

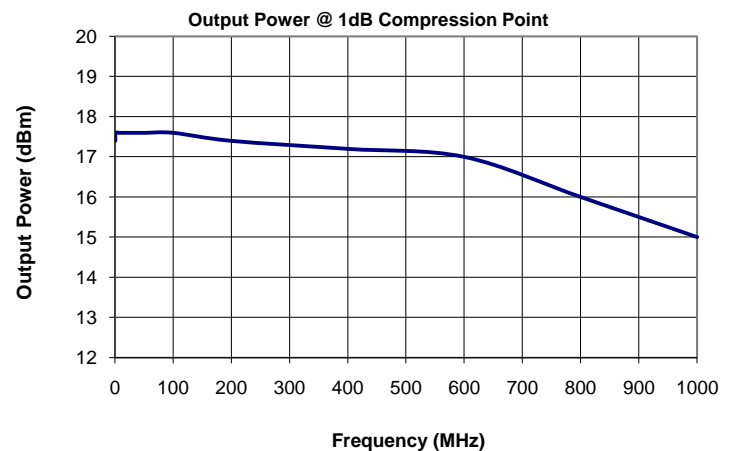
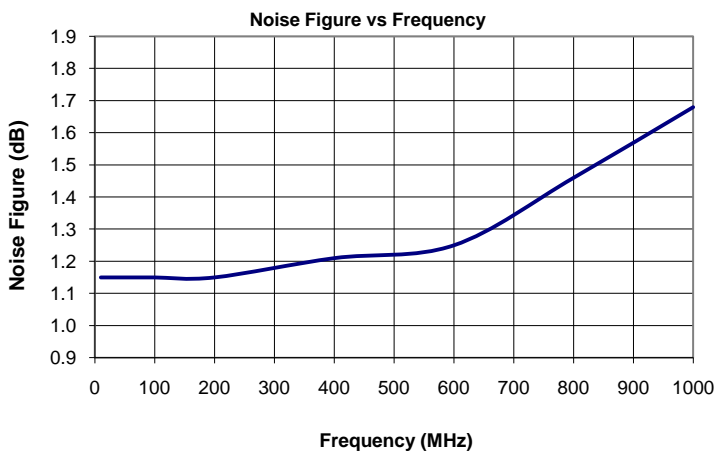
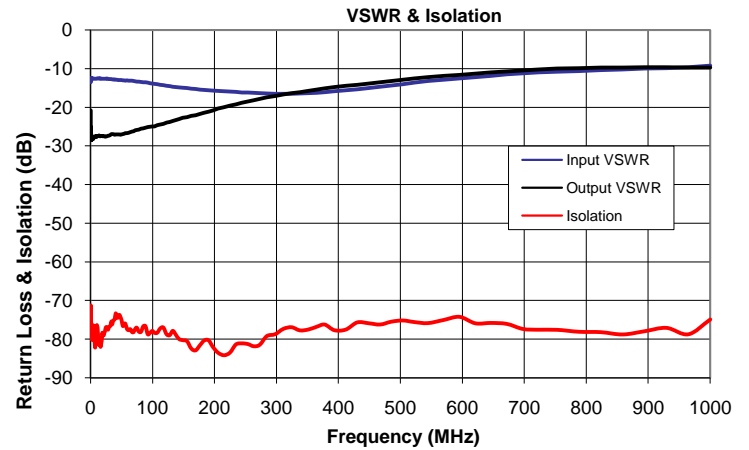
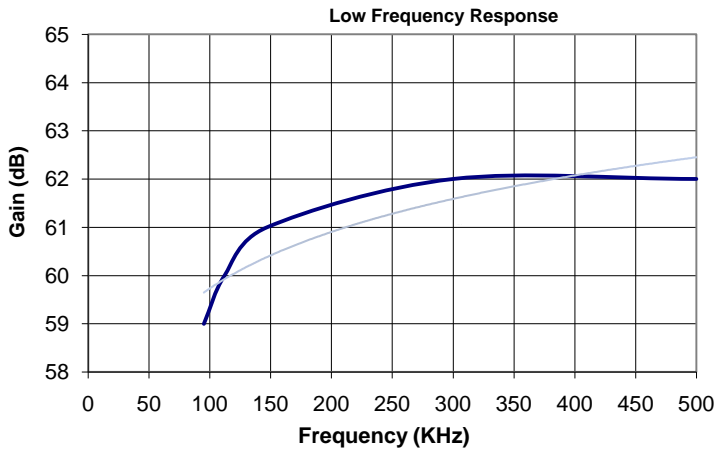
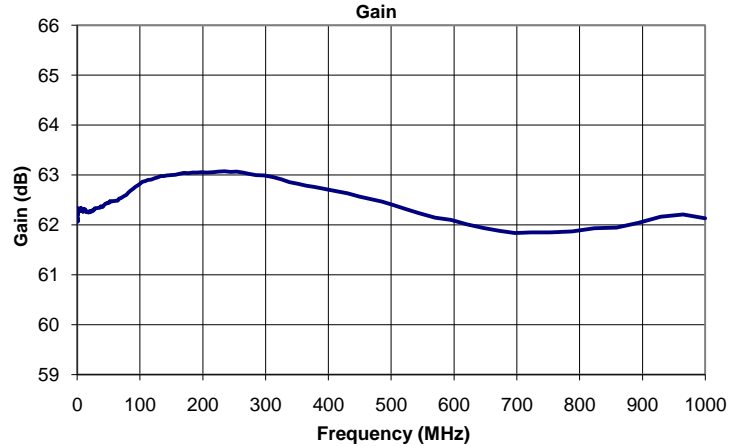
# AM-1646

## Features

- 3-Year Warranty
- Low Noise Figure
- Flat Gain Response
- Internally regulated to +9V
- Reverse voltage protected
- Input Limiter Protected

Parameter	Specification
Frequency Range	0.3 - 1000 MHz
Gain	59 dB Min, 62 dB Typ.
Gain Flatness	± 1.0 dB Max, ± 0.75 dB Typ.
Input VSWR	2.0:1 Max.
Output VSWR	2.0:1 Max.
*Noise Figure (dB)	*1.4, 1.6, 1.8
Output P1dB	+15 dBm Min, +17 dBm Typ.
DC Voltage	+12 to +18V (Marked for +15V)
DC Current	165 mA

\*Noise Figure at 10 MHz, 500 MHz & 1000 MHz



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# AM-1646

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
0.30	62.1	-76.4	-13.5	-20.8	872.5
0.31	62.1	-71.2	-12.9	-21.9	428.8
0.33	62.1	-71.9	-13.2	-21.9	385.3
0.34	62.1	-75.2	-13.1	-21.9	312.3
0.36	62.1	-74.2	-13.0	-22.2	282.8
0.37	62.1	-73.7	-13.0	-22.5	210.4
0.38	62.2	-74.8	-13.0	-22.7	107.5
0.40	62.2	-75.4	-13.0	-22.9	180.3
0.41	62.2	-74.5	-12.9	-23.2	143.7
0.43	62.2	-74.8	-12.8	-23.4	134.6
0.45	62.2	-73.9	-12.8	-23.9	105.5
0.47	62.2	-71.9	-12.9	-24.2	144.8
0.49	62.2	-73.6	-12.8	-24.5	124.9
0.51	62.3	-73.3	-12.8	-24.7	112.8
0.53	62.3	-73.4	-12.8	-24.9	93.8
0.55	62.3	-73.2	-12.8	-25.1	101.0
0.57	62.3	-73.0	-12.8	-25.2	86.5
0.60	62.3	-75.1	-12.8	-25.4	76.2
0.63	62.3	-75.6	-12.8	-25.7	69.4
0.65	62.3	-75.2	-12.7	-25.8	60.3
0.68	62.3	-75.3	-12.6	-25.8	51.6
0.71	62.3	-75.4	-12.6	-25.9	65.1
0.74	62.3	-76.2	-12.6	-26.1	52.8
0.76	62.3	-76.8	-12.6	-26.2	54.7
0.79	62.3	-77.4	-12.6	-26.3	51.1
0.83	62.3	-77.5	-12.6	-26.4	39.9
0.87	62.3	-75.7	-12.6	-26.5	39.5
0.91	62.3	-75.5	-12.7	-26.5	45.5
0.94	62.3	-76.1	-12.7	-26.7	28.9
0.98	62.3	-76.5	-12.7	-26.7	31.2
1.02	62.3	-78.3	-12.7	-26.9	30.9
1.05	62.3	-78.3	-12.7	-27.0	23.3
1.10	62.3	-78.7	-12.7	-27.1	21.4
1.15	62.3	-78.7	-12.7	-27.3	22.0
1.20	62.3	-78.3	-12.6	-27.5	34.9
1.25	62.3	-78.6	-12.6	-27.6	11.7
1.30	62.3	-79.0	-12.6	-27.7	16.0
1.36	62.3	-79.0	-12.6	-27.9	12.8
1.41	62.3	-79.8	-12.6	-28.1	16.9
1.46	62.3	-77.6	-12.6	-28.2	8.8
1.52	62.3	-77.6	-12.5	-28.3	15.7
1.59	62.3	-77.7	-12.5	-28.3	7.2
1.66	62.3	-77.2	-12.5	-28.4	10.7
1.73	62.3	-76.9	-12.5	-28.5	4.9
1.80	62.3	-77.9	-12.5	-28.3	13.2
1.88	62.3	-78.1	-12.5	-28.3	9.8
1.95	62.3	-78.8	-12.5	-28.3	13.6
2.02	62.3	-78.4	-12.5	-28.3	1.8
2.10	62.3	-78.7	-12.5	-28.2	10.4
2.20	62.3	-78.6	-12.6	-28.2	4.7
2.30	62.3	-79.3	-12.5	-28.2	8.6
2.40	62.3	-79.1	-12.5	-28.0	6.5
2.50	62.3	-80.2	-12.5	-27.9	3.2

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
2.59	62.3	-78.7	-12.5	-28.1	3.4
2.69	62.3	-79.0	-12.6	-28.1	5.3
2.79	62.3	-78.4	-12.6	-28.1	4.7
2.91	62.3	-79.5	-12.6	-28.0	7.4
3.04	62.3	-78.4	-12.6	-28.0	6.4
3.18	62.3	-78.6	-12.6	-28.0	6.1
3.32	62.3	-76.8	-12.6	-28.0	2.4
3.45	62.3	-77.2	-12.6	-28.1	5.0
3.59	62.3	-78.1	-12.6	-28.1	3.9
3.73	62.3	-78.5	-12.6	-28.1	2.2
3.86	62.3	-77.5	-12.5	-28.2	2.6
4.02	62.3	-77.9	-12.5	-28.1	3.0
4.21	62.3	-76.8	-12.5	-28.1	1.4
4.40	62.3	-76.4	-12.5	-28.1	0.1
4.59	62.3	-76.5	-12.5	-28.1	1.7
4.78	62.3	-77.6	-12.5	-28.0	3.1
4.97	62.3	-77.2	-12.6	-28.0	1.5
5.15	62.3	-76.5	-12.5	-27.9	2.6
5.34	62.3	-78.7	-12.6	-27.9	2.2
5.56	62.3	-78.6	-12.6	-27.8	3.4
5.82	62.3	-78.7	-12.6	-27.7	-0.2
6.09	62.3	-78.2	-12.6	-27.7	2.8
6.35	62.3	-80.5	-12.6	-27.6	2.3
6.61	62.3	-80.7	-12.6	-27.6	0.5
6.87	62.3	-81.5	-12.6	-27.5	2.8
7.13	62.3	-81.9	-12.6	-27.5	2.2
7.39	62.3	-82.1	-12.6	-27.5	2.0
7.70	62.3	-79.8	-12.6	-27.5	2.5
8.06	62.3	-79.8	-12.6	-27.5	1.5
8.42	62.3	-79.3	-12.6	-27.5	2.6
8.78	62.3	-80.1	-12.6	-27.6	1.9
9.14	62.3	-79.0	-12.6	-27.6	2.0
9.50	62.3	-78.0	-12.6	-27.6	2.5
9.86	62.3	-76.9	-12.6	-27.6	1.3
10.2	62.3	-76.3	-12.5	-27.6	1.5
10.6	62.3	-76.7	-12.5	-27.5	2.2
11.1	62.3	-76.8	-12.5	-27.5	1.9
11.6	62.3	-77.8	-12.5	-27.5	1.2
12.1	62.3	-79.1	-12.5	-27.4	2.1
12.6	62.3	-79.9	-12.5	-27.4	1.6
13.1	62.3	-81.3	-12.5	-27.4	0.8
13.6	62.3	-81.5	-12.5	-27.3	1.7
14.1	62.3	-81.3	-12.5	-27.3	2.1
14.7	62.3	-81.1	-12.6	-27.4	1.9
15.4	62.2	-81.1	-12.6	-27.5	1.3
16.1	62.3	-82.0	-12.5	-27.5	0.5
16.8	62.2	-81.3	-12.5	-27.4	2.3
17.5	62.2	-80.8	-12.6	-27.5	1.4
18.3	62.2	-79.9	-12.6	-27.5	1.5
19.0	62.3	-78.3	-12.6	-27.5	1.9
19.7	62.3	-78.9	-12.6	-27.6	1.3
20.4	62.3	-78.5	-12.6	-27.5	1.4
21.2	62.3	-79.0	-12.6	-27.5	1.2

# AM-1646

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
22.2	62.3	-78.3	-12.6	-27.4	1.8
23.2	62.3	-77.9	-12.6	-27.6	1.7
24.2	62.3	-77.1	-12.6	-27.6	1.3
25.2	62.3	-76.8	-12.6	-27.6	1.1
26.2	62.3	-76.9	-12.6	-27.5	1.3
27.2	62.3	-77.0	-12.6	-27.5	1.4
28.2	62.3	-77.5	-12.6	-27.4	1.5
29.3	62.3	-77.0	-12.7	-27.4	1.4
30.7	62.3	-76.7	-12.7	-27.3	1.6
32.1	62.3	-76.5	-12.7	-27.2	1.4
33.5	62.3	-75.4	-12.7	-26.9	1.7
34.9	62.3	-76.2	-12.8	-27.0	1.6
36.2	62.3	-75.3	-12.8	-27.0	1.7
37.6	62.4	-75.0	-12.8	-27.0	1.6
39.0	62.4	-74.8	-12.8	-27.1	1.5
40.6	62.4	-73.3	-12.9	-27.1	1.6
42.5	62.4	-74.4	-12.8	-27.1	1.6
44.4	62.4	-74.4	-12.9	-27.1	1.9
46.3	62.4	-73.7	-12.9	-27.1	1.3
48.2	62.4	-74.2	-13.0	-27.1	1.4
50.1	62.4	-75.1	-13.0	-27.1	1.3
52.0	62.5	-76.6	-13.0	-27.0	1.4
53.9	62.5	-76.1	-13.0	-26.9	1.4
56.2	62.5	-76.0	-13.1	-26.7	1.6
58.8	62.5	-77.3	-13.0	-26.7	1.6
61.4	62.5	-77.7	-13.1	-26.6	1.4
64.1	62.5	-77.4	-13.1	-26.5	1.2
66.7	62.5	-78.1	-13.1	-26.3	1.7
69.3	62.5	-78.2	-13.2	-26.2	1.5
72.0	62.6	-77.3	-13.3	-26.0	1.6
74.6	62.6	-77.0	-13.3	-25.9	1.6
77.7	62.6	-78.0	-13.4	-25.8	1.6
81.3	62.7	-78.1	-13.5	-25.6	1.6
85.0	62.7	-76.7	-13.5	-25.5	1.5
88.6	62.7	-76.6	-13.6	-25.3	1.6
92.2	62.8	-78.7	-13.6	-25.2	1.7
95.9	62.8	-78.4	-13.7	-25.1	1.6
99.5	62.8	-77.8	-13.8	-25.0	1.6
103	62.9	-78.3	-14.0	-25.0	1.6
107	62.9	-78.3	-14.0	-24.7	1.5
112	62.9	-77.2	-14.2	-24.5	1.6
118	62.9	-77.0	-14.3	-24.3	1.6
123	62.9	-78.7	-14.4	-24.0	1.6
128	63.0	-78.9	-14.5	-23.8	1.7
133	63.0	-77.8	-14.7	-23.6	1.6
138	63.0	-78.9	-14.8	-23.3	1.6
143	63.0	-79.9	-14.9	-23.0	1.6
149	63.0	-80.2	-14.9	-22.7	1.7
156	63.0	-80.5	-15.1	-22.6	1.7
163	63.0	-82.4	-15.2	-22.3	1.6
170	63.0	-82.8	-15.3	-22.1	1.7
177	63.0	-81.5	-15.4	-21.8	1.7
183	63.0	-80.3	-15.5	-21.4	1.6

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
190	63.0	-80.3	-15.6	-21.1	1.6
197	63.1	-82.0	-15.7	-20.8	1.7
206	63.1	-83.4	-15.8	-20.4	1.7
215	63.1	-84.1	-15.9	-20.0	1.7
225	63.1	-83.4	-16.0	-19.6	1.6
235	63.1	-81.3	-16.1	-19.2	1.7
244	63.1	-81.0	-16.2	-18.9	1.6
254	63.1	-81.2	-16.2	-18.5	1.6
263	63.0	-81.8	-16.3	-18.2	1.7
273	63.0	-81.4	-16.4	-17.8	1.7
284	63.0	-79.2	-16.4	-17.5	1.6
298	63.0	-78.7	-16.5	-17.1	1.6
311	63.0	-77.3	-16.5	-16.7	1.6
324	62.9	-76.9	-16.5	-16.4	1.6
338	62.9	-77.7	-16.5	-16.1	1.6
351	62.8	-77.5	-16.4	-15.7	1.6
364	62.8	-76.8	-16.3	-15.4	1.6
378	62.8	-76.2	-16.1	-15.1	1.6
393	62.7	-77.7	-15.9	-14.8	1.6
412	62.7	-77.5	-15.6	-14.5	1.6
430	62.6	-75.6	-15.3	-14.1	1.6
449	62.6	-75.9	-15.1	-13.9	1.6
467	62.5	-76.2	-14.7	-13.5	1.6
486	62.5	-75.4	-14.3	-13.2	1.6
504	62.4	-75.1	-14.0	-12.8	1.6
523	62.3	-75.6	-13.6	-12.5	1.6
544	62.2	-75.8	-13.2	-12.2	1.6
570	62.1	-75.0	-12.9	-11.9	1.6
595	62.1	-74.2	-12.5	-11.6	1.6
621	62.0	-75.9	-12.2	-11.3	1.6
646	61.9	-75.8	-11.8	-11.0	1.6
672	61.9	-76.0	-11.5	-10.7	1.6
697	61.8	-77.3	-11.2	-10.4	1.6
723	61.8	-77.5	-11.0	-10.2	1.6
753	61.8	-77.5	-10.8	-10.0	1.6
788	61.9	-78.1	-10.6	-9.8	1.6
823	61.9	-78.2	-10.4	-9.7	1.7
859	61.9	-78.8	-10.2	-9.7	1.7
894	62.0	-77.9	-10.0	-9.6	1.7
929	62.2	-77.0	-9.8	-9.6	1.8
965	62.2	-78.7	-9.6	-9.7	1.8
1000	62.1	-74.9	-9.2	-9.7	2.0