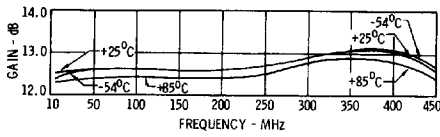


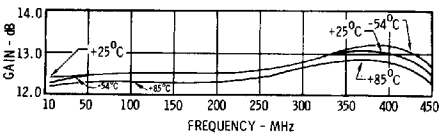
Typical Performance at 25°C

Gain

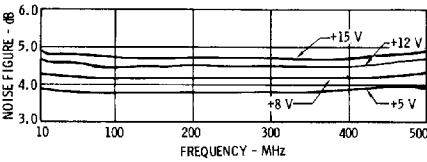
$V_{CC} = 15\text{ V}$



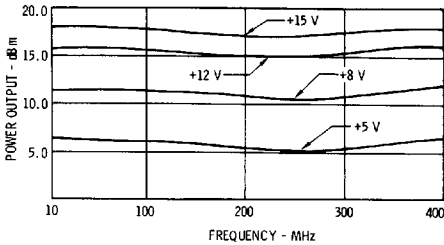
$V_{CC} = 12\text{ V}$



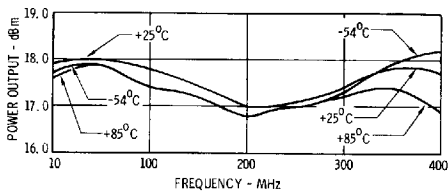
Noise Figure



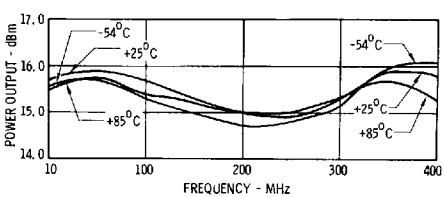
Power Output *



$V_{CC} = 15\text{ V}$

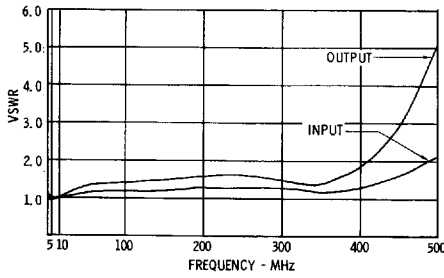


$V_{CC} = 12\text{ V}$

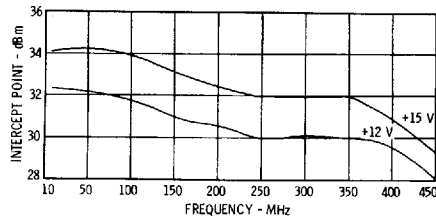


*at 1 dB Gain Compression

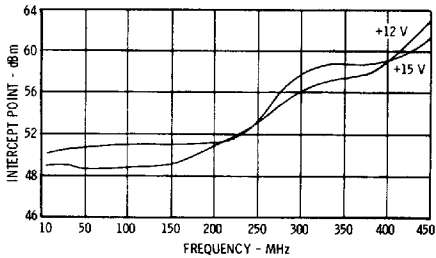
VSWR



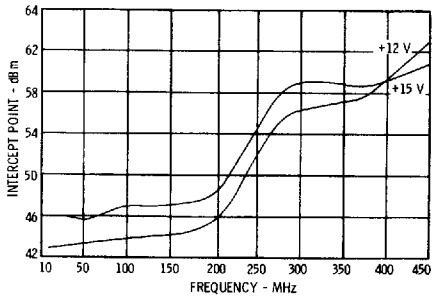
Third Order Two Tone Intercept Point



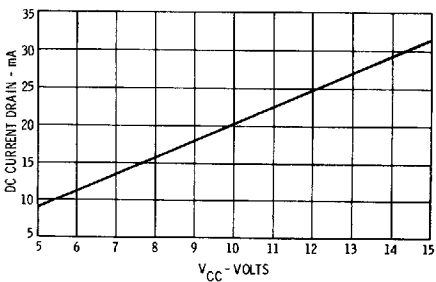
Second Order Harmonic Intercept Point



Second Order Two Tone Intercept Point



Current Drain vs. Control Voltage



Typical Automatic Test Data

V_{CC} = 15.0 V

Frequency MHz	VSWR IN	VSWR OUT	GAIN DB
2.0	1.7	2.1	13.4
5.0	1.2	1.3	13.2
10.0	1.1	1.2	13.1
50.0	1.1	1.1	13.3
100.0	1.0	1.1	13.3
150.0	1.0	1.2	13.3
200.0	1.1	1.2	13.4
250.0	1.1	1.3	13.5
300.0	1.1	1.4	13.7
350.0	1.1	1.6	13.7
400.0	1.1	1.8	14.0
450.0	1.1	2.2	13.8
500.0	1.1	2.7	13.7

Linear S-Parameters

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
2.0	.264	-86	4.682	-157	.108	21.355126		
5.0	.098	-96	4.549	-173	.121	7.141119		
10.0	.059	-108	4.533	-178	.123	3.084124		
50.0	.032	-155	4.624	168	.126	-6.029177		
100.0	.021	-178	4.604	155	.125	-14.052-163		
150.0	.017	-143	4.615	142	.123	-21.079-175		
200.0	.028	-141	4.679	129	.123	-28.105168		
250.0	.037	-137	4.715	116	.121	-35.135149		
300.0	.047	-139	4.823	102	.120	-42.172128		
350.0	.055	-144	4.870	87	.119	-50.220107		
400.0	.055	-153	4.991	70	.117	-58.283 83		
450.0	.051	-170	4.891	54	.115	-67.365 59		
500.0	.045	179	4.833	35	.109	-76.466 34		

V_{CC} = 12.0 V

Frequency MHz	VSWR IN	VSWR OUT	GAIN DB
2.0	1.7	2.1	13.1
5.0	1.2	1.3	13.1
10.0	1.1	1.2	13.1
50.0	1.1	1.1	13.2
100.0	1.0	1.1	13.2
150.0	1.0	1.2	13.2
200.0	1.1	1.3	13.3
250.0	1.1	1.3	13.3
300.0	1.1	1.5	13.6
350.0	1.1	1.6	13.6
400.0	1.1	1.9	13.8
450.0	1.1	2.3	13.6
500.0	1.1	2.9	13.5
550.0	1.0	3.9	12.8
600.0	1.1	5.5	12.0

Linear S-Parameters

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
2.0	.263	-85	4.647	-157	.109	22.360	.360	124
5.0	.098	-94	4.510	-172	.121	7.139	.139	117
10.0	.059	-101	4.503	-178	.124	3.080	.080	120
50.0	.026	-157	4.570	168	.126	-6.025	.025	-174
100.0	.019	-165	4.560	155	.126	-14.054	.054	-156
150.0	.015	-129	4.555	142	.124	-20.084	.084	-170
200.0	.031	-130	4.626	129	.123	-28.113	.113	172
250.0	.038	-128	4.634	115	.123	-34.146	.146	152
300.0	.051	-131	4.765	101	.121	-42.185	.185	130
350.0	.060	-143	4.793	86	.121	-50.237	.237	108
400.0	.058	-149	4.893	70	.119	-58.301	.301	84
450.0	.061	-170	4.807	53	.116	-66.386	.386	59
500.0	.049	-177	4.705	34	.111	-75.485	.485	34

V_{CC} = 8.0 V

Frequency MHz	VSWR IN	VSWR OUT	GAIN DB
2.0	1.7	2.2	13.2
5.0	1.2	1.3	12.9
10.0	1.1	1.2	12.9
50.0	1.0	1.0	13.0
100.0	1.0	1.1	12.9
150.0	1.0	1.2	13.0
200.0	1.1	1.3	13.1
250.0	1.1	1.4	13.1
300.0	1.1	1.5	13.3
350.0	1.2	1.7	13.3
400.0	1.2	2.0	13.5
450.0	1.2	2.4	13.2
500.0	1.1	3.1	12.9
550.0	1.1	4.2	12.2
600.0	1.0	5.9	11.3

Linear S-Parameters

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
2.0	.269	-82	4.567	-156	.111	23.369	.369	122
5.0	.098	-86	4.419	-172	.124	8.136	.136	110
10.0	.053	-87	4.405	-178	.126	3.074	.074	111
50.0	.018	-121	4.458	168	.128	-6.018	.018	-141
100.0	.013	-108	4.439	154	.128	-13.058	.058	-141
150.0	.024	-84	4.455	141	.126	-20.094	.094	-161
200.0	.038	-110	4.515	128	.126	-27.126	.126	178
250.0	.053	-112	4.505	114	.125	-34.164	.164	156
300.0	.066	-126	4.606	100	.125	-41.206	.206	133
350.0	.077	-134	4.622	84	.124	-49.262	.262	109
400.0	.078	-143	4.715	68	.123	-57.330	.330	84
450.0	.077	-162	4.567	51	.121	-66.416	.416	58
500.0	.064	-175	4.431	32	.115	-74.515	.515	33

V_{CC} = 5.0 V

Frequency MHz	VSWR IN	VSWR OUT	GAIN DB
2.0	1.8	2.3	12.8
5.0	1.2	1.3	12.5
10.0	1.1	1.2	12.5
50.0	1.1	1.1	12.6
100.0	1.1	1.1	12.6
150.0	1.1	1.2	12.5
200.0	1.1	1.3	12.7
250.0	1.2	1.4	12.6
300.0	1.2	1.6	12.8
350.0	1.2	1.8	12.7
400.0	1.2	2.1	12.8
450.0	1.2	2.6	12.5
500.0	1.2	3.4	12.1

Linear S-Parameters

Frequency MHz	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
2.0	.276	-76	4.386	-155	.115	24.387	.387	118
5.0	.102	-70	4.232	-172	.128	8.134	.134	99
10.0	.064	-60	4.215	-178	.130	3.070	.070	91
50.0	.030	-49	4.279	168	.132	-6.025	.025	-70
100.0	.035	-49	4.254	154	.132	-13.068	.068	-120
150.0	.051	-62	4.235	140	.131	-20.106	.106	-148
200.0	.066	-88	4.311	126	.130	-27.143	.143	-173
250.0	.083	-101	4.278	112	.130	-33.184	.184	162
300.0	.095	-114	4.376	97	.130	-41.230	.230	137
350.0	.103	-127	4.336	81	.130	-48.289	.289	112
400.0	.107	-137	4.382	64	.129	-56.362	.362	85
450.0	.107	-155	4.196	47	.127	-65.446	.446	58
500.0	.095	-167	4.042	28	.122	-74.543	.543	32

Thermal Data: V_{CC} = 15 Vdc

Thermal Resistance θ_{jc} 45°C/W
 Transistor Power Dissipation P_d 0.278 W
 Junction Temperature Rise Above Case T_{jc} ... 13°C