

AM-1686 Series

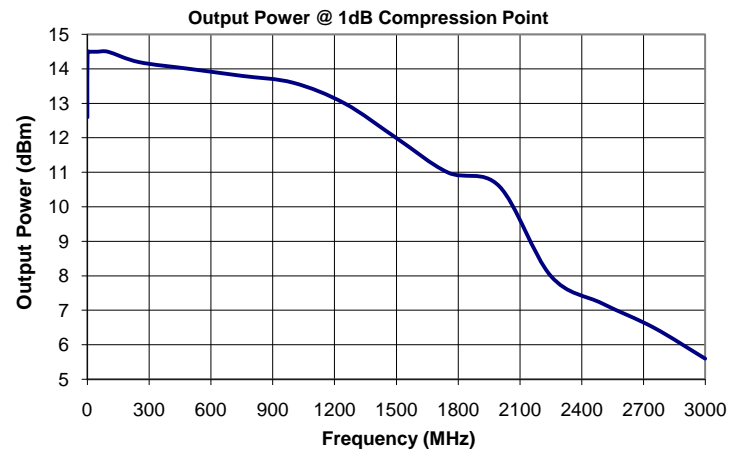
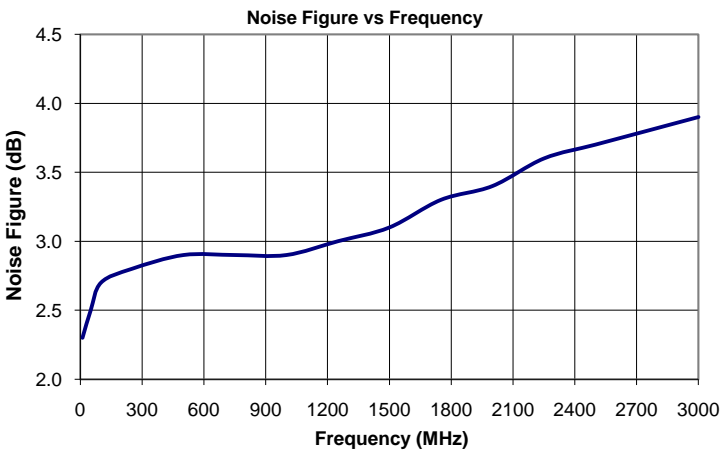
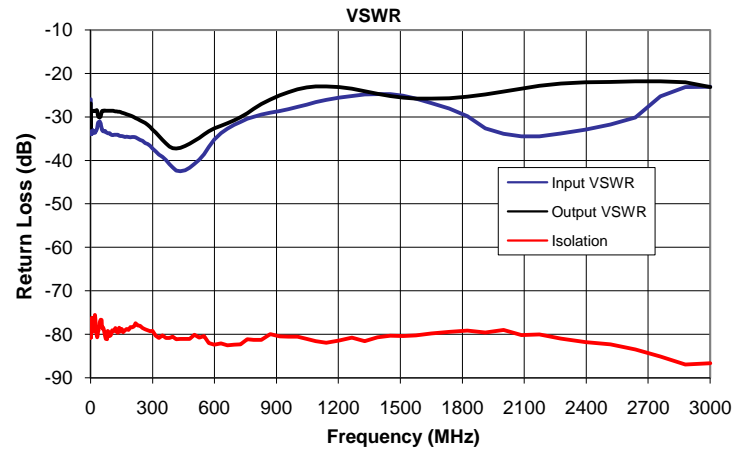
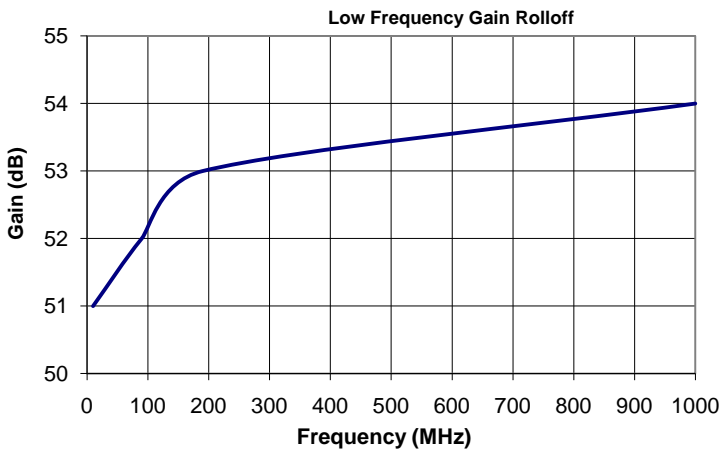
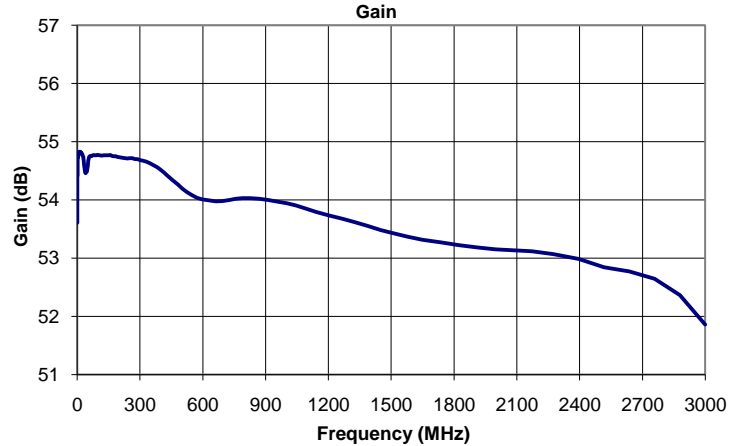
Features

- 3-Year Warranty
- Very Broad Bandwidth
- Low VSWR
- Internally regulated to +12V
- Reverse voltage protected
- Inverting RF Output

Parameter	Specification
Frequency Range	100 KHz to 3 GHz
Gain	52 dB Min, 54 dB Typ.
Gain Flatness	± 2.5 dB to 3 GHz
Input VSWR	2.0:1 Max.
Output VSWR	2.0:1 Max.
*Noise Figure (dB)	2.9, 3.5, 4.5
*Output P1dB	+13, +10, +5
DC Voltage	+15 to +30V (Marked for +15V)
DC Current	145 mA

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

*P1dB at 0.1 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

AM-1686 Series

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
0.30	53.6	-80.7	-25.9	-26.9	-41.2
0.32	53.6	-80.0	-25.9	-27.1	-20.9
0.33	53.7	-79.8	-26.0	-27.5	9.6
0.35	53.7	-80.7	-26.1	-28.0	-1.5
0.36	53.7	-80.1	-26.2	-28.4	1.5
0.38	53.8	-79.5	-26.3	-28.9	-0.4
0.40	53.8	-78.8	-26.5	-29.3	12.0
0.41	53.8	-78.9	-26.6	-29.7	11.3
0.44	53.9	-79.3	-26.7	-30.1	10.1
0.46	53.9	-78.8	-26.9	-30.5	-2.4
0.48	53.9	-78.7	-27.0	-30.8	5.6
0.50	54.0	-78.1	-27.2	-31.2	7.7
0.52	54.0	-78.0	-27.4	-31.5	11.9
0.55	54.0	-78.4	-27.5	-31.7	4.7
0.57	54.1	-79.4	-27.7	-31.9	15.7
0.60	54.1	-79.3	-27.8	-32.0	13.1
0.63	54.1	-79.6	-28.0	-32.2	8.2
0.66	54.1	-80.0	-28.2	-32.3	14.4
0.70	54.2	-80.4	-28.4	-32.4	12.1
0.73	54.2	-80.3	-28.6	-32.3	5.6
0.76	54.2	-80.0	-28.8	-32.2	12.6
0.79	54.3	-80.4	-28.8	-32.1	9.3
0.83	54.3	-79.7	-29.0	-32.0	9.7
0.87	54.3	-78.8	-29.2	-32.0	8.6
0.91	54.3	-78.5	-29.3	-31.9	3.0
0.96	54.4	-79.0	-29.5	-31.7	8.0
1.00	54.4	-78.8	-29.6	-31.5	3.4
1.05	54.4	-78.1	-29.8	-31.3	6.6
1.09	54.4	-78.4	-29.9	-31.2	7.1
1.14	54.4	-78.6	-30.1	-31.0	3.5
1.20	54.5	-78.1	-30.3	-30.9	8.9
1.26	54.5	-78.6	-30.5	-30.7	7.8
1.32	54.5	-78.4	-30.6	-30.5	5.0
1.38	54.5	-78.8	-30.8	-30.3	6.4
1.44	54.5	-78.3	-31.0	-30.2	6.1
1.50	54.6	-77.9	-31.2	-30.0	7.8
1.57	54.6	-77.9	-31.3	-29.9	5.9
1.66	54.6	-77.6	-31.5	-29.8	5.4
1.74	54.6	-76.9	-31.6	-29.7	5.8
1.82	54.6	-77.6	-31.7	-29.6	4.3
1.91	54.6	-77.7	-31.8	-29.5	5.0
1.99	54.7	-78.5	-32.1	-29.4	5.6
2.08	54.7	-78.2	-32.3	-29.4	5.1
2.17	54.7	-79.0	-32.3	-29.3	3.0
2.29	54.7	-79.1	-32.4	-29.3	2.6
2.40	54.7	-78.9	-32.5	-29.2	2.8
2.52	54.7	-79.0	-32.7	-29.1	4.8
2.63	54.7	-79.3	-32.8	-29.0	3.1
2.75	54.7	-79.0	-32.9	-29.0	3.6
2.86	54.7	-79.0	-32.9	-29.0	4.0
3.00	54.7	-78.6	-32.9	-28.9	2.3
3.16	54.7	-79.1	-32.9	-28.8	1.9
3.32	54.7	-78.3	-33.1	-28.8	3.3

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
3.48	54.7	-77.9	-33.2	-28.7	1.9
3.64	54.8	-78.2	-33.4	-28.7	2.8
3.80	54.8	-78.1	-33.5	-28.7	1.1
3.95	54.8	-77.9	-33.6	-28.7	1.3
4.14	54.7	-78.5	-33.7	-28.7	1.4
4.37	54.7	-78.9	-33.8	-28.7	1.9
4.59	54.8	-79.1	-33.9	-28.7	1.9
4.82	54.8	-78.4	-33.9	-28.7	1.9
5.04	54.8	-78.3	-33.7	-28.7	1.4
5.27	54.8	-78.6	-33.7	-28.7	2.1
5.49	54.8	-78.3	-33.5	-28.7	1.6
5.72	54.8	-78.3	-33.4	-28.7	2.4
5.99	54.8	-78.3	-33.4	-28.7	2.2
6.30	54.8	-77.3	-33.4	-28.7	1.9
6.62	54.8	-76.5	-33.4	-28.7	1.0
6.94	54.8	-76.2	-33.4	-28.7	1.7
7.26	54.8	-76.4	-33.3	-28.7	1.5
7.57	54.8	-76.9	-33.3	-28.7	1.7
7.89	54.8	-76.6	-33.3	-28.7	1.7
8.26	54.8	-77.0	-33.5	-28.7	1.5
8.70	54.8	-77.4	-33.5	-28.6	1.2
9.14	54.8	-77.4	-33.4	-28.7	1.4
9.58	54.8	-77.7	-33.2	-28.6	1.1
10.0	54.8	-77.7	-33.1	-28.6	1.4
10.5	54.8	-77.9	-33.1	-28.6	1.2
10.9	54.8	-78.1	-33.1	-28.6	1.4
11.4	54.8	-78.5	-33.3	-28.6	1.1
12.0	54.8	-78.9	-33.2	-28.6	1.4
12.6	54.8	-78.8	-33.1	-28.6	1.3
13.2	54.8	-78.7	-33.2	-28.6	1.2
13.8	54.8	-79.2	-33.2	-28.6	1.2
14.4	54.8	-79.3	-33.4	-28.6	1.3
15.0	54.8	-78.8	-33.4	-28.6	1.1
15.7	54.8	-78.4	-33.4	-28.6	1.0
16.6	54.8	-77.8	-33.5	-28.6	1.3
17.4	54.8	-76.9	-33.5	-28.6	1.4
18.2	54.8	-76.6	-33.6	-28.6	1.1
19.1	54.8	-76.5	-33.6	-28.6	1.2
19.9	54.8	-76.4	-33.7	-28.6	1.3
20.8	54.8	-75.5	-33.6	-28.6	1.1
21.7	54.8	-76.1	-33.4	-28.6	1.2
22.9	54.8	-77.1	-33.4	-28.6	1.3
24.1	54.8	-77.9	-33.4	-28.6	1.4
25.3	54.8	-78.3	-33.2	-28.5	1.1
26.5	54.8	-78.7	-33.1	-28.5	1.2
27.6	54.7	-79.6	-33.1	-28.4	1.2
28.8	54.7	-80.0	-33.0	-28.4	1.3
30.0	54.7	-80.1	-32.8	-28.4	1.1
31.4	54.7	-80.7	-32.6	-28.6	1.4
33.1	54.6	-80.4	-32.1	-29.0	1.1
34.7	54.5	-79.8	-31.6	-29.5	0.6
36.4	54.5	-79.3	-31.3	-29.8	0.4
38.1	54.5	-79.1	-31.2	-30.0	0.5

AM-1686 Series

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
39.7	54.5	-78.7	-31.1	-30.0	0.6
41.4	54.5	-78.0	-31.0	-30.1	0.5
43.4	54.5	-77.4	-31.0	-30.1	0.4
45.7	54.5	-76.9	-31.3	-30.1	0.5
48.0	54.5	-76.6	-31.4	-29.9	0.4
50.3	54.6	-76.6	-32.0	-29.5	0.6
52.6	54.7	-76.7	-32.5	-28.9	1.1
54.9	54.7	-78.4	-33.0	-28.7	1.3
57.2	54.7	-78.2	-33.0	-28.6	1.2
59.9	54.8	-78.7	-33.3	-28.5	1.1
63.0	54.8	-78.6	-33.3	-28.5	1.1
66.2	54.8	-79.7	-33.3	-28.5	1.2
69.4	54.8	-80.4	-33.2	-28.5	1.1
72.6	54.8	-81.0	-33.4	-28.6	1.1
75.7	54.8	-81.0	-33.6	-28.6	1.1
78.9	54.8	-81.1	-33.7	-28.5	1.1
82.6	54.8	-79.2	-33.7	-28.6	1.1
87.0	54.8	-79.4	-33.8	-28.5	1.1
91.4	54.8	-80.3	-33.7	-28.6	1.1
95.8	54.8	-80.2	-33.9	-28.6	1.0
100.2	54.8	-79.9	-34.0	-28.6	1.1
104.5	54.8	-79.0	-34.2	-28.6	1.0
108.9	54.8	-79.2	-34.1	-28.6	1.0
114.1	54.8	-79.2	-34.1	-28.6	1.1
120.1	54.8	-78.5	-34.1	-28.7	1.0
126.2	54.8	-79.4	-34.1	-28.7	1.1
132.2	54.8	-79.6	-34.1	-28.8	1.1
138.3	54.8	-78.4	-34.3	-28.8	1.0
144.3	54.8	-79.3	-34.4	-28.9	1.1
150.4	54.8	-78.8	-34.4	-29.0	1.0
157.4	54.8	-79.4	-34.5	-29.1	1.1
166.0	54.8	-79.0	-34.6	-29.2	1.1
174.6	54.8	-78.8	-34.6	-29.4	1.0
183.1	54.7	-78.9	-34.6	-29.5	1.0
191.7	54.7	-78.3	-34.6	-29.7	1.0
200.2	54.7	-78.4	-34.6	-29.8	1.0
208.8	54.7	-78.1	-34.6	-30.0	1.0
217.3	54.7	-77.4	-34.7	-30.2	1.0
227.6	54.7	-77.9	-35.0	-30.5	1.1
239.6	54.7	-78.0	-35.2	-30.8	1.0
251.7	54.7	-78.5	-35.5	-31.0	1.0
263.8	54.7	-78.8	-36.0	-31.4	1.0
275.9	54.7	-79.1	-36.2	-31.8	1.0
287.9	54.7	-79.3	-36.7	-32.3	1.0
300.0	54.7	-79.2	-37.3	-32.9	1.0
314.1	54.7	-80.3	-37.9	-33.6	1.0
330.8	54.7	-80.8	-38.6	-34.4	1.0
347.5	54.6	-80.2	-39.2	-35.2	1.0
364.1	54.6	-80.8	-39.9	-36.1	1.0
380.8	54.6	-80.8	-40.9	-36.8	1.0
397.5	54.5	-80.5	-41.6	-37.2	1.0
414.1	54.5	-81.1	-42.3	-37.3	1.0
433.6	54.4	-81.0	-42.5	-37.1	1.0

Freq. (MHz)	Gain (dB)	Isol. (dB)	Input VSWR (dBRL)	Output VSWR (dBRL)	S21 Delay
456.6	54.3	-81.0	-42.2	-36.7	1.0
479.6	54.3	-81.0	-41.7	-36.2	1.0
502.6	54.2	-80.1	-40.8	-35.5	1.0
525.6	54.1	-80.7	-39.8	-34.8	1.0
548.6	54.1	-80.4	-38.6	-34.0	1.0
571.6	54.0	-82.0	-36.9	-33.3	1.0
598.6	54.0	-82.3	-35.2	-32.6	1.0
630.3	54.0	-82.0	-33.7	-32.1	1.0
662.1	54.0	-82.5	-32.7	-31.5	1.0
693.8	54.0	-82.3	-31.8	-30.8	1.0
725.6	54.0	-82.3	-31.1	-30.1	1.0
757.3	54.0	-81.1	-30.4	-29.1	1.0
789.1	54.0	-81.2	-29.9	-28.1	1.0
826.3	54.0	-81.3	-29.4	-27.0	1.0
870.1	54.0	-79.9	-29.0	-26.0	1.0
913.9	54.0	-80.4	-28.6	-25.0	1.0
957.8	54.0	-80.5	-28.2	-24.3	1.0
1001.6	53.9	-80.5	-27.7	-23.6	1.0
1045.4	53.9	-81.0	-27.2	-23.2	1.0
1089.2	53.9	-81.5	-26.6	-23.0	1.0
1140.6	53.8	-81.9	-26.1	-23.0	1.0
1202.5	53.7	-81.4	-25.6	-23.1	1.0
1264.5	53.7	-80.7	-25.2	-23.5	1.0
1326.5	53.6	-81.5	-24.8	-24.1	1.0
1388.5	53.6	-80.6	-24.7	-24.7	1.0
1450.5	53.5	-80.3	-24.7	-25.2	1.0
1512.4	53.4	-80.4	-25.1	-25.6	1.0
1574.4	53.4	-80.2	-25.8	-25.8	1.0
1648.6	53.3	-79.8	-26.8	-25.8	1.0
1736.1	53.3	-79.4	-28.1	-25.7	1.0
1823.5	53.2	-79.1	-29.8	-25.4	1.0
1911.0	53.2	-79.5	-32.6	-24.8	1.0
1998.4	53.2	-79.0	-33.8	-24.2	1.0
2085.9	53.1	-80.1	-34.5	-23.5	1.0
2173.3	53.1	-80.0	-34.4	-22.8	1.0
2275.7	53.1	-81.0	-33.8	-22.3	1.0
2396.4	53.0	-81.7	-32.9	-22.0	1.1
2517.2	52.8	-82.3	-31.7	-22.0	1.1
2637.9	52.8	-83.4	-30.1	-21.8	1.1
2758.6	52.6	-85.0	-25.2	-21.8	1.1
2879.3	52.4	-86.9	-23.1	-22.0	1.1
3000.0	51.9	-86.6	-23.0	-23.1	1.1