ERA-51SM Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 65mA, Vd = 4.44V @Temperature = +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	-24.67	-175.84	17.81	174.34	-20.79	-1.73	-42.04	-35.16	1.06	0.71	36.18	18.43	3.06
100	-24.96	164.22	17.77	168.73	-20.38	-7.53	-45.28	-69.79	1.04	0.74	36.05	18.35	3.22
200	-25.67	139.99	17.74	158.60	-20.43	-14.31	-41.08	-114.40	1.05	0.73	36.93	18.40	3.14
300	-25.02	111.41	17.63	137.46	-20.42	-27.10	-33.55	-134.26	1.05	0.73	37.32	18.34	3.17
400	-23.62	82.00	17.50	116.81	-20.44	-40.62	-29.51	-151.66	1.06	0.71	36.84	18.28	3.14
500	-22.31	55.53	17.36	96.28	-20.44	-53.69	-27.17	-177.35	1.06	0.71	36.33	18.24	3.20
600	-21.79	30.76	17.19	75.58	-20.42	-67.10	-25.05	159.98	1.07	0.69	36.24	18.16	3.18
700	-20.99	8.31	17.00	55.22	-20.44	-80.30	-23.22	140.03	1.08	0.68	36.35	18.06	3.21
800	-20.81	-13.04	16.78	35.17	-20.41	-93.74	-21.65	121.28	1.08	0.67	36.17	17.89	3.21
900	-20.34	-31.94	16.55	15.14	-20.35	-107.17	-20.32	101.03	1.09	0.65	36.07	17.80	3.15
1000	-20.24	-51.21	16.32	-4.83	-20.32	-120.48	-19.37	83.43	1.10	0.64	35.58	17.71	3.14
1100	-20.53	-72.97	16.08	-24.51	-20.20	-133.84	-18.49	65.77	1.11	0.63	35.34	17.74	3.13
1200	-20.83	-93.79	15.83	-43.98	-20.24	-147.23	-17.74	48.42	1.12	0.61	35.16	17.66	3.16
1300	-20.93	-113.85	15.56	-63.42	-20.13	-160.90	-16.91	31.32	1.13	0.60	34.77	17.70	3.19
1400	-21.47	-134.05	15.31	-82.29	-20.07	-173.92	-16.46	13.75	1.14	0.59	34.49	17.68	3.07
1500	-21.98	-151.83	15.04	-101.79	-20.01	171.88	-15.75	-3.32	1.15	0.57	34.66	17.58	3.15
1600	-23.17	-172.02	14.80	-120.72	-19.88	158.79	-15.23	-20.51	1.15	0.56	35.26	17.54	3.16
1700	-23.83	168.36	14.53	-139.60	-19.88	145.25	-14.81	-38.95	1.17	0.55	34.87	17.48	3.14
1800	-25.38	153.59	14.29	-158.68	-19.73	131.18	-14.22	-56.63	1.17	0.54	34.17	17.51	3.12
1900	-26.98	132.81	14.07	-177.23	-19.57	117.64	-13.80	-73.88	1.17	0.54	33.59	17.51	3.18
2000	-28.41	110.28	13.81	164.31	-19.46	104.11	-13.48	-90.74	1.18	0.52	33.14	17.52	3.15
2100	-32.63	92.57	13.60	145.59	-19.28	89.92	-12.90	-108.57	1.17	0.52	32.76	17.38	3.14
2200	-35.89	80.76	13.34	127.25	-19.26	75.95	-12.71	-126.18	1.19	0.51	32.44	17.22	3.15
2300	-51.36	72.30	13.13	108.85	-19.10	61.83	-12.21	-143.67	1.19	0.50	32.12	16.97	3.16
2400	-39.09	-125.95	12.93	90.47	-18.95	47.83	-11.83	-160.47	1.18	0.50	31.73	16.83	3.19
2500	-31.94	-157.93	12.69	72.20	-18.86	33.40	-11.42	-178.05	1.19	0.49	31.27	16.69	3.26
2600	-27.61	-170.17	12.53	53.79	-18.70	19.25	-11.00	165.93	1.18	0.49	30.95	16.47	3.21
2700	-26.19	166.75	12.26	35.97	-18.69	4.45	-10.77	148.09	1.20	0.48	30.48	16.13	3.18
2800	-22.58	148.92	12.02	8.63	-18.42	-17.17	-10.14	124.48	1.17	0.47	29.99	16.17	3.24
2900	-19.37	111.12	11.61	-36.51	-18.08	-53.32	-9.44	85.47	1.15	0.47	29.72	15.80	3.20
3000	-17.23	72.68	11.35	-81.76	-17.67	-90.49	-8.65	47.11	1.10	0.47	29.40	15.62	3.17
3100	-15.38	30.37	11.17	-127.75	-17.15	-128.08	-7.84	7.54	1.03	0.48	28.99	15.01	3.24
3200	-13.00	-15.93	11.04	-175.74	-16.49	-166.13	-6.66	-32.94	0.92	0.50	28.58	15.01	3.23
3300	-11.19	-69.32	10.73	135.19	-15.94	153.60	-5.49	-77.04	0.84	0.53	28.10	14.84	3.29
3400	-7.49	-173.30	9.16	33.40	-15.31	70.58	-3.76	-168.26	0.71	0.54	27.71	14.47	3.31
3500	-5.38	94.88	6.29	-62.67	-15.22	-10.65	-3.29	104.63	0.69	0.50	27.40	14.35	3.33
3600	-4.51	13.41	3.21	-149.76	-14.89	-92.72	-3.10	26.31	0.67	0.44	27.14	14.21	3.32
3700	-3.91	-66.86	0.42	125.99	-14.80	-174.90	-3.00	-49.10	0.69	0.42	26.87	14.28	3.38
3800	-3.44	-141.87	-2.10	45.44	-15.21	103.91	-2.89	-123.46	0.77	0.42	26.53	13.74	3.37
4000	-3.35	151.25	-4.33	-29.94	-16.05	23.52	-2.95	168.40	1.03	0.41	25.70	13.31	3.24

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 52mA, Vd = 4.36V @Temperature = +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	-27.25	-178.59	17.63	174.31	-20.05	-3.02	-35.17	-6.23	1.04	0.76	32.01	16.43	3.01
100	-28.65	159.37	17.59	168.75	-20.15	-6.68	-33.84	-18.35	1.04	0.74	31.77	16.15	3.15
200	-28.55	130.73	17.56	158.62	-20.27	-13.72	-34.96	-49.92	1.05	0.73	32.19	16.34	3.08
300	-27.74	99.80	17.45	137.58	-20.28	-27.69	-32.05	-97.03	1.05	0.72	32.37	16.29	3.12
400	-25.24	72.85	17.34	116.86	-20.26	-40.69	-28.50	-129.14	1.06	0.72	31.99	16.30	3.10
500	-23.49	46.15	17.18	96.33	-20.25	-54.21	-26.66	-157.78	1.06	0.70	31.72	16.30	3.13
600	-22.73	22.06	17.02	75.64	-20.28	-67.22	-24.95	175.37	1.07	0.69	31.66	16.07	3.15
700	-21.80	-0.14	16.84	55.30	-20.25	-80.88	-23.19	152.03	1.08	0.68	31.90	15.95	3.15
800	-21.54	-21.19	16.61	35.19	-20.24	-94.12	-21.63	130.74	1.08	0.67	31.88	15.62	3.16
900	-20.99	-38.99	16.41	15.17	-20.20	-107.23	-20.23	109.49	1.09	0.65	31.78	15.65	3.09
1000	-20.88	-58.37	16.17	-4.81	-20.24	-120.74	-19.24	90.71	1.11	0.63	31.52	15.49	3.11
1100	-21.08	-80.50	15.94	-24.48	-20.12	-134.13	-18.38	71.85	1.11	0.63	31.47	15.69	3.06
1200	-21.35	-101.51	15.67	-44.04	-20.11	-147.93	-17.67	53.66	1.12	0.61	31.47	15.54	3.11
1300	-21.44	-121.38	15.43	-63.60	-19.99	-161.39	-16.83	35.95	1.13	0.60	31.30	15.58	3.13
1400	-21.95	-142.49	15.19	-82.48	-19.97	-174.63	-16.31	17.32	1.14	0.58	31.16	15.56	3.00
1500	-22.50	-160.47	14.91	-101.95	-19.85	171.55	-15.64	0.09	1.15	0.57	31.31	15.46	3.08
1600	-23.63	176.89	14.68	-120.99	-19.79	158.19	-15.10	-17.26	1.15	0.56	31.92	15.55	3.10
1700	-24.24	157.69	14.42	-139.85	-19.75	144.48	-14.66	-35.89	1.16	0.55	32.10	15.41	3.09
1800	-26.13	140.10	14.19	-159.05	-19.63	130.31	-14.04	-53.65	1.17	0.54	31.66	15.65	3.06
1900	-27.57	115.30	13.97	-177.51	-19.46	116.71	-13.69	-71.71	1.17	0.53	31.21	15.60	3.12
2000	-28.74	92.36	13.73	163.94	-19.37	102.88	-13.40	-88.95	1.17	0.52	30.96	15.59	3.09
2100	-32.78	62.42	13.49	145.13	-19.24	88.94	-12.84	-107.06	1.18	0.52	30.74	15.47	3.11
2200	-36.44	33.45	13.25	126.69	-19.13	75.07	-12.57	-124.73	1.18	0.51	30.51	15.21	3.12
2300	-39.69	-42.72	13.03	108.29	-19.04	61.05	-12.16	-142.51	1.19	0.50	30.36	15.09	3.12
2400	-33.93	-100.01	12.83	89.92	-18.90	47.05	-11.74	-159.37	1.18	0.49	30.13	15.10	3.11
2500	-29.68	-139.23	12.60	71.40	-18.77	32.29	-11.30	-177.04	1.18	0.49	29.72	15.14	3.17
2600	-26.54	-156.68	12.43	53.13	-18.66	18.42	-10.98	166.74	1.18	0.48	29.59	15.12	3.10
2700	-25.08	175.87	12.14	35.02	-18.63	3.42	-10.66	148.70	1.19	0.47	29.27	14.96	3.14
2800	-21.71	155.14	11.89	7.67	-18.31	-18.08	-10.06	125.01	1.17	0.47	28.92	15.05	3.18
2900	-18.95	114.61	11.47	-37.36	-18.09	-54.40	-9.46	85.39	1.16	0.45	28.70	14.80	3.14
3000	-16.71	74.61	11.21	-82.78	-17.64	-91.52	-8.63	46.94	1.10	0.46	28.36	14.64	3.09
3100	-14.74	32.08	11.03	-129.02	-17.14	-128.99	-7.79	7.68	1.03	0.46	28.03	14.19	3.17
3200	-12.69	-13.88	10.94	-177.01	-16.59	-166.82	-6.69	-32.53	0.92	0.48	27.62	14.24	3.16
3300	-10.78	-67.83	10.56	133.38	-15.96	152.95	-5.46	-76.88	0.83	0.51	27.26	14.06	3.20
3400	-7.31	-172.96	8.92	31.96	-15.34	70.05	-3.80	-168.33	0.70	0.52	26.86	13.77	3.26
3500	-5.23	95.46	6.02	-63.65	-15.31	-11.80	-3.28	105.26	0.67	0.48	26.63	13.63	3.25
3600	-4.44	13.55	2.90	-150.85	-14.95	-92.96	-3.14	26.62	0.68	0.43	26.30	13.52	3.27
3700	-3.81	-66.48	0.14	124.67	-14.82	-176.59	-3.05	-49.44	0.69	0.41	26.09	13.56	3.30
3800	-3.38	-141.64	-2.54	44.14	-15.47	103.47	-3.03	-123.31	0.85	0.41	25.82	13.06	3.30
4000	-3.32	151.21	-4.76	-30.25	-16.07	23.79	-3.03	169.25	1.12	0.41	24.98	12.64	3.17

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 78mA, Vd = 4.52V @Temperature = +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	-23.54	-179.55	17.91	174.34	-20.36	-5.49	-41.07	-164.12	1.04	0.75	40.31	19.61	3.14
100	-23.86	164.41	17.86	168.77	-20.43	-6.78	-43.21	-153.27	1.04	0.74	41.21	19.70	3.29
200	-24.26	143.08	17.84	158.61	-20.51	-13.77	-36.66	-163.97	1.05	0.74	44.01	19.61	3.18
300	-23.95	113.89	17.74	137.53	-20.47	-27.33	-32.47	-161.19	1.05	0.73	43.30	19.54	3.25
400	-22.60	87.35	17.60	116.85	-20.46	-40.21	-28.96	-170.25	1.05	0.72	43.40	19.38	3.19
500	-21.66	60.47	17.46	96.27	-20.50	-53.32	-26.76	170.53	1.06	0.71	40.83	19.31	3.26
600	-21.21	35.99	17.29	75.59	-20.50	-67.02	-24.68	150.67	1.07	0.70	40.04	19.30	3.26
700	-20.51	12.73	17.09	55.30	-20.49	-80.51	-23.00	132.66	1.07	0.68	39.11	19.16	3.29
800	-20.44	-8.47	16.87	35.21	-20.43	-93.47	-21.52	115.44	1.08	0.67	38.48	19.03	3.27
900	-19.95	-27.38	16.64	15.28	-20.40	-106.76	-20.17	96.62	1.09	0.66	37.97	18.89	3.21
1000	-19.91	-46.93	16.40	-4.65	-20.39	-120.55	-19.31	79.83	1.10	0.64	37.18	18.82	3.20
1100	-20.18	-68.37	16.15	-24.19	-20.36	-133.46	-18.45	62.58	1.11	0.63	36.70	18.75	3.19
1200	-20.56	-88.38	15.89	-43.74	-20.31	-146.71	-17.72	45.78	1.12	0.61	36.30	18.71	3.24
1300	-20.60	-108.13	15.63	-63.26	-20.21	-160.33	-16.96	28.74	1.13	0.60	35.64	18.79	3.25
1400	-21.13	-128.45	15.38	-82.03	-20.13	-173.53	-16.46	11.72	1.14	0.59	35.56	18.73	3.13
1500	-21.62	-145.47	15.11	-101.41	-20.04	172.85	-15.77	-5.12	1.15	0.58	35.58	18.64	3.20
1600	-22.77	-165.14	14.87	-120.33	-19.99	159.30	-15.25	-22.20	1.16	0.56	35.49	18.53	3.24
1700	-23.36	176.61	14.61	-139.15	-19.92	145.48	-14.82	-39.98	1.17	0.55	34.65	18.45	3.19
1800	-24.64	163.35	14.34	-158.20	-19.75	131.48	-14.23	-57.58	1.17	0.54	33.95	18.29	3.19
1900	-26.33	144.79	14.13	-176.73	-19.67	117.91	-13.76	-75.05	1.17	0.53	33.62	18.28	3.25
2000	-27.76	123.49	13.89	165.02	-19.52	104.74	-13.45	-91.51	1.18	0.53	33.33	18.31	3.24
2100	-31.22	112.63	13.66	146.14	-19.39	90.66	-12.90	-109.13	1.18	0.52	32.90	18.26	3.22
2200	-33.50	103.96	13.42	128.01	-19.31	76.41	-12.69	-126.68	1.19	0.51	32.57	18.08	3.28
2300	-39.09	117.96	13.18	109.66	-19.17	62.40	-12.20	-143.94	1.19	0.50	32.34	17.79	3.24
2400	-39.69	175.09	12.99	91.44	-19.06	48.52	-11.83	-160.65	1.19	0.50	32.02	17.53	3.26
2500	-32.85	177.25	12.76	73.10	-18.91	33.82	-11.40	-178.02	1.19	0.49	31.59	17.28	3.32
2600	-28.32	176.10	12.58	54.72	-18.72	20.22	-10.96	165.82	1.18	0.49	31.33	17.04	3.30
2700	-26.69	155.75	12.32	36.94	-18.70	5.26	-10.73	148.34	1.19	0.48	31.02	16.68	3.26
2800	-23.16	142.87	12.08	9.63	-18.41	-16.22	-10.10	124.69	1.17	0.48	30.50	16.71	3.35
2900	-19.77	106.73	11.68	-35.38	-18.09	-52.57	-9.33	85.61	1.15	0.47	30.26	16.38	3.29
3000	-17.73	69.83	11.43	-80.48	-17.62	-89.49	-8.54	47.31	1.09	0.48	30.02	16.18	3.24
3100	-15.90	28.73	11.26	-126.21	-17.15	-127.29	-7.77	7.97	1.03	0.49	29.65	15.58	3.32
3200	-13.45	-18.03	11.11	-173.99	-16.46	-165.19	-6.56	-32.93	0.93	0.52	29.20	15.54	3.31
3300	-11.66	-70.64	10.84	137.32	-15.90	154.24	-5.38	-76.94	0.85	0.55	28.85	15.37	3.37
3400	-7.71	-173.64	9.33	35.37	-15.28	71.22	-3.64	-168.16	0.71	0.57	28.40	15.00	3.39
3500	-5.54	94.86	6.49	-60.85	-15.10	-10.15	-3.20	104.46	0.69	0.52	28.14	14.91	3.43
3600	-4.62	13.50	3.44	-147.69	-14.86	-92.45	-3.02	25.95	0.68	0.46	27.82	14.76	3.43
3700	-3.99	-66.62	0.69	128.09	-14.72	-174.00	-2.91	-49.37	0.68	0.43	27.68	14.85	3.47
3800	-3.51	-141.76	-1.75	47.20	-15.10	103.93	-2.80	-124.18	0.73	0.42	27.48	14.32	3.44
4000	-3.40	151.61	-3.95	-28.35	-16.11	23.47	-2.93	167.55	1.00	0.41	26.71	13.86	3.33

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 65mA, Vd = 4.67V @Temperature = -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	-24.58	-179.44	17.79	174.35	-20.58	-2.67	-50.40	-74.62	1.05	0.72	37.42	18.44	2.65
100	-25.64	162.67	17.74	168.67	-20.34	-7.50	-46.27	-38.40	1.04	0.74	37.63	18.40	2.77
200	-26.16	138.40	17.73	158.50	-20.31	-14.01	-39.34	-103.24	1.04	0.74	39.23	18.47	2.65
300	-25.01	110.47	17.63	137.28	-20.30	-27.58	-34.19	-140.82	1.05	0.74	40.71	18.44	2.67
400	-23.35	81.99	17.53	116.31	-20.40	-41.46	-29.86	-155.61	1.05	0.72	40.72	18.43	2.65
500	-21.90	56.45	17.38	95.49	-20.40	-55.25	-27.52	174.99	1.06	0.71	41.42	18.38	2.70
600	-21.48	31.63	17.23	74.57	-20.32	-69.17	-25.44	153.43	1.06	0.71	41.38	18.28	2.69
700	-20.60	8.35	17.04	53.99	-20.31	-83.08	-23.62	132.50	1.07	0.69	41.42	18.21	2.70
800	-20.14	-11.83	16.83	33.64	-20.29	-96.62	-21.74	114.17	1.08	0.68	41.91	17.98	2.71
900	-19.66	-30.46	16.62	13.41	-20.25	-110.39	-20.41	93.29	1.08	0.67	41.75	17.92	2.64
1000	-19.30	-48.40	16.39	-6.81	-20.26	-124.36	-19.16	75.44	1.09	0.65	40.83	17.84	2.64
1100	-19.46	-70.81	16.12	-26.61	-20.16	-138.08	-18.36	58.39	1.10	0.64	40.60	17.90	2.62
1200	-19.66	-92.19	15.88	-46.39	-20.19	-151.65	-17.74	42.38	1.11	0.62	40.96	17.81	2.65
1300	-19.89	-112.07	15.64	-66.18	-20.03	-166.08	-16.92	24.84	1.12	0.61	39.68	17.84	2.66
1400	-19.93	-134.62	15.36	-85.24	-20.03	-179.10	-16.86	6.70	1.13	0.59	39.82	17.80	2.53
1500	-20.39	-150.81	15.13	-105.01	-19.91	166.19	-15.84	-10.34	1.14	0.59	39.84	17.75	2.61
1600	-21.41	-169.36	14.89	-124.24	-19.80	152.50	-15.47	-27.51	1.14	0.58	40.44	17.76	2.65
1700	-21.40	169.04	14.60	-143.24	-19.79	138.28	-15.37	-46.57	1.16	0.56	39.97	17.69	2.61
1800	-22.22	158.77	14.36	-162.80	-19.70	123.51	-14.56	-66.06	1.17	0.55	38.70	17.78	2.59
1900	-23.66	136.40	14.18	178.49	-19.49	110.13	-14.14	-82.17	1.16	0.55	38.01	17.79	2.65
2000	-24.55	120.98	13.94	159.75	-19.36	95.65	-13.61	-100.44	1.16	0.54	37.31	17.77	2.63
2100	-26.26	111.45	13.72	140.80	-19.32	81.11	-13.00	-118.38	1.17	0.53	36.54	17.67	2.62
2200	-26.34	102.66	13.45	122.24	-19.24	66.58	-12.70	-137.67	1.18	0.52	36.29	17.46	2.61
2300	-27.29	84.43	13.22	104.29	-19.25	52.77	-12.48	-154.44	1.20	0.51	36.00	17.26	2.63
2400	-31.53	91.13	13.10	85.26	-18.95	38.30	-11.67	-170.39	1.17	0.52	35.42	17.20	2.64
2500	-32.39	120.69	12.93	66.36	-18.72	23.42	-10.99	172.69	1.16	0.52	34.79	17.13	2.69
2600	-30.86	121.27	12.71	47.92	-18.68	8.70	-10.78	155.99	1.17	0.51	34.32	17.05	2.64
2700	-27.70	100.78	12.37	29.73	-18.65	-7.24	-10.53	137.01	1.19	0.50	33.88	16.79	2.63
2800	-25.71	114.93	12.21	2.03	-18.34	-28.63	-10.08	114.17	1.16	0.50	33.24	16.88	2.70
2900	-22.16	84.94	11.70	-44.06	-17.91	-67.25	-9.47	72.29	1.15	0.49	32.94	16.56	2.65
3000	-21.85	69.61	11.70	-88.81	-17.74	-103.76	-9.35	35.53	1.12	0.49	32.60	16.36	2.63
3100	-19.37	13.09	11.38	-135.77	-17.05	-143.60	-8.21	-7.50	1.06	0.51	32.08	15.81	2.67
3200	-15.70	-33.62	11.40	175.52	-16.46	178.48	-6.82	-47.77	0.95	0.54	31.65	15.82	2.67
3300	-14.08	-89.28	11.35	126.98	-16.08	136.93	-5.56	-92.03	0.88	0.58	30.96	15.64	2.75
3400	-8.69	172.24	10.05	23.89	-15.34	53.65	-3.70	177.56	0.72	0.59	30.54	15.24	2.76
3500	-6.15	78.74	7.74	-75.05	-14.95	-29.32	-3.08	89.16	0.65	0.55	30.21	15.11	2.76
3600	-4.82	-9.77	4.91	-167.53	-14.55	-116.13	-2.79	5.45	0.58	0.49	29.78	14.99	2.77
3700	-3.85	-96.01	1.75	102.78	-15.23	159.09	-2.44	-75.44	0.56	0.47	29.57	15.11	2.83
3800	-3.17	-169.84	-0.76	22.43	-14.68	78.75	-2.43	-148.07	0.47	0.46	29.26	14.60	2.79
4000	-3.28	122.50	-2.76	-56.00	-15.64	-3.79	-2.77	142.22	0.70	0.41	28.31	14.09	2.68

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 52mA, Vd = 4.59V @Temperature = -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	-26.45	-176.72	17.61	174.31	-20.13	-0.83	-34.52	-26.15	1.04	0.75	32.60	16.34	2.59
100	-28.27	160.29	17.59	168.77	-20.44	-6.90	-33.82	-24.22	1.05	0.72	32.37	15.84	2.70
200	-28.78	129.17	17.58	158.55	-20.09	-13.97	-34.49	-57.58	1.04	0.75	33.01	16.01	2.61
300	-26.70	115.43	17.51	147.93	-20.18	-21.60	-34.58	-75.92	1.05	0.74	33.42	16.01	2.61
400	-27.09	101.38	17.48	137.23	-20.25	-27.95	-32.66	-101.73	1.05	0.73	33.26	16.08	2.62
500	-25.85	85.58	17.43	126.83	-20.24	-35.04	-30.72	-114.38	1.05	0.72	33.17	16.08	2.63
600	-24.82	73.44	17.37	116.34	-20.22	-41.64	-29.07	-131.47	1.05	0.72	33.26	15.83	2.65
700	-24.13	57.91	17.30	105.87	-20.24	-48.55	-28.24	-147.74	1.06	0.71	33.70	15.79	2.65
800	-22.89	48.88	17.24	95.50	-20.23	-55.57	-27.52	-165.38	1.06	0.71	33.77	15.37	2.64
900	-22.70	38.58	17.16	85.19	-20.21	-62.14	-26.59	-179.46	1.06	0.71	33.65	15.43	2.58
1000	-22.41	24.25	17.08	74.63	-20.18	-69.11	-25.59	168.74	1.06	0.70	33.46	15.40	2.59
1100	-21.83	14.50	16.98	64.40	-20.19	-76.12	-24.57	155.42	1.07	0.70	33.41	15.50	2.56
1200	-21.37	1.40	16.89	54.07	-20.18	-83.17	-23.71	144.43	1.07	0.69	33.48	15.39	2.58
1300	-21.06	-7.35	16.78	43.98	-20.16	-89.97	-22.88	132.32	1.07	0.68	33.35	15.44	2.61
1400	-20.74	-18.08	16.69	33.76	-20.19	-97.00	-21.79	123.17	1.08	0.68	33.33	15.43	2.47
1500	-20.48	-25.82	16.58	23.52	-20.20	-103.90	-20.97	111.97	1.08	0.67	33.62	15.37	2.55
1600	-20.24	-36.35	16.48	13.46	-20.13	-110.74	-20.48	101.31	1.08	0.67	34.47	15.44	2.59
1700	-20.23	-45.47	16.35	3.34	-20.17	-117.66	-19.87	91.26	1.09	0.65	34.97	15.30	2.54
1800	-19.85	-53.95	16.24	-6.71	-20.09	-124.80	-19.21	81.45	1.09	0.65	34.41	15.57	2.53
1900	-19.85	-65.44	16.12	-16.59	-20.11	-131.31	-18.81	73.01	1.10	0.64	33.90	15.61	2.61
2000	-19.97	-76.32	16.02	-26.65	-20.05	-138.28	-18.40	63.93	1.10	0.64	33.56	15.56	2.56
2100	-19.98	-86.15	15.89	-36.54	-20.06	-145.30	-17.94	55.70	1.11	0.63	33.39	15.45	2.57
2200	-20.14	-97.67	15.75	-46.39	-20.06	-152.20	-17.68	47.66	1.11	0.62	33.18	15.26	2.55
2300	-20.34	-109.17	15.67	-56.19	-19.96	-159.13	-17.29	38.35	1.11	0.62	33.09	15.07	2.58
2400	-20.41	-118.30	15.53	-66.21	-19.92	-166.34	-16.84	29.43	1.12	0.61	32.85	15.15	2.58
2500	-20.29	-129.88	15.39	-75.82	-19.93	-172.94	-16.65	21.25	1.12	0.60	32.50	15.26	2.65
2600	-20.29	-141.05	15.25	-85.36	-19.94	-179.60	-16.71	10.76	1.13	0.59	32.55	15.31	2.59
2700	-20.73	-147.05	15.17	-95.35	-19.82	172.74	-16.04	3.06	1.13	0.60	32.28	15.25	2.57
2800	-20.88	-156.77	15.01	-105.05	-19.82	165.99	-15.73	-6.63	1.14	0.59	31.97	15.36	2.65
2900	-21.29	-164.31	14.91	-114.63	-19.78	158.69	-15.66	-15.77	1.14	0.58	31.76	15.22	2.57
3000	-21.81	-176.49	14.80	-124.31	-19.75	151.88	-15.31	-24.70	1.14	0.57	31.40	15.09	2.57
3100	-21.89	173.41	14.65	-134.02	-19.68	144.51	-15.14	-34.20	1.15	0.57	30.90	14.75	2.60
3200	-21.79	161.88	14.50	-143.41	-19.72	137.96	-15.17	-43.27	1.16	0.56	30.54	14.89	2.63
3300	-22.91	152.54	14.46	-153.06	-19.53	130.88	-14.64	-50.41	1.15	0.57	30.13	14.80	2.67
3400	-22.87	152.09	14.25	-163.06	-19.62	122.92	-14.41	-63.04	1.17	0.55	29.69	14.48	2.70
3500	-23.53	136.67	14.19	-172.10	-19.50	116.17	-14.24	-71.08	1.16	0.55	29.41	14.35	2.70
3600	-24.24	127.27	14.09	178.34	-19.41	109.22	-13.98	-79.58	1.16	0.55	29.05	14.22	2.70
3700	-24.06	118.82	13.92	169.10	-19.45	102.48	-14.02	-89.18	1.17	0.54	28.88	14.27	2.76
3800	-25.28	111.82	13.86	159.49	-19.30	95.09	-13.49	-98.44	1.16	0.54	28.50	13.87	2.70
4000	-27.46	100.85	13.64	140.54	-19.20	80.74	-12.88	-116.73	1.17	0.53	27.69	13.44	2.62

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 78mA, Vd = 4.75V @Temperature = -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	-23.06	-178.64	17.89	174.28	-20.46	-3.63	-42.48	-177.57	1.04	0.74	41.33	19.84	2.71
100	-24.03	165.68	17.88	168.74	-20.54	-6.35	-41.69	-162.56	1.05	0.74	42.18	19.84	2.85
200	-24.82	140.88	17.85	158.52	-20.37	-14.44	-37.14	-156.69	1.04	0.75	44.71	19.81	2.69
300	-23.89	114.16	17.73	137.17	-20.44	-27.38	-32.75	-163.91	1.05	0.73	44.77	19.77	2.75
400	-22.50	85.78	17.64	116.32	-20.45	-41.36	-29.31	-170.98	1.05	0.73	44.24	19.65	2.71
500	-21.24	60.33	17.49	95.50	-20.43	-55.34	-26.97	163.23	1.06	0.72	43.35	19.59	2.76
600	-20.90	35.80	17.33	74.68	-20.39	-68.71	-25.08	143.75	1.06	0.71	43.20	19.55	2.74
700	-20.17	12.70	17.12	53.99	-20.42	-82.93	-23.28	125.52	1.07	0.69	42.01	19.43	2.77
800	-19.70	-7.71	16.92	33.85	-20.37	-96.71	-21.55	108.45	1.08	0.68	41.44	19.30	2.76
900	-19.28	-26.64	16.70	13.53	-20.36	-110.25	-20.27	89.10	1.08	0.67	41.60	19.19	2.70
1000	-18.96	-45.08	16.45	-6.67	-20.36	-124.10	-19.06	71.24	1.10	0.65	41.66	19.14	2.70
1100	-19.12	-66.90	16.22	-26.44	-20.27	-137.88	-18.29	54.92	1.10	0.64	41.57	19.09	2.68
1200	-19.36	-87.85	15.96	-46.22	-20.17	-151.52	-17.79	39.70	1.11	0.63	40.83	19.04	2.70
1300	-19.63	-107.81	15.72	-65.88	-20.07	-165.65	-16.93	22.48	1.11	0.62	40.41	19.12	2.73
1400	-19.57	-129.57	15.44	-84.99	-20.12	-178.81	-16.81	4.35	1.13	0.59	40.48	19.05	2.61
1500	-20.09	-145.99	15.20	-104.66	-19.96	166.43	-15.85	-11.92	1.14	0.59	40.27	19.01	2.67
1600	-21.02	-164.18	14.96	-123.88	-19.86	152.84	-15.51	-29.32	1.14	0.58	39.08	18.95	2.72
1700	-21.06	174.62	14.67	-142.83	-19.86	138.82	-15.33	-48.03	1.16	0.56	38.09	18.90	2.66
1800	-21.79	164.51	14.42	-162.42	-19.76	123.77	-14.59	-67.17	1.17	0.55	37.85	18.83	2.66
1900	-23.08	142.69	14.26	179.06	-19.56	110.61	-14.17	-83.18	1.16	0.55	37.81	18.85	2.69
2000	-23.89	128.15	14.01	160.29	-19.46	96.14	-13.63	-101.23	1.17	0.54	37.38	18.86	2.68
2100	-25.29	119.75	13.79	141.39	-19.34	81.36	-13.04	-119.27	1.17	0.54	36.76	18.80	2.66
2200	-25.27	108.97	13.51	122.80	-19.30	66.92	-12.69	-138.35	1.18	0.52	36.53	18.67	2.67
2300	-26.01	91.69	13.27	104.89	-19.31	53.48	-12.47	-154.98	1.20	0.51	36.31	18.42	2.70
2400	-29.17	95.47	13.17	86.04	-19.01	38.89	-11.68	-170.76	1.18	0.52	35.80	18.25	2.70
2500	-29.83	113.26	12.98	67.21	-18.77	23.83	-11.00	172.36	1.16	0.52	35.38	18.05	2.75
2600	-29.11	108.82	12.77	48.80	-18.72	9.39	-10.76	155.76	1.17	0.51	34.75	17.80	2.71
2700	-26.36	92.29	12.43	30.59	-18.70	-6.30	-10.52	136.89	1.19	0.50	34.42	17.48	2.70
2800	-25.49	104.04	12.26	2.95	-18.35	-28.07	-10.06	114.07	1.16	0.50	33.83	17.56	2.78
2900	-22.44	76.98	11.76	-43.11	-17.91	-66.59	-9.44	72.14	1.15	0.50	33.60	17.21	2.70
3000	-22.84	63.99	11.77	-87.60	-17.75	-103.19	-9.30	35.66	1.12	0.49	33.10	17.02	2.70
3100	-20.09	7.86	11.44	-134.46	-17.07	-142.71	-8.17	-7.51	1.06	0.52	32.59	16.43	2.76
3200	-16.26	-36.06	11.47	177.01	-16.47	179.14	-6.77	-47.52	0.95	0.55	32.25	16.40	2.76
3300	-14.52	-91.65	11.45	128.75	-16.10	137.46	-5.50	-91.85	0.88	0.59	31.63	16.22	2.83
3400	-8.93	171.41	10.21	25.74	-15.29	53.96	-3.60	177.75	0.72	0.61	31.13	15.77	2.82
3500	-6.30	78.29	7.91	-73.10	-14.90	-29.10	-2.97	89.04	0.65	0.57	30.87	15.71	2.85
3600	-4.91	-9.64	5.13	-165.69	-14.51	-115.92	-2.68	5.27	0.58	0.50	30.50	15.55	2.84
3700	-3.91	-95.98	2.00	104.90	-15.08	159.91	-2.39	-75.80	0.57	0.48	30.22	15.70	2.91
3800	-3.21	-169.82	-0.43	24.01	-14.69	78.94	-2.38	-148.37	0.46	0.47	29.91	15.19	2.85
4000	-3.33	122.54	-2.40	-54.51	-15.78	-2.78	-2.76	141.57	0.69	0.41	28.93	14.66	2.77

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 65mA, Vd = 4.28V @Temperature = +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	-25.72	-179.08	17.76	174.29	-20.28	-2.95	-36.69	-10.61	1.04	0.75	35.83	18.27	3.41
100	-25.67	158.32	17.73	168.70	-20.33	-6.77	-40.95	-33.31	1.04	0.74	35.81	18.27	3.59
200	-25.94	140.22	17.70	158.56	-20.53	-14.14	-41.68	-101.36	1.05	0.72	36.53	18.25	3.49
300	-26.13	106.82	17.55	137.52	-20.37	-26.39	-32.69	-119.70	1.05	0.72	36.70	18.19	3.57
400	-24.32	79.15	17.44	116.87	-20.36	-40.11	-28.71	-142.67	1.06	0.72	36.23	18.10	3.53
500	-22.87	51.06	17.27	96.31	-20.43	-53.19	-26.70	-168.55	1.06	0.70	35.55	18.05	3.59
600	-22.42	25.34	17.10	75.73	-20.44	-66.05	-24.52	170.80	1.07	0.69	35.18	17.98	3.59
700	-21.73	1.53	16.90	55.46	-20.44	-78.94	-23.07	149.83	1.08	0.67	35.12	17.90	3.62
800	-21.60	-20.93	16.68	35.51	-20.43	-92.12	-21.58	130.80	1.09	0.66	34.95	17.70	3.58
900	-21.06	-41.06	16.45	15.52	-20.37	-105.05	-20.28	110.39	1.10	0.64	34.79	17.60	3.55
1000	-20.90	-59.93	16.21	-4.36	-20.38	-118.51	-19.37	92.17	1.11	0.63	34.29	17.52	3.54
1100	-21.16	-81.43	15.96	-23.89	-20.31	-131.51	-18.57	72.45	1.12	0.61	33.98	17.53	3.52
1200	-21.63	-101.95	15.69	-43.35	-20.22	-144.47	-17.75	54.84	1.13	0.60	33.76	17.44	3.59
1300	-21.86	-121.00	15.44	-62.85	-20.09	-158.02	-16.70	36.44	1.13	0.59	33.35	17.51	3.59
1400	-22.09	-141.54	15.16	-81.53	-20.10	-170.86	-16.34	17.84	1.15	0.57	33.13	17.42	3.47
1500	-23.16	-160.54	14.90	-100.90	-20.01	175.65	-15.56	0.88	1.16	0.56	33.15	17.35	3.54
1600	-24.80	179.22	14.66	-119.96	-19.90	162.12	-14.94	-17.06	1.16	0.55	33.49	17.28	3.58
1700	-25.07	158.42	14.37	-138.52	-19.88	149.00	-14.72	-34.89	1.18	0.53	33.22	17.21	3.55
1800	-27.32	146.79	14.07	-157.65	-19.84	134.75	-14.04	-53.72	1.19	0.52	32.58	17.18	3.50
1900	-29.98	110.62	13.90	-176.06	-19.62	121.82	-13.55	-69.27	1.18	0.52	32.07	17.16	3.60
2000	-32.17	73.86	13.65	165.45	-19.51	108.12	-13.13	-85.90	1.19	0.51	31.71	17.16	3.56
2100	-35.77	30.46	13.38	146.89	-19.33	94.32	-12.80	-103.81	1.19	0.50	31.32	17.05	3.56
2200	-34.80	-15.72	13.14	128.62	-19.28	80.70	-12.63	-120.85	1.20	0.49	30.97	16.87	3.57
2300	-31.16	-64.49	12.93	110.38	-19.19	67.32	-12.23	-137.46	1.20	0.48	30.72	16.58	3.58
2400	-27.83	-91.99	12.76	92.20	-18.98	53.63	-11.90	-153.79	1.19	0.48	30.32	16.35	3.59
2500	-24.50	-125.45	12.56	73.48	-18.72	39.49	-11.18	-170.59	1.17	0.48	29.86	16.14	3.66
2600	-22.29	-148.57	12.34	55.11	-18.56	25.32	-10.76	172.72	1.16	0.48	29.61	15.89	3.60
2700	-22.49	-168.80	12.04	37.76	-18.70	10.73	-10.85	155.08	1.20	0.45	29.22	15.53	3.59
2800	-18.78	163.48	11.82	9.88	-18.26	-10.08	-9.82	131.39	1.15	0.46	28.76	15.54	3.67
2900	-16.43	115.40	11.23	-35.20	-17.95	-47.10	-8.98	90.94	1.14	0.45	28.45	15.18	3.61
3000	-14.23	77.53	10.98	-80.26	-17.59	-82.66	-8.19	53.86	1.08	0.44	28.19	14.99	3.57
3100	-12.83	34.52	10.63	-125.92	-17.04	-120.13	-7.44	15.03	1.01	0.45	27.79	14.38	3.65
3200	-11.01	-11.59	10.34	-173.11	-16.35	-158.01	-6.49	-25.90	0.91	0.46	27.43	14.42	3.66
3300	-9.82	-60.32	10.07	137.35	-15.88	162.48	-5.53	-68.64	0.82	0.48	27.00	14.19	3.69
3400	-6.95	-166.51	8.05	36.56	-15.31	79.32	-4.03	-160.52	0.74	0.49	26.67	13.83	3.74
3500	-5.12	103.96	4.81	-56.28	-15.33	-0.46	-3.55	113.87	0.77	0.46	26.36	13.73	3.77
3600	-4.39	26.08	1.75	-139.31	-15.36	-79.03	-3.23	38.72	0.81	0.42	26.08	13.62	3.76
3700	-4.25	-50.59	-1.05	139.66	-15.17	-155.99	-3.13	-32.51	0.94	0.39	25.86	13.60	3.80
3800	-3.71	-126.20	-3.18	59.60	-14.95	119.12	-3.02	-108.44	0.95	0.40	25.63	13.04	3.84
4000	-3.78	169.43	-5.68	-14.14	-16.22	37.57	-3.27	-175.29	1.57	0.38	24.83	12.65	3.66

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 52mA, Vd = 4.19V @Temperature = +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	-28.84	179.05	17.56	174.33	-20.10	-0.13	-29.43	-9.39	1.04	0.74	31.62	16.49	3.35
100	-29.08	157.57	17.52	168.63	-20.12	-7.00	-31.27	-15.58	1.04	0.74	31.46	16.21	3.50
200	-28.73	129.51	17.48	158.57	-20.39	-13.80	-33.05	-45.19	1.05	0.72	31.81	16.39	3.43
300	-28.24	93.89	17.37	137.56	-20.23	-26.72	-29.72	-86.41	1.05	0.72	31.89	16.34	3.49
400	-25.93	66.88	17.25	116.94	-20.32	-40.27	-27.13	-118.50	1.06	0.70	31.52	16.32	3.46
500	-24.07	40.30	17.09	96.41	-20.26	-53.25	-25.86	-148.68	1.07	0.70	31.19	16.31	3.50
600	-23.25	14.21	16.94	75.83	-20.26	-66.18	-24.10	-174.34	1.07	0.69	31.11	16.13	3.53
700	-22.38	-8.40	16.73	55.58	-20.25	-79.53	-22.66	162.44	1.08	0.67	31.18	16.07	3.52
800	-22.12	-30.46	16.53	35.60	-20.24	-92.69	-21.23	140.78	1.09	0.66	31.11	15.68	3.53
900	-21.54	-49.77	16.28	15.56	-20.23	-105.97	-20.05	118.44	1.10	0.64	31.04	15.73	3.49
1000	-21.39	-69.01	16.06	-4.26	-20.24	-118.98	-19.12	99.51	1.11	0.63	30.80	15.53	3.49
1100	-21.52	-90.20	15.80	-23.89	-20.17	-132.02	-18.33	79.18	1.12	0.61	30.65	15.75	3.45
1200	-21.88	-112.12	15.55	-43.35	-20.12	-145.21	-17.62	60.56	1.13	0.60	30.60	15.66	3.51
1300	-22.17	-130.61	15.32	-62.91	-19.98	-158.67	-16.49	40.89	1.13	0.59	30.41	15.60	3.51
1400	-22.33	-151.55	15.03	-81.68	-20.01	-171.23	-16.20	22.29	1.15	0.57	30.22	15.63	3.39
1500	-23.34	-170.60	14.77	-101.09	-19.91	174.82	-15.37	4.51	1.16	0.56	30.29	15.50	3.46
1600	-24.98	166.11	14.55	-120.21	-19.77	161.50	-14.76	-13.65	1.16	0.55	30.78	15.55	3.48
1700	-25.07	143.79	14.23	-138.79	-19.78	148.32	-14.56	-32.01	1.18	0.53	30.94	15.38	3.48
1800	-27.47	129.70	13.96	-157.91	-19.76	134.39	-13.91	-51.02	1.19	0.51	30.53	15.62	3.42
1900	-29.27	88.80	13.78	-176.45	-19.56	121.04	-13.43	-67.31	1.18	0.51	30.09	15.58	3.54
2000	-30.02	52.21	13.54	165.02	-19.37	107.63	-13.02	-83.88	1.18	0.51	29.83	15.54	3.47
2100	-31.54	12.43	13.27	146.43	-19.31	93.51	-12.70	-102.09	1.19	0.49	29.60	15.44	3.49
2200	-30.31	-21.68	13.02	128.10	-19.20	79.59	-12.50	-118.93	1.20	0.48	29.38	15.16	3.47
2300	-27.95	-59.36	12.82	109.80	-19.08	66.13	-12.13	-136.02	1.20	0.48	29.14	15.00	3.49
2400	-25.46	-86.99	12.64	91.55	-18.88	52.88	-11.84	-152.59	1.19	0.47	28.84	14.97	3.50
2500	-23.16	-118.99	12.44	72.82	-18.69	38.65	-11.11	-169.54	1.17	0.47	28.48	14.99	3.58
2600	-21.35	-143.00	12.23	54.35	-18.49	24.20	-10.70	173.50	1.16	0.47	28.43	14.85	3.52
2700	-21.45	-162.58	11.92	36.93	-18.65	10.08	-10.77	155.88	1.20	0.45	28.11	14.63	3.53
2800	-18.16	167.53	11.70	9.03	-18.22	-10.99	-9.77	132.01	1.15	0.45	27.68	14.65	3.57
2900	-15.95	118.81	11.10	-36.12	-17.93	-47.89	-8.92	91.42	1.14	0.43	27.44	14.37	3.56
3000	-13.81	79.51	10.84	-81.30	-17.59	-83.50	-8.15	54.18	1.07	0.43	27.16	14.19	3.48
3100	-12.47	35.85	10.47	-127.07	-17.08	-121.23	-7.40	15.14	1.01	0.43	26.78	13.63	3.57
3200	-10.70	-10.65	10.17	-174.40	-16.38	-158.80	-6.47	-25.89	0.91	0.44	26.46	13.73	3.58
3300	-9.51	-59.71	9.86	135.97	-15.89	161.60	-5.55	-68.76	0.82	0.46	26.05	13.52	3.61
3400	-6.82	-166.26	7.81	35.12	-15.37	78.64	-4.09	-160.53	0.74	0.47	25.74	13.20	3.67
3500	-5.05	104.35	4.54	-57.43	-15.39	-1.15	-3.60	114.05	0.77	0.44	25.48	13.06	3.65
3600	-4.34	26.18	1.45	-140.60	-15.40	-79.28	-3.25	38.95	0.82	0.41	25.19	12.94	3.66
3700	-4.21	-50.47	-1.37	138.66	-15.19	-156.29	-3.14	-32.33	0.97	0.39	25.02	12.92	3.71
3800	-3.68	-126.17	-3.53	58.76	-15.00	118.90	-3.04	-108.10	0.99	0.40	24.72	12.40	3.74
4000	-3.78	169.51	-6.02	-14.76	-16.22	37.54	-3.28	-175.19	1.65	0.38	23.94	12.02	3.58

TYPE: MMIC Amplifier
MODEL: ERA-51SM Reference Data: RDF-1079D
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 78mA, Vd = 4.36V @Temperature = +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	-23.80	-177.94	17.88	174.30	-20.43	-1.85	-52.19	8.58	1.04	0.75	39.30	19.46	3.48
100	-24.28	161.95	17.84	168.62	-20.42	-6.56	-55.66	-153.32	1.04	0.74	39.97	19.55	3.68
200	-24.76	142.29	17.82	158.55	-20.52	-13.57	-37.79	-163.80	1.05	0.73	41.33	19.42	3.55
300	-24.62	112.08	17.69	137.43	-20.44	-26.70	-32.42	-145.80	1.05	0.73	40.40	19.32	3.65
400	-23.13	84.68	17.55	116.82	-20.48	-39.67	-28.85	-159.47	1.06	0.72	39.60	19.11	3.60
500	-22.05	57.02	17.38	96.28	-20.51	-52.83	-26.62	178.74	1.06	0.70	38.28	19.03	3.66
600	-21.73	31.04	17.22	75.73	-20.51	-65.85	-24.68	160.42	1.07	0.69	37.27	19.05	3.65
700	-21.18	7.52	17.01	55.51	-20.51	-79.22	-23.11	141.75	1.08	0.67	36.58	18.89	3.67
800	-21.11	-15.17	16.78	35.52	-20.48	-91.93	-21.65	123.87	1.09	0.66	36.12	18.78	3.68
900	-20.63	-35.34	16.56	15.55	-20.45	-105.04	-20.35	105.16	1.10	0.65	35.69	18.62	3.63
1000	-20.59	-54.33	16.30	-4.29	-20.40	-118.15	-19.45	87.55	1.11	0.63	34.86	18.53	3.63
1100	-20.82	-75.67	16.04	-23.72	-20.40	-131.17	-18.70	68.48	1.12	0.61	34.45	18.42	3.61
1200	-21.37	-96.87	15.79	-43.22	-20.29	-144.47	-17.85	51.71	1.13	0.60	34.09	18.39	3.66
1300	-21.57	-114.62	15.53	-62.64	-20.19	-157.89	-16.81	33.39	1.13	0.59	33.54	18.49	3.65
1400	-21.86	-135.50	15.23	-81.36	-20.25	-170.56	-16.51	15.27	1.15	0.57	33.45	18.40	3.55
1500	-22.80	-152.77	14.96	-100.67	-20.13	175.91	-15.66	-1.19	1.16	0.56	33.42	18.28	3.59
1600	-24.50	-172.54	14.74	-119.70	-19.96	162.56	-15.10	-18.71	1.16	0.55	33.35	18.12	3.67
1700	-24.86	166.83	14.44	-138.17	-19.93	149.56	-14.85	-36.52	1.18	0.54	32.56	17.99	3.62
1800	-26.65	157.83	14.14	-157.30	-19.87	135.26	-14.15	-55.06	1.19	0.52	32.06	17.78	3.61
1900	-29.95	127.56	13.96	-175.66	-19.70	122.35	-13.65	-70.54	1.19	0.52	31.72	17.75	3.67
2000	-32.86	94.80	13.73	165.87	-19.52	109.07	-13.25	-86.59	1.18	0.51	31.35	17.78	3.64
2100	-38.44	65.75	13.44	147.40	-19.46	94.86	-12.89	-104.32	1.20	0.50	31.05	17.72	3.63
2200	-40.45	-2.17	13.20	129.15	-19.31	81.13	-12.70	-121.36	1.20	0.49	30.73	17.50	3.68
2300	-34.16	-70.70	12.98	110.89	-19.19	67.54	-12.32	-137.93	1.20	0.48	30.53	17.18	3.67
2400	-29.32	-98.09	12.81	92.85	-19.01	54.13	-12.01	-153.96	1.19	0.48	30.26	16.93	3.69
2500	-25.53	-131.07	12.64	74.21	-18.76	40.14	-11.27	-170.67	1.17	0.49	29.89	16.65	3.75
2600	-23.03	-153.57	12.41	55.73	-18.62	26.05	-10.80	172.55	1.17	0.48	29.74	16.38	3.69
2700	-23.17	-173.75	12.11	38.49	-18.73	11.67	-10.89	154.91	1.21	0.46	29.44	16.03	3.69
2800	-19.33	160.00	11.88	10.65	-18.24	-9.67	-9.87	131.34	1.15	0.47	28.98	16.02	3.74
2900	-16.82	112.73	11.29	-34.25	-18.00	-46.10	-8.99	91.20	1.14	0.45	28.79	15.70	3.70
3000	-14.59	75.76	11.05	-79.16	-17.60	-82.09	-8.17	54.16	1.08	0.45	28.59	15.50	3.64
3100	-13.16	33.25	10.72	-124.74	-16.97	-119.61	-7.41	15.33	1.01	0.46	28.15	14.90	3.74
3200	-11.25	-12.54	10.43	-171.81	-16.34	-157.26	-6.46	-25.51	0.91	0.48	27.91	14.90	3.75
3300	-10.04	-60.71	10.18	138.77	-15.87	162.84	-5.48	-68.30	0.83	0.49	27.47	14.70	3.77
3400	-7.07	-166.88	8.20	37.92	-15.30	79.78	-3.94	-160.27	0.74	0.50	27.14	14.34	3.83
3500	-5.17	103.80	4.98	-54.80	-15.26	-0.22	-3.47	113.84	0.76	0.47	26.88	14.21	3.86
3600	-4.43	26.00	1.93	-137.95	-15.31	-78.57	-3.18	38.65	0.80	0.43	26.59	14.08	3.86
3700	-4.30	-50.55	-0.83	141.09	-15.13	-155.86	-3.10	-32.71	0.93	0.40	26.50	14.08	3.90
3800	-3.73	-126.17	-2.93	60.91	-14.97	119.41	-2.99	-108.45	0.93	0.40	26.34	13.59	3.90
4000	-3.79	169.49	-5.40	-13.03	-16.16	37.78	-3.29	-175.43	1.51	0.37	25.74	13.18	3.76