AU-1678

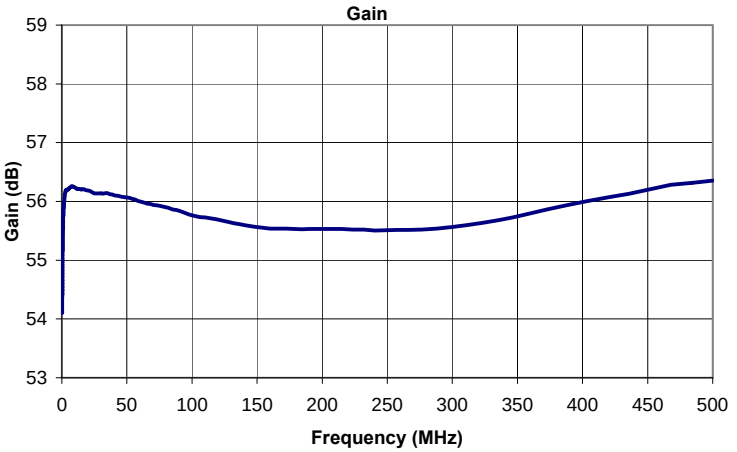
Features

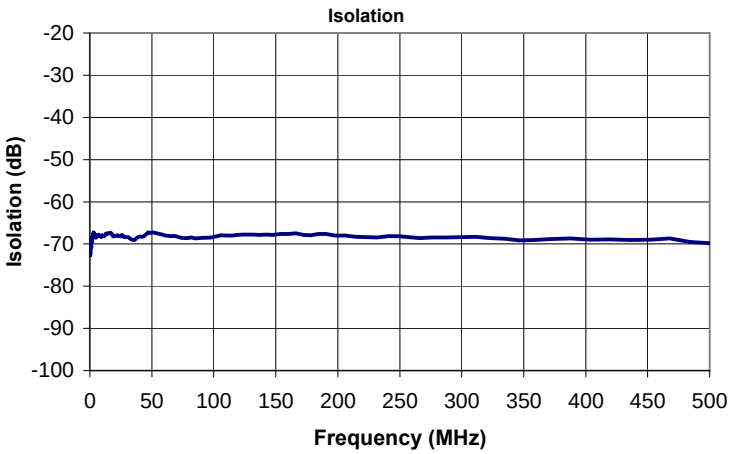
- Excellent P1dB & Intermods
- Input Limiter Protected
- Internally regulated to +9V
- Reverse voltage protected

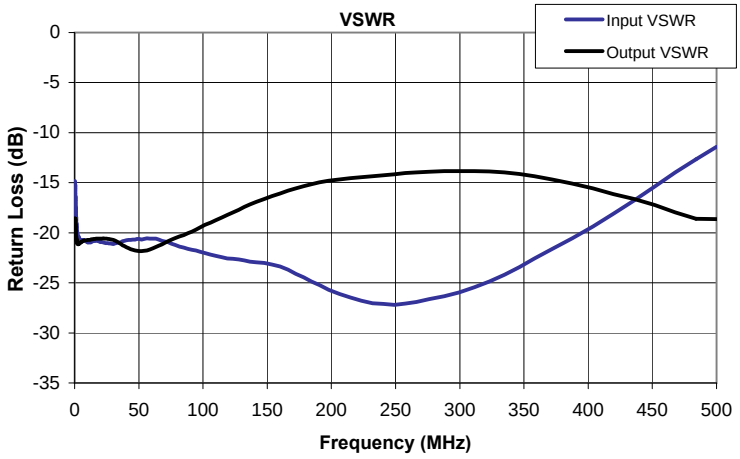
Parameter	Specification
Frequency Range (MHz)	
Gain (dB)	
Gain Flatness (± dB)	
Input VSWR (dBRL)	
Output VSWR (dBRL)	
*Noise Figure (dB)	
*Output P1dB (dBm)	
DC Voltage	
DC Current (mA)	

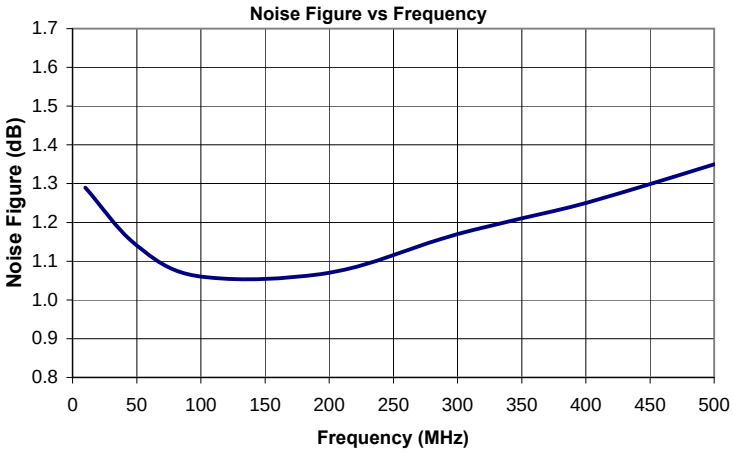
*Noise Figure at 10 MHz, 1500 MHz & 3000 MHz

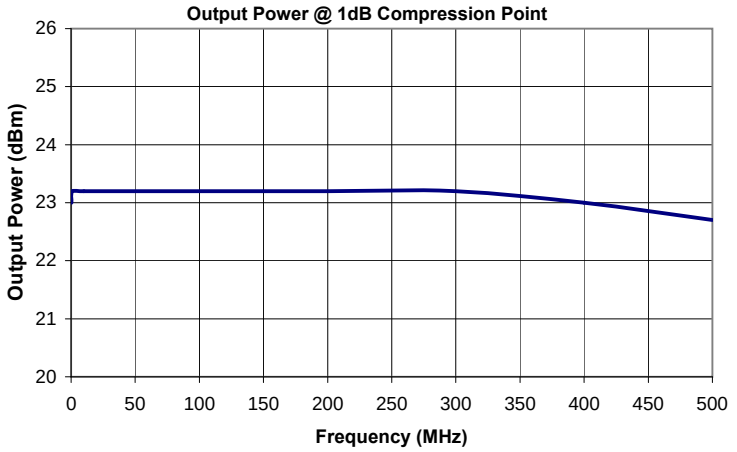
*P1dB at 50 MHz, 1500 MHz & 3000 MHz











100 Davids Drive, Hauppauge, NY 11788
TEL.: (631) 439-9220 • FAX: (631) 436-7430
e-mail: components@miteq.com • www.miteq.com

AU-1678

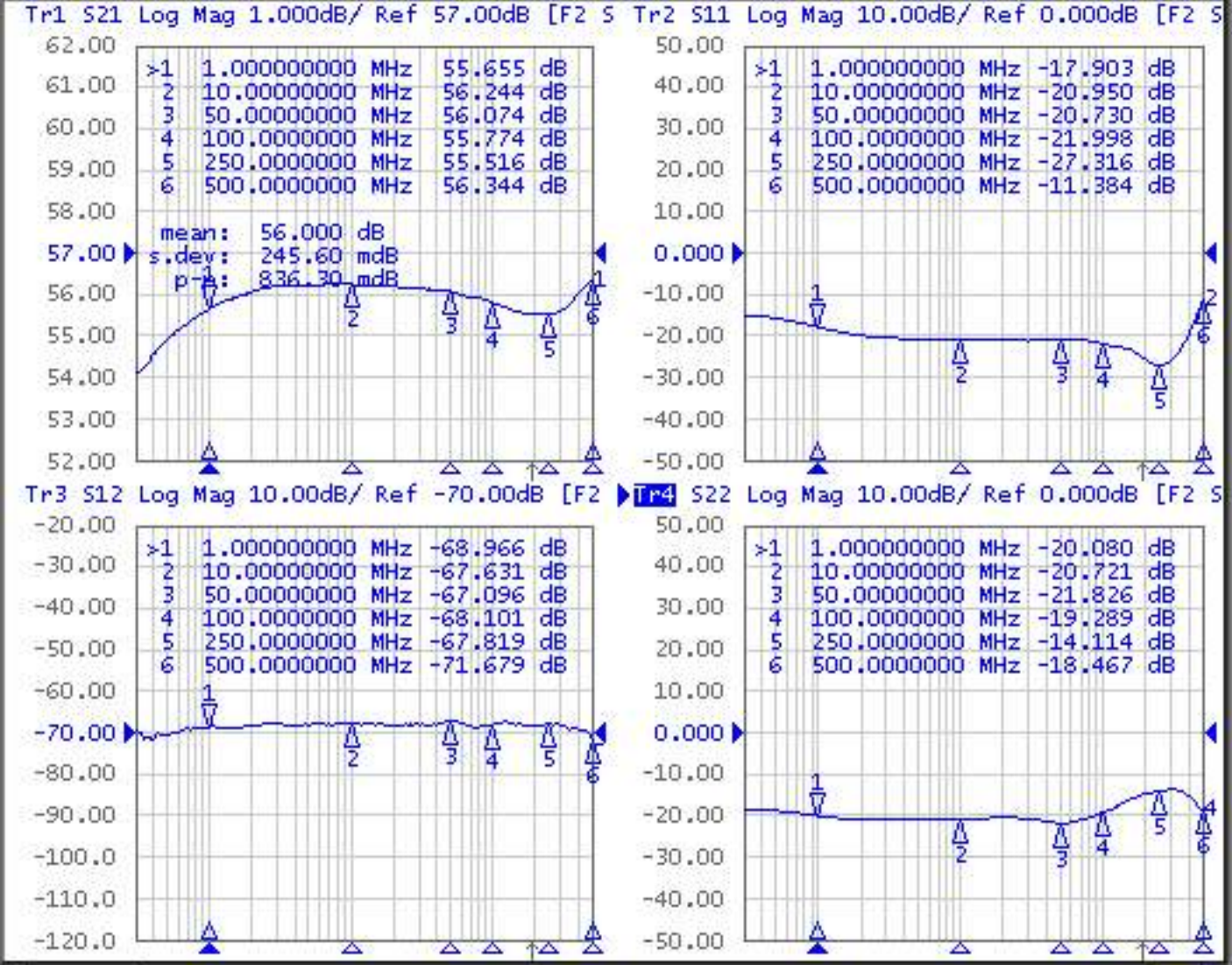
Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	Delay Ns
0.30	54.1	-69.7	-14.8	-18.7	139.5
0.31	54.1	-70.9	-14.9	-18.7	239.5
0.33	54.2	-72.3	-15.0	-18.6	195.9
0.34	54.2	-72.7	-15.0	-18.6	189.6
0.35	54.3	-71.8	-15.1	-18.6	188.1
0.36	54.4	-72.1	-15.2	-18.6	187.9
0.38	54.4	-72.3	-15.2	-18.6	195.7
0.39	54.5	-72.2	-15.2	-18.6	151.6
0.40	54.5	-71.6	-15.3	-18.6	163.2
0.42	54.6	-71.4	-15.4	-18.7	156.9
0.44	54.7	-70.9	-15.4	-18.7	142.4
0.45	54.7	-70.7	-15.5	-18.7	139.1
0.47	54.8	-70.7	-15.6	-18.8	118.5
0.49	54.8	-71.0	-15.7	-18.8	112.8
0.51	54.9	-70.5	-15.8	-18.9	108.1
0.53	54.9	-70.5	-15.9	-18.9	87.8
0.54	55.0	-69.8	-16.0	-18.9	86.0
0.56	55.0	-70.0	-16.1	-19.0	81.0
0.59	55.1	-70.1	-16.2	-19.0	69.6
0.61	55.1	-70.1	-16.3	-19.1	78.6
0.64	55.2	-69.8	-16.4	-19.2	68.1
0.66	55.2	-69.9	-16.5	-19.2	79.3
0.69	55.3	-69.6	-16.6	-19.3	65.4
0.71	55.3	-69.5	-16.7	-19.3	55.8
0.73	55.3	-69.5	-16.8	-19.4	59.7
0.76	55.4	-69.7	-16.9	-19.5	66.1
0.79	55.4	-69.1	-17.0	-19.6	54.7
0.82	55.5	-69.1	-17.2	-19.6	59.9
0.85	55.5	-69.0	-17.3	-19.7	45.2
0.89	55.5	-69.2	-17.4	-19.8	47.9
0.92	55.6	-68.9	-17.6	-19.9	45.5
0.96	55.6	-69.0	-17.7	-20.0	41.3
0.99	55.6	-69.1	-17.8	-20.0	44.2
1.02	55.7	-68.9	-18.0	-20.1	38.9
1.06	55.7	-68.9	-18.1	-20.2	35.2
1.10	55.7	-69.0	-18.3	-20.3	31.4
1.15	55.8	-68.6	-18.4	-20.3	30.4
1.19	55.8	-68.6	-18.6	-20.4	29.5
1.24	55.8	-68.6	-18.7	-20.5	23.7
1.29	55.9	-69.0	-18.8	-20.5	27.9
1.34	55.9	-69.0	-19.0	-20.6	27.3
1.38	55.9	-68.9	-19.1	-20.6	23.7
1.43	55.9	-68.8	-19.2	-20.7	24.9
1.48	55.9	-68.7	-19.3	-20.7	19.6
1.53	56.0	-69.0	-19.3	-20.8	20.0
1.60	56.0	-69.4	-19.4	-20.8	16.7
1.66	56.0	-69.6	-19.5	-20.8	18.3
1.73	56.0	-69.2	-19.6	-20.9	18.7
1.79	56.0	-68.8	-19.7	-20.9	15.1
1.86	56.0	-68.9	-19.8	-21.0	13.7
1.92	56.0	-69.0	-19.8	-21.0	14.2
2.0	56.1	-69.0	-19.9	-21.0	12.6
2.1	56.1	-68.9	-20.0	-21.1	12.4

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	Delay Ns
2.2	56.1	-68.5	-20.1	-21.1	11.3
2.2	56.1	-68.4	-20.1	-21.1	11.7
2.3	56.1	-68.0	-20.2	-21.1	9.6
2.4	56.1	-67.9	-20.2	-21.1	10.0
2.5	56.1	-67.9	-20.2	-21.1	9.4
2.6	56.2	-67.6	-20.2	-21.1	8.1
2.7	56.2	-67.5	-20.3	-21.1	7.0
2.8	56.2	-67.4	-20.4	-21.1	7.6
2.9	56.2	-67.5	-20.4	-21.1	8.7
3.0	56.2	-67.4	-20.4	-21.1	7.8
3.1	56.2	-67.3	-20.4	-21.1	6.1
3.3	56.2	-67.5	-20.5	-21.1	7.3
3.4	56.2	-67.7	-20.5	-21.1	7.0
3.5	56.2	-67.6	-20.5	-21.1	6.4
3.6	56.2	-67.6	-20.6	-21.1	6.7
3.8	56.2	-67.9	-20.6	-21.1	7.3
3.9	56.2	-68.0	-20.6	-21.0	5.7
4.0	56.2	-68.1	-20.7	-21.0	4.9
4.2	56.2	-68.2	-20.7	-21.0	4.6
4.4	56.2	-68.2	-20.7	-21.0	5.0
4.5	56.2	-68.2	-20.7	-21.0	4.4
4.7	56.2	-68.1	-20.8	-21.0	3.9
4.9	56.2	-68.5	-20.8	-20.9	4.1
5.1	56.2	-68.4	-20.8	-20.9	3.2
5.2	56.2	-68.1	-20.8	-20.9	3.4
5.4	56.2	-68.1	-20.8	-20.9	3.4
5.6	56.2	-68.1	-20.7	-20.9	3.1
5.9	56.2	-68.0	-20.7	-20.9	3.4
6.1	56.2	-67.9	-20.8	-20.8	3.2
6.3	56.2	-67.7	-20.7	-20.8	2.6
6.6	56.2	-67.8	-20.7	-20.8	2.9
6.8	56.2	-67.8	-20.8	-20.8	2.1
7.0	56.3	-68.0	-20.7	-20.8	2.8
7.3	56.3	-67.9	-20.8	-20.8	2.7
7.6	56.3	-68.2	-20.8	-20.8	2.6
7.9	56.3	-68.0	-20.8	-20.7	3.0
8.2	56.3	-68.1	-20.8	-20.7	2.5
8.5	56.3	-68.2	-20.9	-20.7	2.7
8.9	56.3	-68.3	-20.8	-20.7	2.8
9.2	56.2	-68.4	-20.9	-20.7	2.6
9.5	56.2	-68.0	-20.9	-20.7	2.8
9.8	56.2	-67.9	-21.0	-20.7	2.5
10.2	56.2	-68.1	-21.0	-20.7	2.3
10.6	56.2	-68.0	-20.9	-20.7	2.1
11.0	56.2	-68.2	-21.0	-20.7	1.9
11.5	56.2	-68.1	-21.0	-20.7	2.5
11.9	56.2	-68.1	-21.0	-20.7	2.1
12.4	56.2	-68.0	-21.0	-20.7	1.9
12.8	56.2	-67.5	-20.9	-20.7	2.0
13.3	56.2	-67.5	-20.9	-20.7	2.0
13.8	56.2	-67.5	-20.8	-20.7	1.9
14.2	56.2	-67.6	-20.8	-20.6	1.7
14.7	56.2	-67.6	-20.8	-20.6	2.3

AU-1678

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	Delay Ns
15.4	56.2	-67.4	-20.8	-20.6	1.9
16.0	56.2	-67.4	-20.8	-20.6	1.8
16.7	56.2	-67.3	-20.8	-20.6	1.5
17.3	56.2	-67.6	-20.8	-20.6	1.9
17.9	56.2	-67.6	-20.8	-20.6	1.9
18.6	56.2	-68.1	-20.8	-20.6	1.7
19.2	56.2	-68.3	-20.9	-20.6	1.6
19.8	56.2	-68.0	-20.9	-20.6	2.0
20.6	56.2	-68.1	-20.9	-20.6	1.6
21.5	56.2	-68.0	-20.9	-20.6	1.8
22.3	56.2	-68.0	-21.0	-20.6	1.5
23.2	56.2	-68.2	-21.0	-20.6	1.9
24.1	56.1	-68.2	-21.0	-20.6	1.6
24.9	56.1	-68.2	-21.0	-20.6	1.5
25.8	56.1	-67.9	-21.0	-20.6	1.6
26.7	56.1	-68.0	-21.1	-20.6	1.5
27.7	56.1	-68.4	-21.1	-20.6	1.5
28.9	56.1	-68.3	-21.1	-20.7	1.6
30.1	56.1	-68.4	-21.1	-20.7	1.6
31.3	56.1	-68.4	-21.1	-20.8	1.8
32.5	56.1	-68.8	-21.0	-20.8	1.4
33.7	56.1	-68.9	-21.0	-20.9	1.5
34.9	56.1	-69.1	-21.0	-21.0	1.6
36.1	56.1	-69.1	-20.9	-21.1	1.6
37.3	56.1	-68.8	-20.8	-21.2	1.8
38.7	56.1	-68.4	-20.8	-21.3	1.6
40.3	56.1	-68.3	-20.7	-21.4	1.4
42.0	56.1	-68.3	-20.7	-21.5	1.6
43.7	56.1	-68.1	-20.7	-21.6	1.7
45.4	56.1	-67.7	-20.7	-21.7	1.7
47.0	56.1	-67.3	-20.7	-21.8	1.8
48.7	56.1	-67.4	-20.6	-21.8	1.7
50.4	56.1	-67.2	-20.6	-21.8	1.7
52.0	56.1	-67.3	-20.7	-21.8	1.7
54.0	56.0	-67.4	-20.6	-21.8	1.7
56.3	56.0	-67.6	-20.6	-21.8	1.7
58.7	56.0	-67.8	-20.6	-21.7	1.6
61.0	56.0	-68.0	-20.6	-21.6	1.5
63.3	56.0	-68.1	-20.6	-21.4	1.5
65.7	56.0	-68.1	-20.7	-21.3	1.4
68.0	56.0	-68.1	-20.8	-21.1	1.5
70.3	55.9	-68.2	-20.9	-21.0	1.6
72.7	55.9	-68.5	-20.9	-20.8	1.5
75.4	55.9	-68.6	-21.1	-20.7	1.6
78.6	55.9	-68.6	-21.2	-20.5	1.6
81.8	55.9	-68.5	-21.4	-20.4	1.6
85.0	55.9	-68.7	-21.5	-20.2	1.6
88.2	55.9	-68.6	-21.6	-20.1	1.6
91.4	55.8	-68.5	-21.7	-19.9	1.6
94.6	55.8	-68.6	-21.8	-19.7	1.5
97.8	55.8	-68.4	-21.9	-19.5	1.5
101.5	55.8	-68.2	-22.0	-19.2	1.6
105.8	55.7	-68.0	-22.2	-19.0	1.5

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	Delay Ns
110.2	55.7	-68.0	-22.3	-18.7	1.5
114.6	55.7	-68.0	-22.4	-18.5	1.5
119.0	55.7	-67.8	-22.6	-18.2	1.5
123.4	55.7	-67.8	-22.6	-18.0	1.5
127.7	55.7	-67.8	-22.7	-17.7	1.5
132.1	55.6	-67.8	-22.8	-17.4	1.5
136.5	55.6	-67.8	-22.9	-17.2	1.5
141.7	55.6	-67.8	-22.9	-16.9	1.4
147.8	55.6	-67.8	-23.0	-16.6	1.4
153.9	55.6	-67.6	-23.2	-16.3	1.5
160.0	55.5	-67.6	-23.4	-16.1	1.5
166.1	55.5	-67.5	-23.7	-15.8	1.5
172.3	55.5	-67.8	-24.1	-15.6	1.5
178.4	55.5	-67.9	-24.4	-15.3	1.5
184.5	55.5	-67.6	-24.9	-15.1	1.5
190.6	55.5	-67.6	-25.2	-15.0	1.5
197.8	55.5	-68.0	-25.7	-14.8	1.5
206.3	55.5	-68.0	-26.1	-14.7	1.5
214.9	55.5	-68.3	-26.5	-14.6	1.5
223.4	55.5	-68.4	-26.8	-14.4	1.5
232.0	55.5	-68.5	-27.0	-14.4	1.5
240.5	55.5	-68.1	-27.1	-14.3	1.5
249.1	55.5	-68.1	-27.2	-14.2	1.5
257.6	55.5	-68.4	-27.1	-14.0	1.5
266.1	55.5	-68.6	-26.9	-14.0	1.5
276.2	55.5	-68.4	-26.6	-13.9	1.5
287.9	55.5	-68.5	-26.4	-13.9	1.5
299.6	55.6	-68.3	-26.0	-13.8	1.5
311.3	55.6	-68.3	-25.4	-13.8	1.5
323.0	55.6	-68.6	-24.9	-13.9	1.5
334.7	55.7	-68.8	-24.2	-14.0	1.5
346.4	55.7	-69.1	-23.4	-14.1	1.6
358.1	55.8	-69.1	-22.6	-14.3	1.6
371.6	55.9	-68.8	-21.6	-14.7	1.6
387.7	55.9	-68.7	-20.5	-15.1	1.6
403.7	56.0	-69.0	-19.4	-15.6	1.7
419.8	56.1	-68.9	-18.1	-16.1	1.7
435.8	56.1	-69.1	-16.8	-16.6	1.7
451.9	56.2	-69.0	-15.4	-17.2	1.8
467.9	56.3	-68.7	-14.0	-18.0	1.8
484.0	56.3	-69.5	-12.7	-18.6	1.9
500.0	56.4	-69.8	-11.4	-18.6	1.9


Tr1 S21 Log Mag 1.000dB/ Ref 57.00dB [F2 S
>1 1.000000000 MHz 55.655 dB
2 10.00000000 MHz 56.244 dB
3 50.00000000 MHz 56.074 dB
4 100.0000000 MHz 55.774 dB
5 250.0000000 MHz 55.516 dB
6 500.0000000 MHz 56.344 dB
mean: 56.000 dB
s.dev: 245.60 mdB
p-p: 836.30 mdB
62.00
61.00
60.00
59.00
58.00
57.00
56.00
55.00
54.00
53.00
52.00
Tr2 S11 Log Mag 10.00dB/ Ref 0.000dB [F2 S
>1 1.000000000 MHz -17.903 dB
2 10.00000000 MHz -20.950 dB
3 50.00000000 MHz -20.730 dB
4 100.0000000 MHz -21.998 dB
5 250.0000000 MHz -27.316 dB
6 500.0000000 MHz -11.384 dB
50.00
40.00
30.00
20.00
10.00
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
Tr3 S12 Log Mag 10.00dB/ Ref -70.00dB [F2
>1 1.000000000 MHz -68.966 dB
2 10.00000000 MHz -67.631 dB
3 50.00000000 MHz -67.096 dB
4 100.0000000 MHz -68.101 dB
5 250.0000000 MHz -67.819 dB
6 500.0000000 MHz -71.679 dB
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
-110.0
-120.0
Tr4 S22 Log Mag 10.00dB/ Ref 0.000dB [F2 S
>1 1.000000000 MHz -20.080 dB
2 10.00000000 MHz -20.721 dB
3 50.00000000 MHz -21.826 dB
4 100.0000000 MHz -19.289 dB
5 250.0000000 MHz -14.114 dB
6 500.0000000 MHz -18.467 dB
50.00
40.00
30.00
20.00
10.00
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
1 Start 300 kHz
IFBW 100 Hz
Stop 500 MHz
Cor