MAR-8ASM Performance Data

NOTE:Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=36mA; Vcc=3.97V@Temp.=+25degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-15.52	-3.87	31.43	167.26	-34.52	-0.26	-12.46	-10.66	1.04	0.74	26.36	12.85	2.13
60	-15.95	-8.74	31.50	166.32	-34.53	0.53	-12.54	-13.76	1.04	0.74	26.45	12.91	2.17
80	-15.47	-1.13	31.37	162.00	-34.43	0.86	-12.61	-18.63	1.04	0.74	26.70	12.84	2.20
100	-15.08	-13.22	31.34	157.18	-34.46	1.98	-12.65	-23.16	1.04	0.74	26.46	12.80	2.26
120	-16.14	-13.39	31.23	153.79	-34.26	1.31	-12.68	-27.73	1.04	0.74	26.22	12.72	2.27
140	-15.51	-16.07	31.12	149.66	-34.40	1.99	-12.71	-32.45	1.05	0.72	25.93	12.64	2.25
160	-16.55	-20.77	30.87	146.34	-34.30	2.08	-12.75	-36.78	1.05	0.71	25.69	12.63	2.31
180	-15.57	-19.47	30.83	141.81	-34.21	2.49	-12.83	-41.25	1.05	0.71	25.74	12.55	2.28
200	-16.03	-19.51	30.66	138.07	-34.15	2.59	-12.87	-45.66	1.06	0.70	25.98	12.65	2.28
220	-16.32	-26.70	30.51	133.72	-34.09	2.90	-12.98	-49.95	1.06	0.69	26.13	12.74	2.36
240	-16.36	-24.07	30.37	130.48	-33.95	3.07	-13.01	-54.11	1.06	0.69	25.95	12.72	2.36
260	-16.06	-31.45	30.17	126.93	-33.96	3.20	-13.10	-58.43	1.07	0.67	26.00	12.64	2.41
280	-15.82	-32.42	29.96	123.23	-33.80	3.75	-13.16	-62.98	1.07	0.67	26.02	12.56	2.46
300	-16.13	-30.80	29.82	119.91	-33.75	3.65	-13.19	-67.21	1.07	0.66	25.79	12.38	2.55
320	-15.92	-33.61	29.63	116.46	-33.62	3.70	-13.26	-71.39	1.08	0.66	25.69	12.49	2.51
340	-16.23	-35.92	29.44	113.00	-33.52	4.10	-13.33	-75.57	1.08	0.65	25.67	12.60	2.54
360	-16.19	-42.21	29.25	110.00	-33.39	4.05	-13.40	-79.65	1.08	0.64	25.60	12.59	2.61
380	-16.23	-39.09	29.07	107.06	-33.24	4.27	-13.45	-83.80	1.08	0.64	25.60	12.60	2.62
400	-16.64	-43.67	28.89	103.63	-33.16	4.10	-13.55	-88.08	1.09	0.63	25.53	12.55	2.63
420	-16.47	-46.27	28.71	100.42	-32.95	4.43	-13.60	-92.48	1.08	0.63	25.43	12.54	2.64
440	-16.47	-46.09	28.47	97.85	-32.82	4.24	-13.67	-96.36	1.09	0.62	25.39	12.63	2.63
460	-16.56	-48.19	28.32	94.87	-32.70	4.07	-13.76	-100.82	1.09	0.62	25.59	12.62	2.71
480	-16.43	-49.54	28.15	91.69	-32.54	3.77	-13.82	-104.56	1.09	0.62	25.55	12.58	2.71
500	-16.78	-51.53	27.96	89.08	-32.40	3.59	-13.91	-108.47	1.09	0.61	25.68	12.63	2.76
520	-16.20	-54.90	27.78	86.12	-32.24	3.62	-13.90	-111.99	1.09	0.61	25.79	12.67	2.73
540	-16.37	-57.58	27.58	83.15	-32.01	3.03	-13.96	-116.01	1.09	0.61	25.85	12.69	2.76
560	-16.42	-57.13	27.43	80.30	-31.89	2.72	-14.04	-119.77	1.09	0.60	25.81	12.68	2.82
580	-16.74	-59.97	27.24	77.95	-31.74	2.46	-14.04	-124.08	1.09	0.60	25.82	12.68	2.79
600	-16.50	-61.70	27.10	74.97	-31.56	1.87	-14.11	-127.67	1.09	0.60	25.94	12.72	2.81
620	-16.32	-64.53	26.88	72.56	-31.40	1.64	-14.12	-131.85	1.09	0.59	25.97	12.74	2.81
640	-16.61	-64.83	26.72	69.93	-31.25	0.98	-14.19	-135.34	1.09	0.59	25.91	12.71	2.78
660	-16.70	-67.78	26.58	67.43	-31.07	0.29	-14.16	-138.94	1.09	0.59	26.06	12.68	2.85
680	-16.78	-69.73	26.39	64.84	-30.85	-0.15	-14.22	-142.42	1.08	0.60	26.13	12.75	2.84
700	-16.42	-71.72	26.20	62.39	-30.73	-0.89	-14.22	-145.95	1.08	0.59	26.19	12.77	2.83
750	-16.63	-78.65	25.82	56.19	-30.29	-2.75	-14.37	-155.10	1.08	0.59	26.04	12.82	2.81
800	-16.83	-84.50	25.42	50.09	-29.88	-4.49	-14.31	-163.60	1.08	0.59	25.90	12.76	2.88
850	-16.78	-90.48	25.04	44.25	-29.50	-6.83	-14.30	-171.89	1.07	0.59	25.76	12.82	2.86
900	-16.80	-96.91	24.65	38.41	-29.08	-9.02	-14.32	179.90	1.07	0.58	25.35	12.73	2.84
940	-17.07	-102.74	24.29	32.71	-28.71	-11.48	-14.27	171.94	1.07	0.58	25.52	12.81	2.92
1000	-16.83	-109.34	23.95	27.19	-28.33	-14.10	-14.17	164.53	1.06	0.58	25.65	12.78	2.87

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=29mA; Vcc=3.87V@Temp.=+25degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-12.12	-6.69	30.34	167.83	-33.78	0.19	-9.83	-10.10	1.04	0.75	24.75	11.10	2.14
60	-12.82	-11.32	30.47	167.05	-33.87	0.75	-9.88	-12.55	1.04	0.75	24.92	11.17	2.15
80	-12.37	-7.04	30.33	162.89	-33.96	0.52	-9.95	-16.72	1.05	0.73	25.19	11.10	2.17
100	-12.33	-16.40	30.33	158.67	-33.84	1.54	-10.01	-20.94	1.04	0.74	24.87	11.03	2.24
120	-12.87	-18.49	30.24	155.31	-33.71	1.14	-10.07	-24.90	1.04	0.74	24.64	10.77	2.23
140	-12.89	-18.29	30.14	151.24	-33.72	1.19	-10.12	-29.18	1.04	0.73	24.35	10.63	2.22
160	-13.71	-24.87	29.95	148.00	-33.68	1.52	-10.14	-32.86	1.05	0.71	24.09	10.57	2.28
180	-12.95	-26.13	29.90	143.72	-33.60	2.07	-10.19	-37.03	1.04	0.72	24.05	10.48	2.24
200	-13.13	-25.36	29.74	140.08	-33.52	1.99	-10.29	-40.79	1.05	0.71	24.27	10.66	2.27
220	-13.50	-31.65	29.62	135.92	-33.53	2.31	-10.35	-44.88	1.05	0.69	24.43	10.82	2.31
240	-13.51	-32.17	29.48	132.76	-33.44	2.53	-10.38	-48.81	1.05	0.69	24.21	10.85	2.33
260	-13.35	-36.86	29.32	129.48	-33.29	2.63	-10.49	-52.80	1.05	0.68	24.27	10.62	2.38
280	-13.37	-39.09	29.15	125.88	-33.24	2.40	-10.56	-56.65	1.05	0.67	24.22	10.41	2.47
300	-13.71	-39.46	29.05	122.52	-33.13	2.55	-10.59	-60.70	1.05	0.67	23.87	10.22	2.51
320	-13.75	-41.15	28.87	119.25	-33.03	2.73	-10.69	-64.55	1.06	0.66	23.82	10.49	2.50
340	-13.97	-44.42	28.71	115.82	-32.96	2.85	-10.78	-68.22	1.06	0.65	23.70	10.55	2.53
360	-13.89	-48.19	28.55	112.88	-32.82	2.85	-10.88	-72.02	1.06	0.65	23.63	10.58	2.57
380	-13.94	-48.21	28.38	109.86	-32.69	2.47	-10.95	-75.76	1.06	0.64	23.63	10.65	2.58
400	-14.26	-52.98	28.21	106.50	-32.58	2.32	-11.06	-79.42	1.06	0.63	23.59	10.57	2.59
420	-14.27	-54.99	28.06	103.38	-32.41	2.35	-11.13	-83.45	1.06	0.63	23.45	10.44	2.62
440	-14.35	-55.18	27.86	100.94	-32.27	2.27	-11.21	-87.04	1.06	0.63	23.41	10.52	2.60
460	-14.47	-57.16	27.73	97.83	-32.17	2.12	-11.33	-91.04	1.06	0.62	23.62	10.52	2.69
480	-14.47	-58.22	27.58	94.64	-32.02	1.84	-11.39	-94.41	1.06	0.62	23.62	10.47	2.69
500	-14.75	-59.84	27.41	91.94	-31.90	1.50	-11.49	-98.28	1.07	0.61	23.75	10.58	2.72
520	-14.34	-63.24	27.25	88.96	-31.75	1.36	-11.54	-101.69	1.06	0.61	23.90	10.62	2.73
540	-14.55	-65.67	27.06	86.23	-31.56	1.05	-11.65	-105.49	1.06	0.61	24.01	10.77	2.71
560	-14.72	-66.52	26.94	83.26	-31.41	0.51	-11.78	-109.01	1.06	0.61	23.96	10.57	2.73
580	-14.95	-68.79	26.77	80.81	-31.25	0.26	-11.82	-113.03	1.06	0.60	23.99	10.65	2.77
600	-14.78	-70.83	26.65	77.78	-31.11	-0.30	-11.89	-116.21	1.06	0.60	24.18	10.81	2.79
620	-14.73	-72.74	26.44	75.32	-30.93	-0.86	-11.96	-119.98	1.06	0.60	24.24	10.73	2.79
640	-14.93	-74.48	26.31	72.74	-30.81	-1.36	-12.08	-123.49	1.06	0.60	24.15	10.70	2.77
660	-15.12	-76.17	26.16	70.18	-30.63	-1.87	-12.10	-126.89	1.06	0.60	24.26	10.70	2.78
680	-15.17	-79.22	26.00	67.67	-30.43	-2.90	-12.21	-130.55	1.06	0.60	24.41	10.67	2.81
700	-15.00	-80.03	25.85	65.27	-30.31	-3.31	-12.26	-133.66	1.06	0.60	24.63	10.79	2.80
750	-15.21	-86.80	25.48	58.81	-29.92	-5.09	-12.41	-142.19	1.05	0.59	24.71	11.05	2.80
800	-15.39	-92.78	25.12	52.54	-29.50	-7.06	-12.50	-150.43	1.05	0.59	24.50	10.77	2.81
850	-15.48	-98.41	24.75	46.60	-29.14	-9.45	-12.65	-158.81	1.05	0.59	24.62	11.05	2.86
900	-15.55	-103.43	24.38	40.62	-28.74	-11.73	-12.74	-167.06	1.04	0.59	24.41	11.24	2.84
940	-15.78	-109.86	24.07	34.80	-28.37	-14.25	-12.77	-175.23	1.04	0.59	24.41	11.07	2.89
1000	-15.70	-115.80	23.73	29.13	-28.03	-16.78	-12.88	177.31	1.04	0.59	24.81	11.17	2.84

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=43mA; Vcc=4.05V@Temp.=+25degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-18.00	-0.75	32.14	166.86	-34.94	1.20	-14.96	-11.23	1.04	0.75	27.84	13.78	2.16
60	-19.49	-8.58	32.18	165.80	-34.77	0.78	-15.04	-15.04	1.03	0.76	27.96	13.75	2.17
80	-18.34	6.57	32.03	161.40	-34.91	0.91	-15.08	-20.30	1.04	0.74	28.19	13.69	2.22
100	-17.44	-12.01	32.01	156.27	-34.73	1.71	-15.24	-25.56	1.04	0.75	27.92	13.68	2.29
120	-18.61	-7.59	31.86	152.84	-34.85	1.71	-15.27	-30.50	1.05	0.73	27.70	13.70	2.32
140	-18.22	-10.57	31.74	148.52	-34.87	2.69	-15.27	-35.68	1.05	0.72	27.44	13.82	2.29
160	-19.59	-14.87	31.47	145.02	-34.69	2.81	-15.25	-40.26	1.06	0.71	27.24	13.86	2.31
180	-17.74	-13.34	31.44	140.43	-34.62	3.22	-15.35	-45.39	1.06	0.71	27.31	13.74	2.29
200	-17.98	-10.74	31.25	136.63	-34.56	3.09	-15.39	-50.21	1.06	0.70	27.55	13.62	2.29
220	-19.01	-17.73	31.06	132.17	-34.44	4.09	-15.51	-55.07	1.06	0.69	27.65	13.62	2.38
240	-18.33	-16.01	30.90	128.89	-34.36	3.65	-15.49	-59.56	1.07	0.69	27.49	13.59	2.39
260	-18.22	-20.95	30.70	125.15	-34.27	4.25	-15.57	-64.22	1.07	0.68	27.51	13.69	2.43
280	-17.86	-24.82	30.48	121.45	-34.17	4.62	-15.58	-68.71	1.07	0.67	27.64	13.84	2.49
300	-18.05	-21.80	30.32	118.12	-34.14	5.14	-15.53	-73.71	1.08	0.66	27.48	13.86	2.58
320	-17.86	-24.29	30.11	114.65	-33.97	5.23	-15.57	-78.33	1.08	0.66	27.39	13.76	2.55
340	-18.09	-26.07	29.91	111.19	-33.87	5.49	-15.65	-82.88	1.09	0.65	27.33	13.66	2.55
360	-18.06	-33.66	29.71	108.10	-33.74	5.40	-15.69	-87.42	1.09	0.64	27.23	13.54	2.64
380	-17.76	-30.43	29.51	105.15	-33.59	5.61	-15.67	-91.57	1.09	0.64	27.18	13.56	2.64
400	-18.08	-36.64	29.29	101.72	-33.46	5.57	-15.75	-96.00	1.09	0.63	27.07	13.66	2.65
420	-17.92	-37.28	29.10	98.44	-33.30	5.80	-15.73	-100.60	1.09	0.63	26.96	13.70	2.67
440	-17.86	-36.99	28.87	95.94	-33.13	5.41	-15.72	-104.79	1.10	0.62	26.93	13.68	2.67
460	-17.90	-38.99	28.69	92.88	-32.99	5.27	-15.77	-109.77	1.10	0.62	27.08	13.65	2.72
480	-17.70	-40.23	28.51	89.84	-32.82	5.26	-15.82	-113.60	1.10	0.62	27.01	13.60	2.75
500	-18.03	-43.69	28.30	87.14	-32.68	4.98	-15.84	-117.94	1.10	0.61	27.08	13.58	2.77
520	-17.34	-46.73	28.12	84.11	-32.52	4.93	-15.81	-121.47	1.10	0.61	27.11	13.55	2.78
540	-17.70	-49.51	27.88	81.37	-32.32	4.62	-15.74	-125.48	1.10	0.60	27.11	13.51	2.79
560	-17.61	-49.50	27.72	78.53	-32.18	4.52	-15.79	-129.35	1.10	0.60	27.04	13.52	2.86
580	-17.90	-52.80	27.54	76.16	-32.00	4.12	-15.70	-133.90	1.10	0.60	27.02	13.51	2.83
600	-17.51	-53.72	27.38	73.22	-31.82	3.54	-15.74	-137.27	1.10	0.60	27.10	13.52	2.83
620	-17.39	-57.12	27.15	70.75	-31.65	3.09	-15.70	-141.45	1.10	0.60	27.05	13.55	2.85
640	-17.50	-58.23	27.00	68.23	-31.48	2.66	-15.72	-145.26	1.10	0.60	27.01	13.57	2.82
660	-17.69	-60.28	26.84	65.64	-31.30	1.95	-15.64	-149.06	1.10	0.60	27.16	13.57	2.88
680	-17.78	-63.10	26.62	63.22	-31.12	1.33	-15.67	-152.54	1.10	0.59	27.15	13.56	2.86
700	-17.57	-64.58	26.45	60.81	-30.96	0.86	-15.59	-156.28	1.10	0.59	27.06	13.51	2.83
750	-17.52	-72.25	26.04	54.50	-30.51	-0.91	-15.63	-165.28	1.09	0.59	26.79	13.32	2.86
800	-17.81	-78.86	25.62	48.61	-30.08	-3.00	-15.47	-173.72	1.09	0.59	26.68	13.54	2.89
850	-17.80	-84.48	25.24	42.72	-29.67	-5.24	-15.39	178.04	1.08	0.59	26.34	13.35	2.92
900	-17.72	-91.04	24.83	36.96	-29.27	-7.51	-15.25	170.08	1.08	0.59	25.85	13.12	2.87
940	-18.10	-97.82	24.45	31.39	-28.87	-9.87	-15.10	162.40	1.08	0.59	26.13	13.41	2.94
1000	-17.76	-104.45	24.11	25.92	-28.47	-12.56	-14.98	155.37	1.07	0.59	26.05	13.26	2.93

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=36mA; Vcc=3.95V@Temp.=-45degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-17.33	-5.34	31.88	167.07	-34.86	3.20	-14.04	-11.04	1.05	0.74	25.74	13.09	1.76
60	-17.40	-7.13	31.94	166.07	-34.75	0.30	-14.13	-14.25	1.04	0.75	25.72	13.14	1.79
80	-17.53	-0.19	31.79	161.77	-34.60	1.15	-14.05	-19.42	1.04	0.75	25.82	13.05	1.81
100	-16.77	-17.05	31.77	156.87	-34.66	1.68	-14.21	-24.57	1.04	0.74	25.61	13.01	1.90
120	-17.67	-14.31	31.64	153.61	-34.72	2.56	-14.25	-29.30	1.05	0.73	25.50	12.89	1.88
140	-17.61	-11.67	31.55	149.34	-34.55	2.80	-14.32	-34.04	1.05	0.73	25.31	12.84	1.86
160	-19.02	-19.81	31.30	145.88	-34.53	2.79	-14.34	-38.22	1.05	0.71	25.21	12.82	1.91
180	-17.58	-19.52	31.26	141.44	-34.33	2.87	-14.43	-42.84	1.05	0.72	25.33	12.75	1.89
200	-17.35	-16.23	31.08	137.63	-34.32	3.26	-14.48	-47.26	1.05	0.71	25.62	12.91	1.97
220	-18.50	-24.35	30.91	133.25	-34.27	3.62	-14.58	-51.76	1.06	0.70	25.85	12.97	1.94
240	-18.11	-22.66	30.77	129.99	-34.13	3.57	-14.55	-56.05	1.06	0.70	25.72	12.87	1.95
260	-17.64	-28.04	30.58	126.38	-34.07	3.41	-14.65	-60.40	1.06	0.69	25.74	12.90	2.01
280	-17.58	-31.05	30.38	122.72	-34.01	3.90	-14.69	-64.77	1.07	0.68	25.75	12.77	2.05
300	-18.09	-29.65	30.22	119.35	-33.87	4.36	-14.67	-69.26	1.07	0.67	25.61	12.62	2.09
320	-17.59	-32.40	30.05	115.94	-33.78	4.50	-14.74	-73.53	1.07	0.67	25.62	12.78	2.07
340	-18.21	-32.98	29.86	112.46	-33.65	4.59	-14.83	-77.88	1.07	0.66	25.64	12.88	2.09
360	-18.04	-39.29	29.67	109.39	-33.55	4.38	-14.89	-82.22	1.08	0.65	25.62	12.83	2.17
380	-17.84	-36.99	29.49	106.29	-33.38	4.34	-14.93	-86.32	1.08	0.65	25.62	12.92	2.18
400	-18.60	-40.86	29.28	102.86	-33.20	4.69	-15.03	-90.57	1.08	0.65	25.57	12.87	2.18
420	-18.15	-43.51	29.11	99.63	-33.08	4.30	-15.04	-95.19	1.08	0.64	25.50	12.89	2.19
440	-18.11	-44.69	28.89	97.19	-32.94	4.26	-15.10	-99.06	1.08	0.64	25.48	12.89	2.20
460	-18.18	-45.06	28.72	94.18	-32.80	4.09	-15.21	-103.53	1.08	0.63	25.67	12.92	2.24
480	-18.07	-46.87	28.54	90.98	-32.64	3.82	-15.26	-107.05	1.08	0.63	25.66	12.89	2.28
500	-18.44	-48.57	28.37	88.34	-32.48	3.61	-15.34	-111.39	1.09	0.63	25.79	12.95	2.29
520	-17.71	-52.40	28.20	85.31	-32.34	3.34	-15.34	-114.95	1.08	0.63	25.94	12.99	2.29
540	-17.87	-54.15	27.96	82.40	-32.12	2.63	-15.31	-119.35	1.08	0.62	25.96	13.01	2.27
560	-17.88	-53.93	27.82	79.51	-31.98	2.56	-15.39	-123.13	1.08	0.62	25.93	13.00	2.32
580	-18.22	-58.35	27.65	77.12	-31.80	2.08	-15.32	-127.55	1.08	0.62	25.97	12.97	2.34
600	-18.03	-58.67	27.51	74.09	-31.60	1.70	-15.37	-131.06	1.08	0.63	26.11	13.08	2.33
620	-17.86	-62.10	27.28	71.59	-31.45	1.08	-15.38	-135.39	1.08	0.62	26.11	13.07	2.31
640	-18.23	-62.75	27.13	69.03	-31.28	0.56	-15.45	-139.10	1.08	0.62	26.06	13.00	2.29
660	-18.29	-65.39	26.97	66.47	-31.12	-0.07	-15.43	-142.88	1.08	0.62	26.22	13.02	2.35
680	-18.39	-67.83	26.77	63.92	-30.93	-0.77	-15.49	-146.52	1.08	0.62	26.32	13.07	2.33
700	-17.98	-69.75	26.61	61.48	-30.75	-1.41	-15.45	-150.11	1.08	0.62	26.39	13.11	2.31
750	-18.05	-77.73	26.22	55.13	-30.37	-3.23	-15.44	-158.81	1.07	0.61	26.33	13.24	2.34
800	-18.27	-83.52	25.82	49.04	-29.89	-5.52	-15.32	-167.62	1.07	0.62	26.24	13.11	2.40
850	-18.32	-89.47	25.44	43.01	-29.51	-7.74	-15.31	-176.22	1.07	0.62	26.16	13.25	2.36
900	-18.31	-95.57	25.05	37.12	-29.08	-10.10	-15.25	175.29	1.06	0.62	25.82	13.25	2.33
940	-18.58	-102.62	24.71	31.45	-28.71	-12.82	-15.10	167.49	1.06	0.62	25.99	13.23	2.40
1000	-18.37	-108.53	24.37	25.81	-28.34	-15.45	-15.02	160.10	1.05	0.62	26.17	13.22	2.37

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=29mA; Vcc=3.84V@Temp.=-45degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-13.77	-7.36	30.97	167.44	-34.29	1.26	-11.23	-10.41	1.05	0.74	23.99	11.38	1.74
60	-14.08	-11.55	31.06	166.79	-34.17	0.37	-11.34	-13.12	1.04	0.75	24.02	11.46	1.75
80	-14.19	-5.08	30.90	162.57	-34.10	1.04	-11.34	-17.56	1.04	0.74	24.17	11.33	1.78
100	-13.91	-17.33	30.88	158.17	-34.03	1.49	-11.43	-22.09	1.04	0.75	23.92	11.20	1.84
120	-14.76	-16.48	30.78	154.83	-34.11	1.06	-11.46	-26.28	1.05	0.73	23.78	11.00	1.88
140	-14.45	-17.98	30.70	150.83	-33.99	2.01	-11.52	-30.55	1.04	0.73	23.55	10.71	1.86
160	-15.24	-24.71	30.49	147.51	-33.97	1.93	-11.54	-34.40	1.05	0.71	23.37	10.74	1.88
180	-14.47	-24.94	30.45	143.17	-33.91	2.39	-11.62	-38.48	1.05	0.72	23.41	10.57	1.85
200	-14.76	-24.56	30.30	139.38	-33.80	2.50	-11.68	-42.50	1.05	0.71	23.70	10.78	1.87
220	-15.25	-31.30	30.16	135.21	-33.74	2.58	-11.78	-46.60	1.05	0.70	23.92	11.05	1.92
240	-15.45	-30.57	30.03	132.06	-33.67	2.80	-11.80	-50.56	1.05	0.69	23.76	11.03	1.91
260	-15.11	-37.77	29.84	128.63	-33.58	2.32	-11.90	-54.41	1.05	0.68	23.77	10.90	1.95
280	-14.95	-38.49	29.69	125.07	-33.50	2.97	-11.95	-58.44	1.06	0.68	23.70	10.72	2.03
300	-15.46	-38.18	29.56	121.71	-33.41	2.84	-11.95	-62.56	1.06	0.67	23.47	10.49	2.11
320	-15.15	-40.15	29.38	118.39	-33.28	3.21	-12.07	-66.53	1.06	0.67	23.44	10.68	2.09
340	-15.68	-43.45	29.22	114.95	-33.16	2.92	-12.17	-70.41	1.06	0.66	23.47	10.83	2.10
360	-15.45	-47.20	29.06	112.00	-33.04	3.03	-12.28	-74.43	1.06	0.66	23.47	10.88	2.18
380	-15.64	-46.72	28.89	108.98	-32.93	2.93	-12.32	-78.11	1.06	0.65	23.48	10.95	2.16
400	-16.07	-50.96	28.72	105.56	-32.76	3.03	-12.46	-82.02	1.06	0.65	23.45	10.85	2.14
420	-15.92	-52.55	28.55	102.36	-32.65	2.69	-12.49	-86.37	1.07	0.64	23.35	10.80	2.15
440	-16.06	-54.34	28.35	99.89	-32.51	2.73	-12.60	-89.97	1.07	0.64	23.35	10.84	2.21
460	-16.18	-55.94	28.21	96.78	-32.37	2.50	-12.73	-93.86	1.07	0.63	23.56	10.86	2.23
480	-16.17	-57.00	28.06	93.62	-32.23	2.03	-12.80	-97.29	1.07	0.63	23.57	10.93	2.27
500	-16.47	-59.53	27.90	90.97	-32.07	1.89	-12.90	-101.23	1.07	0.63	23.73	10.93	2.25
520	-15.87	-62.47	27.74	87.92	-31.92	1.82	-12.94	-104.83	1.07	0.63	23.87	10.98	2.25
540	-15.98	-63.65	27.52	85.23	-31.74	1.40	-12.97	-108.59	1.07	0.62	24.01	11.08	2.26
560	-16.21	-64.24	27.40	82.23	-31.58	0.99	-13.06	-112.19	1.07	0.63	23.97	11.07	2.29
580	-16.47	-67.16	27.23	79.84	-31.41	0.37	-13.08	-116.36	1.06	0.62	23.99	10.99	2.31
600	-16.33	-68.25	27.10	76.73	-31.25	-0.08	-13.15	-119.65	1.06	0.62	24.19	11.11	2.31
620	-16.35	-71.39	26.89	74.31	-31.08	-0.67	-13.19	-123.74	1.06	0.62	24.26	11.09	2.33
640	-16.61	-71.91	26.75	71.65	-30.93	-1.27	-13.31	-127.08	1.06	0.62	24.19	11.03	2.27
660	-16.69	-74.47	26.62	69.10	-30.76	-1.99	-13.35	-130.82	1.06	0.62	24.29	11.01	2.33
680	-16.84	-77.68	26.42	66.61	-30.60	-2.42	-13.45	-134.23	1.06	0.62	24.45	11.12	2.33
700	-16.58	-78.30	26.28	64.18	-30.43	-3.41	-13.46	-137.73	1.06	0.62	24.66	11.17	2.32
750	-16.56	-84.39	25.92	57.65	-30.04	-5.17	-13.63	-146.69	1.06	0.62	24.84	11.39	2.31
800	-16.86	-91.89	25.54	51.52	-29.62	-7.36	-13.65	-155.35	1.05	0.61	24.62	11.16	2.34
850	-17.02	-96.85	25.17	45.50	-29.25	-9.44	-13.77	-163.75	1.05	0.61	24.85	11.39	2.35
900	-17.03	-102.79	24.80	39.51	-28.85	-11.99	-13.82	-172.16	1.05	0.61	24.71	11.59	2.33
940	-17.21	-109.54	24.48	33.67	-28.46	-14.59	-13.82	179.73	1.04	0.62	24.67	11.44	2.38
1000	-17.06	-115.07	24.16	28.01	-28.11	-17.21	-13.85	171.93	1.04	0.61	25.13	11.56	2.35

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=43mA; Vcc=4.02V@Temp.=-45degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-19.79	3.39	32.55	166.58	-35.22	1.80	-17.05	-11.70	1.04	0.75	27.35	14.18	1.78
60	-20.73	-9.67	32.57	165.66	-35.25	2.22	-17.11	-16.00	1.04	0.75	27.27	14.19	1.78
80	-20.81	7.97	32.42	161.25	-35.13	1.77	-17.12	-21.50	1.04	0.74	27.29	14.14	1.84
100	-20.82	-11.36	32.38	156.10	-35.10	2.56	-17.24	-27.62	1.04	0.74	27.11	14.11	1.94
120	-21.20	0.63	32.24	152.61	-35.04	2.66	-17.24	-33.01	1.05	0.74	27.02	14.12	1.92
140	-20.10	-7.46	32.12	148.27	-35.01	2.80	-17.30	-38.46	1.05	0.73	26.89	14.07	1.85
160	-23.03	-14.11	31.83	144.62	-34.92	3.11	-17.29	-42.74	1.06	0.71	26.85	14.07	1.95
180	-20.50	-10.10	31.80	140.07	-34.83	3.77	-17.35	-47.84	1.05	0.72	26.99	14.02	1.89
200	-19.99	-5.30	31.61	136.23	-34.73	3.97	-17.35	-52.75	1.06	0.71	27.28	14.06	2.00
220	-21.39	-13.15	31.42	131.71	-34.70	4.25	-17.44	-57.71	1.06	0.70	27.45	14.10	1.96
240	-20.21	-13.64	31.25	128.46	-34.62	4.54	-17.36	-62.26	1.07	0.69	27.35	14.06	1.97
260	-20.16	-18.20	31.05	124.89	-34.52	4.88	-17.40	-67.13	1.07	0.68	27.35	14.08	2.01
280	-19.60	-19.88	30.85	121.09	-34.38	5.07	-17.41	-71.95	1.07	0.68	27.49	14.09	2.05
300	-19.83	-15.76	30.68	117.66	-34.26	5.49	-17.33	-76.76	1.08	0.67	27.43	14.06	2.13
320	-19.54	-19.77	30.48	114.23	-34.16	5.49	-17.35	-81.56	1.08	0.67	27.42	14.14	2.11
340	-19.92	-20.70	30.28	110.74	-34.02	5.72	-17.38	-86.24	1.08	0.66	27.39	14.11	2.14
360	-19.71	-29.72	30.06	107.59	-33.88	5.69	-17.40	-91.07	1.08	0.65	27.30	14.04	2.20
380	-19.36	-25.24	29.87	104.55	-33.75	5.74	-17.35	-95.34	1.09	0.65	27.25	14.11	2.20
400	-20.02	-29.78	29.64	101.13	-33.56	5.70	-17.42	-99.88	1.09	0.64	27.17	14.14	2.22
420	-19.80	-33.76	29.46	97.88	-33.39	5.72	-17.35	-104.93	1.09	0.64	27.08	14.16	2.23
440	-19.57	-32.96	29.22	95.31	-33.25	5.69	-17.37	-109.27	1.09	0.64	27.06	14.21	2.26
460	-19.68	-34.89	29.06	92.30	-33.11	5.50	-17.41	-114.01	1.09	0.63	27.19	14.16	2.26
480	-19.39	-35.33	28.87	89.10	-32.96	5.36	-17.43	-117.71	1.09	0.63	27.12	14.15	2.30
500	-19.70	-38.10	28.68	86.45	-32.76	4.92	-17.45	-122.18	1.09	0.63	27.19	14.18	2.31
520	-18.72	-42.63	28.50	83.33	-32.58	4.64	-17.35	-125.87	1.09	0.63	27.23	14.16	2.29
540	-19.31	-45.88	28.26	80.60	-32.40	4.41	-17.27	-130.36	1.09	0.62	27.24	14.14	2.29
560	-19.25	-43.70	28.11	77.68	-32.21	3.99	-17.27	-134.20	1.09	0.63	27.19	14.13	2.34
580	-19.36	-46.72	27.93	75.25	-32.05	3.71	-17.11	-138.80	1.09	0.62	27.20	14.14	2.34
600	-18.99	-49.48	27.76	72.26	-31.86	3.13	-17.09	-142.21	1.09	0.62	27.27	14.17	2.35
620	-18.98	-52.05	27.54	69.78	-31.69	2.56	-17.04	-146.83	1.09	0.62	27.22	14.16	2.36
640	-19.18	-53.41	27.37	67.27	-31.51	2.00	-17.03	-150.33	1.09	0.62	27.21	14.17	2.33
660	-19.06	-55.27	27.20	64.71	-31.29	1.58	-16.94	-154.19	1.09	0.62	27.35	14.20	2.38
680	-19.41	-58.54	27.01	62.23	-31.12	0.62	-16.97	-157.89	1.09	0.62	27.39	14.22	2.37
700	-18.97	-61.36	26.85	59.89	-30.97	-0.23	-16.84	-161.48	1.08	0.62	27.31	14.18	2.34
750	-19.05	-69.02	26.43	53.45	-30.55	-1.94	-16.74	-170.26	1.08	0.62	27.04	14.07	2.36
800	-19.23	-76.12	26.01	47.37	-30.10	-4.01	-16.48	-178.80	1.08	0.62	27.05	14.21	2.41
850	-19.31	-81.39	25.61	41.57	-29.68	-6.39	-16.32	172.87	1.07	0.62	26.78	14.11	2.38
900	-19.23	-88.99	25.21	35.76	-29.25	-8.87	-16.13	164.82	1.07	0.62	26.35	13.88	2.37
940	-19.45	-96.16	24.86	30.01	-28.87	-11.44	-15.90	157.45	1.07	0.62	26.65	14.15	2.43
1000	-19.34	-103.21	24.50	24.43	-28.49	-14.07	-15.74	150.40	1.06	0.62	26.60	14.00	2.39

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=36mA; Vcc=3.91V@Temp.=+85degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-13.16	-8.30	30.75	167.54	-33.98	2.46	-10.46	-10.46	1.04	0.75	26.80	12.53	2.54
60	-13.80	-8.09	30.82	166.78	-34.05	0.51	-10.55	-13.20	1.04	0.75	26.91	12.57	2.56
80	-13.50	-3.66	30.69	162.52	-34.12	0.99	-10.66	-17.60	1.05	0.74	27.14	12.52	2.59
100	-12.90	-14.25	30.66	157.95	-34.00	1.19	-10.77	-22.02	1.04	0.74	26.83	12.47	2.65
120	-13.93	-14.16	30.55	154.41	-33.87	1.22	-10.83	-26.01	1.04	0.74	26.54	12.48	2.66
140	-13.32	-15.43	30.44	150.43	-34.00	1.47	-10.86	-30.53	1.05	0.72	26.26	12.54	2.67
160	-14.10	-21.93	30.23	147.13	-33.93	1.75	-10.88	-34.59	1.05	0.70	26.02	12.48	2.68
180	-13.45	-23.41	30.17	142.73	-33.84	2.00	-10.97	-38.90	1.05	0.71	26.00	12.44	2.67
200	-13.62	-22.90	30.02	138.96	-33.75	1.98	-11.05	-43.01	1.05	0.70	26.19	12.45	2.68
220	-14.09	-29.16	29.86	134.71	-33.73	2.25	-11.12	-47.36	1.06	0.69	26.33	12.42	2.76
240	-14.31	-29.07	29.72	131.57	-33.63	2.63	-11.15	-51.51	1.06	0.68	26.16	12.40	2.75
260	-14.08	-33.85	29.52	127.98	-33.61	3.00	-11.25	-55.67	1.07	0.67	26.26	12.40	2.84
280	-13.76	-34.79	29.33	124.42	-33.50	3.23	-11.29	-60.17	1.07	0.66	26.29	12.34	2.89
300	-14.07	-34.48	29.18	121.08	-33.45	3.18	-11.35	-64.42	1.07	0.65	25.98	12.26	2.97
320	-13.80	-36.73	29.01	117.76	-33.27	3.42	-11.43	-68.58	1.07	0.65	25.82	12.31	2.94
340	-14.53	-38.79	28.83	114.32	-33.21	3.62	-11.51	-72.77	1.08	0.64	25.74	12.31	2.95
360	-14.24	-42.84	28.66	111.39	-33.09	3.89	-11.61	-76.81	1.08	0.63	25.66	12.28	3.05
380	-14.18	-42.19	28.48	108.38	-32.98	3.92	-11.68	-80.59	1.08	0.63	25.61	12.28	3.02
400	-14.62	-46.68	28.30	105.01	-32.89	3.52	-11.77	-84.67	1.08	0.61	25.54	12.27	3.05
420	-14.55	-48.81	28.11	101.79	-32.73	3.54	-11.84	-88.68	1.08	0.61	25.45	12.36	3.06
440	-14.59	-49.46	27.89	99.39	-32.57	3.81	-11.91	-92.50	1.09	0.61	25.41	12.29	3.06
460	-14.67	-51.00	27.74	96.33	-32.47	3.73	-12.01	-96.55	1.09	0.60	25.59	12.31	3.12
480	-14.69	-52.48	27.57	93.24	-32.32	3.40	-12.10	-100.16	1.09	0.60	25.56	12.23	3.16
500	-14.91	-55.00	27.38	90.57	-32.17	3.42	-12.21	-103.98	1.09	0.59	25.65	12.30	3.20
520	-14.41	-57.99	27.21	87.69	-32.00	3.46	-12.24	-107.36	1.09	0.59	25.74	12.29	3.17
540	-14.53	-59.86	27.00	84.83	-31.85	2.67	-12.33	-111.49	1.09	0.58	25.82	12.26	3.18
560	-14.62	-60.26	26.85	81.97	-31.70	2.70	-12.43	-114.86	1.09	0.58	25.75	12.27	3.25
580	-14.84	-63.10	26.69	79.61	-31.55	2.32	-12.44	-119.07	1.09	0.58	25.73	12.27	3.24
600	-14.75	-64.07	26.54	76.70	-31.39	1.93	-12.53	-122.34	1.09	0.58	25.86	12.23	3.24
620	-14.71	-66.99	26.32	74.31	-31.20	1.58	-12.57	-126.31	1.09	0.57	25.85	12.26	3.24
640	-14.77	-68.45	26.19	71.74	-31.06	0.96	-12.67	-129.60	1.09	0.57	25.80	12.28	3.24
660	-14.95	-70.49	26.04	69.19	-30.88	0.55	-12.67	-133.25	1.08	0.57	25.94	12.23	3.29
680	-15.06	-72.91	25.86	66.59	-30.71	-0.09	-12.76	-136.81	1.08	0.57	25.99	12.27	3.31
700	-14.87	-74.23	25.67	64.22	-30.58	-0.66	-12.79	-140.41	1.08	0.56	26.02	12.27	3.26
750	-14.93	-80.13	25.32	57.99	-30.17	-2.20	-12.91	-148.60	1.08	0.56	25.83	12.23	3.28
800	-15.14	-87.19	24.91	51.98	-29.74	-4.05	-12.98	-156.98	1.07	0.56	25.67	12.27	3.33
850	-15.20	-91.75	24.54	46.20	-29.37	-6.24	-13.09	-165.17	1.07	0.56	25.45	12.19	3.32
900	-15.13	-97.17	24.15	40.37	-28.97	-8.23	-13.13	-173.11	1.07	0.55	24.99	12.05	3.34
940	-15.41	-103.35	23.79	34.72	-28.58	-10.61	-13.15	178.98	1.07	0.55	25.17	12.22	3.37
1000	-15.27	-109.31	23.44	29.35	-28.22	-13.04	-13.16	171.69	1.06	0.55	25.21	12.11	3.36

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=29mA; Vcc=3.81V@Temp.=+85degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-10.65	-7.41	29.62	168.21	-33.72	0.21	-8.51	-9.87	1.05	0.73	25.51	10.96	2.53
60	-11.13	-9.56	29.76	167.57	-33.68	-0.16	-8.57	-12.20	1.04	0.74	25.62	11.02	2.55
80	-11.30	-5.92	29.63	163.27	-33.57	0.76	-8.62	-16.08	1.05	0.74	25.91	10.90	2.57
100	-11.04	-16.34	29.64	159.33	-33.55	0.91	-8.72	-20.01	1.04	0.74	25.59	10.94	2.64
120	-11.62	-18.03	29.57	155.83	-33.46	0.72	-8.76	-23.90	1.04	0.73	25.28	10.71	2.64
140	-11.40	-19.08	29.46	151.90	-33.36	0.81	-8.82	-27.92	1.04	0.73	24.97	10.51	2.65
160	-11.99	-25.26	29.27	148.85	-33.38	1.56	-8.85	-31.68	1.05	0.71	24.66	10.52	2.65
180	-11.48	-25.99	29.21	144.60	-33.34	1.95	-8.93	-35.50	1.05	0.71	24.59	10.43	2.62
200	-11.59	-26.83	29.08	140.89	-33.26	2.35	-8.97	-39.47	1.05	0.70	24.74	10.46	2.66
220	-11.98	-31.64	28.96	136.86	-33.13	2.19	-9.07	-43.33	1.05	0.69	24.88	10.66	2.74
240	-11.88	-32.17	28.82	133.86	-33.13	2.04	-9.08	-47.27	1.05	0.68	24.65	10.63	2.74
260	-11.75	-35.91	28.66	130.66	-33.00	2.26	-9.18	-51.22	1.05	0.68	24.77	10.59	2.82
280	-11.80	-38.04	28.49	127.08	-33.01	2.45	-9.25	-55.03	1.05	0.66	24.75	10.29	2.85
300	-12.12	-38.67	28.38	123.72	-32.86	2.75	-9.30	-58.97	1.05	0.66	24.33	10.07	2.94
320	-12.06	-41.85	28.22	120.49	-32.76	2.85	-9.38	-62.90	1.05	0.65	24.10	10.34	2.93
340	-12.51	-43.73	28.07	117.12	-32.66	3.00	-9.49	-66.57	1.06	0.64	23.98	10.38	2.94
360	-12.43	-48.19	27.91	114.26	-32.53	2.81	-9.58	-70.34	1.05	0.64	23.87	10.35	3.00
380	-12.56	-46.93	27.74	111.31	-32.45	3.00	-9.65	-74.04	1.06	0.63	23.84	10.44	2.99
400	-12.81	-51.56	27.58	108.10	-32.29	2.78	-9.77	-77.87	1.06	0.62	23.78	10.40	3.01
420	-12.70	-52.84	27.44	104.96	-32.19	2.58	-9.86	-81.54	1.06	0.62	23.65	10.23	3.02
440	-12.97	-54.53	27.24	102.54	-32.05	2.67	-9.93	-85.07	1.06	0.61	23.59	10.31	3.05
460	-12.96	-56.22	27.11	99.52	-31.93	2.50	-10.03	-88.86	1.06	0.61	23.83	10.34	3.14
480	-13.00	-57.96	26.96	96.37	-31.78	2.21	-10.11	-92.25	1.06	0.60	23.80	10.28	3.13
500	-13.27	-60.39	26.81	93.68	-31.64	2.00	-10.23	-95.77	1.06	0.60	23.89	10.32	3.15
520	-12.88	-62.56	26.62	90.77	-31.56	1.74	-10.28	-99.18	1.06	0.59	24.03	10.30	3.18
540	-13.05	-65.47	26.45	88.13	-31.36	1.47	-10.30	-102.44	1.06	0.59	24.14	10.43	3.19
560	-13.23	-65.68	26.32	85.20	-31.23	1.32	-10.41	-105.81	1.06	0.59	24.07	10.42	3.24
580	-13.43	-69.16	26.19	82.67	-31.07	0.54	-10.47	-109.68	1.06	0.58	24.10	10.30	3.23
600	-13.28	-69.46	26.04	79.72	-30.92	0.38	-10.58	-112.84	1.06	0.58	24.28	10.52	3.22
620	-13.29	-72.38	25.85	77.34	-30.77	-0.17	-10.64	-116.51	1.06	0.58	24.35	10.49	3.23
640	-13.50	-73.90	25.73	74.78	-30.61	-0.34	-10.75	-119.82	1.05	0.58	24.26	10.38	3.22
660	-13.55	-75.53	25.56	72.21	-30.45	-1.11	-10.79	-123.13	1.05	0.57	24.34	10.43	3.25
680	-13.75	-78.25	25.41	69.74	-30.29	-1.76	-10.89	-126.66	1.05	0.57	24.48	10.48	3.28
700	-13.57	-79.08	25.26	67.33	-30.15	-2.54	-10.96	-129.94	1.05	0.57	24.66	10.56	3.23
750	-13.56	-85.89	24.90	61.09	-29.78	-3.95	-11.25	-138.26	1.05	0.56	24.68	10.72	3.27
800	-13.85	-91.82	24.54	54.94	-29.35	-5.91	-11.33	-146.40	1.04	0.56	24.47	10.55	3.31
850	-13.98	-96.57	24.17	49.02	-28.97	-8.09	-11.53	-154.38	1.04	0.56	24.46	10.72	3.33
900	-13.92	-102.00	23.82	43.19	-28.60	-10.20	-11.68	-162.37	1.04	0.55	24.19	10.92	3.32
940	-14.23	-107.28	23.49	37.39	-28.23	-12.55	-11.78	-170.26	1.04	0.55	24.21	10.83	3.34
1000	-14.09	-112.92	23.17	31.87	-27.87	-15.02	-11.87	-177.72	1.03	0.55	24.50	10.89	3.33

TYPE: MMIC Amplifier
MODEL: MAR-8ASM Reference Data:RDF-994
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER: PORT IN=-30dBm, PORT OUT=0dBm; Icc=43mA; Vcc=3.99V@Temp.=+85degC

Definitions:
Input Return Loss=-S11(dB)
Gain(Power Gain)=S21(dB)
Reverse Isolation=-S12(dB)
Output Return Loss=-S22(dB)

FREQ	S11		S21		S12		S22		Stability		IP-3 Output	1 dB Compression Output	Noise Figure
(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta	(dBm)	(dBm)	(dB)
50	-15.29	-1.81	31.52	167.12	-34.41	-0.03	-12.53	-10.96	1.04	0.76	28.14	13.11	2.58
60	-16.13	-6.70	31.57	166.17	-34.48	0.38	-12.61	-14.28	1.04	0.75	28.21	13.12	2.60
80	-15.53	-0.94	31.44	161.77	-34.46	1.20	-12.67	-19.14	1.04	0.74	28.39	13.08	2.62
100	-15.02	-12.97	31.38	156.97	-34.42	0.67	-12.84	-23.82	1.04	0.74	28.09	13.05	2.70
120	-16.20	-12.38	31.27	153.41	-34.39	1.95	-12.89	-28.30	1.05	0.73	27.83	13.11	2.72
140	-15.57	-14.19	31.14	149.15	-34.34	1.46	-12.92	-33.05	1.05	0.73	27.54	13.24	2.69
160	-16.67	-19.15	30.89	145.71	-34.27	2.29	-12.96	-37.47	1.05	0.71	27.34	13.28	2.70
180	-15.40	-17.79	30.84	141.22	-34.26	2.51	-13.04	-42.18	1.06	0.71	27.37	13.13	2.70
200	-15.72	-16.96	30.66	137.40	-34.22	2.38	-13.09	-46.79	1.06	0.70	27.58	12.92	2.69
220	-16.32	-23.04	30.47	132.91	-34.14	2.89	-13.20	-51.50	1.07	0.68	27.67	12.84	2.77
240	-16.11	-21.96	30.32	129.75	-34.06	2.83	-13.20	-55.97	1.07	0.68	27.49	12.77	2.78
260	-15.58	-29.11	30.13	126.20	-34.02	3.67	-13.28	-60.48	1.07	0.67	27.58	12.88	2.85
280	-15.72	-29.58	29.93	122.51	-33.92	3.84	-13.30	-65.23	1.08	0.66	27.70	13.05	2.92
300	-15.81	-27.92	29.77	119.13	-33.85	4.38	-13.31	-69.96	1.08	0.65	27.51	13.07	2.97
320	-15.60	-30.96	29.55	115.60	-33.72	4.28	-13.39	-74.46	1.08	0.64	27.34	12.94	2.95
340	-15.99	-31.63	29.36	112.18	-33.60	4.59	-13.48	-78.91	1.09	0.64	27.26	12.81	2.98
360	-15.82	-37.02	29.16	109.20	-33.54	4.52	-13.56	-83.28	1.09	0.62	27.11	12.71	3.05
380	-15.78	-35.83	28.96	106.19	-33.40	4.97	-13.58	-87.26	1.10	0.62	27.06	12.77	3.06
400	-16.25	-41.01	28.76	102.82	-33.23	4.90	-13.67	-91.58	1.10	0.61	26.96	12.87	3.09
420	-16.10	-41.56	28.58	99.68	-33.11	5.14	-13.72	-95.98	1.10	0.61	26.84	12.86	3.08
440	-15.93	-42.59	28.35	97.11	-32.98	5.09	-13.77	-99.90	1.10	0.60	26.80	12.86	3.10
460	-16.03	-44.80	28.18	94.09	-32.80	5.07	-13.82	-104.21	1.10	0.60	26.95	12.81	3.16
480	-15.94	-46.61	27.99	91.00	-32.68	4.87	-13.90	-107.97	1.10	0.59	26.85	12.81	3.19
500	-16.16	-48.46	27.79	88.35	-32.50	4.49	-13.98	-112.03	1.11	0.59	26.92	12.76	3.22
520	-15.56	-52.39	27.60	85.31	-32.37	4.59	-13.99	-115.61	1.10	0.59	26.95	12.72	3.22
540	-15.76	-55.15	27.40	82.77	-32.20	3.97	-13.99	-119.74	1.10	0.58	26.94	12.72	3.23
560	-15.84	-54.70	27.22	79.77	-32.01	4.01	-14.04	-123.29	1.10	0.58	26.88	12.71	3.29
580	-15.99	-57.24	27.03	77.37	-31.85	3.68	-14.02	-127.58	1.10	0.58	26.87	12.69	3.26
600	-15.78	-58.48	26.88	74.47	-31.69	3.53	-14.09	-131.03	1.10	0.58	26.89	12.68	3.28
620	-15.74	-61.74	26.66	72.07	-31.52	2.98	-14.10	-135.09	1.10	0.57	26.85	12.71	3.28
640	-15.81	-62.18	26.50	69.51	-31.35	2.55	-14.16	-138.61	1.10	0.57	26.79	12.75	3.26
660	-15.92	-64.69	26.33	67.10	-31.16	2.01	-14.12	-142.28	1.10	0.57	26.91	12.77	3.32
680	-16.09	-67.70	26.13	64.65	-30.98	1.37	-14.17	-145.79	1.10	0.57	26.91	12.76	3.32
700	-15.85	-68.64	25.99	62.15	-30.86	0.84	-14.18	-149.49	1.10	0.57	26.83	12.71	3.29
750	-15.92	-75.66	25.57	55.94	-30.41	-0.71	-14.26	-157.93	1.10	0.56	26.49	12.57	3.29
800	-16.05	-82.37	25.13	50.06	-29.99	-2.56	-14.15	-166.29	1.09	0.56	26.36	12.73	3.38
850	-16.09	-87.09	24.75	44.34	-29.59	-4.57	-14.21	-174.47	1.09	0.56	25.99	12.54	3.37
900	-16.01	-93.23	24.35	38.59	-29.19	-6.87	-14.17	177.55	1.09	0.55	25.47	12.31	3.35
940	-16.30	-98.31	23.98	33.00	-28.81	-9.16	-14.11	169.76	1.08	0.55	25.69	12.57	3.38
1000	-16.07	-105.74	23.62	27.58	-28.42	-11.68	-14.05	162.66	1.08	0.55	25.64	12.43	3.38