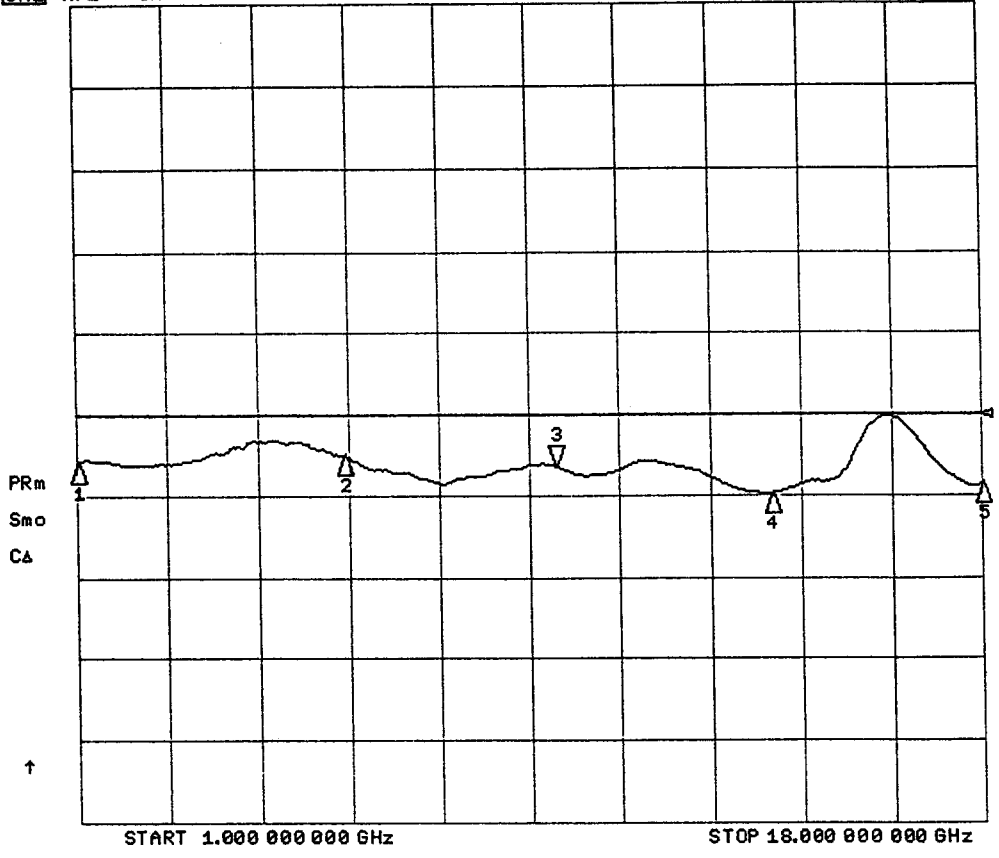
3/N 101C

Output USWR  
Plot

20 Jun 2003 14:42:33

CH2 RFL SWR 1 / REF 2 3: 1.3604 10.000 000 000 GHz

CH2 Markers  
1: 1.4152  
1.00000 GHz  
2: 1.5026  
6.00000 GHz  
4: 1.0404  
14.0000 GHz  
5: 1.1437  
18.0000 GHz





Model # AML 118L2501

Serial # 101D Tested By R. Baluyut Date 6/20/03

Frequency GHz	Gain * dB Min/Max	Flatness dB Max	Input VSWR Nom	Output VSWR Nom	Noise Figure dB Max	P-1dB dBm Min	Gain Match dB	Phase Match
1	25.59		1.22:1	1.55:1	2.52 dB	11.50 dBm	±1	±5°
2	25.28		1.32:1	1.40:1	2.54 dB	12.40 dBm	±1	±5°
4	26.89		1.66:1	1.40:1	2.64 dB	11.80 dBm	±1	±5°
6	26.34		1.46:1	1.40:1	2.52 dB	12.20 dBm	±1	±5°
8	26.26	1.13	1.51:1	1.31:1	2.44 dB	13.40 dBm	±1	±5°
10	27.37		1.58:1	1.59:1	2.58 dB	12.45 dBm	±1	±5°
12	26.44		1.36:1	1.77:1	2.63 dB	12.60 dBm	±1	±5°
14	25.26		1.35:1	1.11:1	2.46 dB	13.20 dBm	±1	±5°
16	25.46		1.42:1	1.39:1	2.40 dB	13.70 dBm	±1	±5°
18	25.59		1.20:1	1.31:1	2.68 dB	11.90 dBm	±1	±5°

All Data and Specifications @ +25 °C

Stability: PASS / FAIL

VDC +12 to +15

DC current 150mA Nom. Measured current: 145 mA

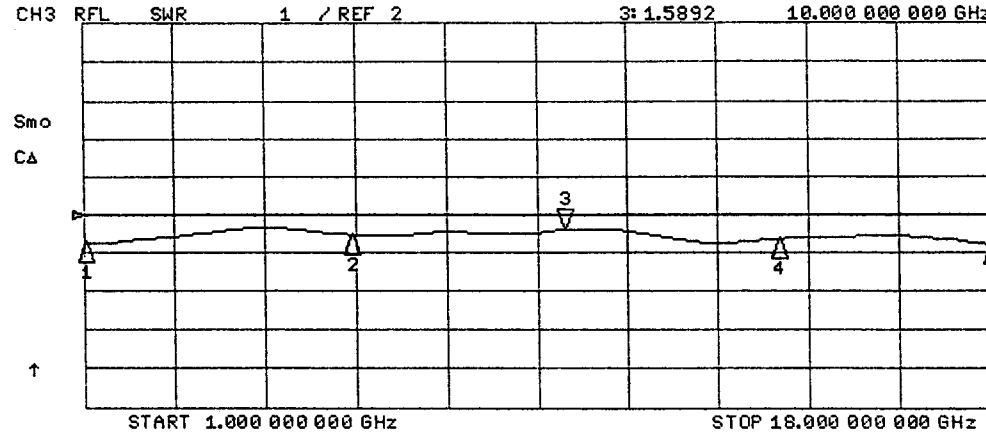
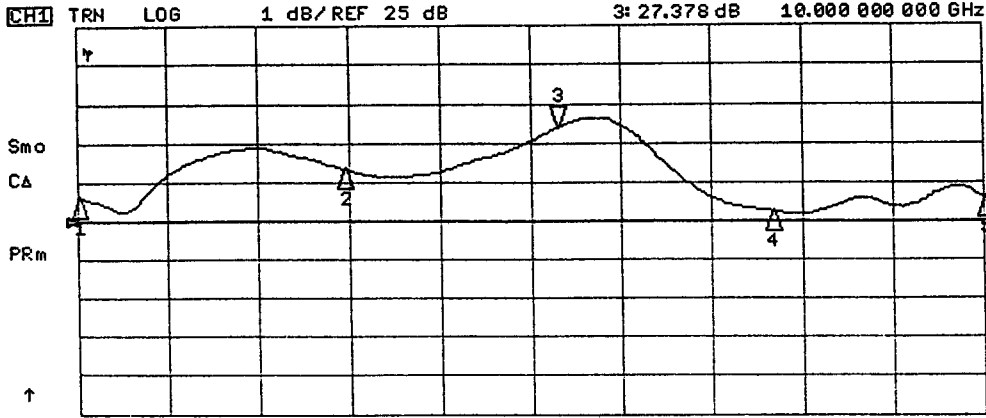
\* INCLUDE PLOTTED DATA

QA QA2 DATE 6/20/03

SPECIAL REQUIREMENT(S): 1. UNITS TO BE SERIALIZED AS FOLLOWS: 101A, 101B, 101C AND 101D. SERIAL NO 101A TO BE THE "GOLDEN UNIT".  
 2. SERIAL NO 101B,C AND D TO BE GAIN AND PHASED MATCHED TO GOLDEN UNIT AS FOLLOWS.  
 GAIN MATCH=±1dB PHASE MATCHED=±5°

# S/N 101 D Gain & Input VSWR Plots

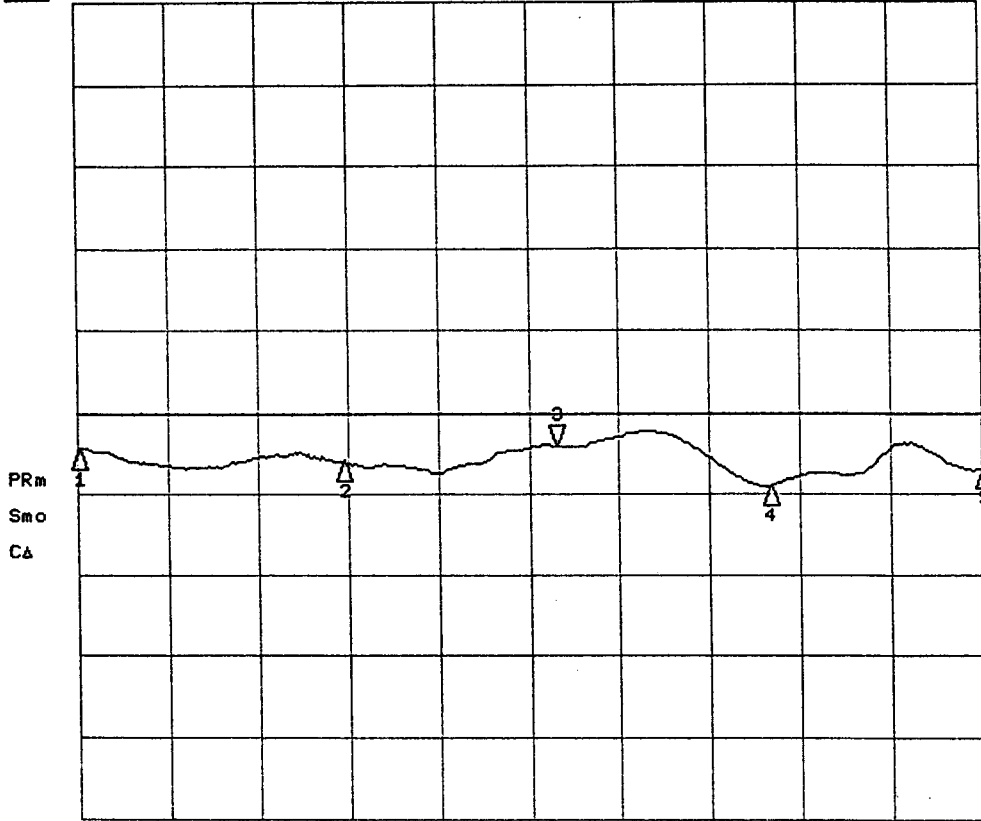
20 Jun 2003 15:13:54



S/N 101D Output VSWR Plot

20 Jun 2003 15:15:16

CH2 RFL SWR 1 / REF 2 3: 1.5935 10.000 000 000 GHz



CH2 Markers

1: 1.5543  
1.00000 GHz

2: 1.4064  
6.00000 GHz

4: 1.1118  
14.00000 GHz

5: 1.3136  
18.00000 GHz

START 1.000 000 000 GHz

STOP 18.000 000 000 GHz