ERA-1 Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 40mA, Vd = 3.43V @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	-28.10	-5.30	12.25	174.62	-16.87	-4.05	-33.06	168.07	1.14	0.59	27.16	11.90	4.81
100	-27.64	-4.39	12.26	169.91	-16.88	-7.68	-32.68	161.29	1.14	0.59	27.08	11.81	4.57
200	-27.94	-11.33	12.24	160.22	-16.89	-15.07	-31.39	146.40	1.14	0.58	27.37	11.96	4.47
400	-28.67	-24.40	12.15	140.93	-16.89	-29.71	-29.87	124.08	1.15	0.58	27.09	11.75	4.50
600	-30.51	-37.75	12.06	121.58	-16.91	-44.45	-27.47	102.35	1.16	0.57	27.07	11.98	4.47
800	-32.07	-40.46	11.96	102.50	-16.92	-59.32	-25.75	83.51	1.16	0.56	27.22	11.94	4.41
1000	-35.09	-38.41	11.87	83.54	-16.95	-74.09	-24.02	67.00	1.17	0.56	27.87	11.56	4.38
1200	-35.78	-20.02	11.75	64.71	-16.99	-88.91	-22.71	50.01	1.18	0.55	28.22	11.92	4.45
1400	-33.48	-12.03	11.63	45.95	-17.02	-103.74	-21.59	34.40	1.19	0.54	27.80	11.87	4.41
1600	-31.22	-10.98	11.50	27.33	-17.08	-118.56	-21.01	18.50	1.21	0.53	28.13	11.80	4.49
1800	-29.13	-21.76	11.40	8.54	-17.14	-133.43	-20.40	3.15	1.22	0.52	27.78	11.92	4.38
2000	-28.22	-31.87	11.27	-9.92	-17.17	-148.20	-20.14	-12.23	1.23	0.51	27.80	12.05	4.42
2200	-27.37	-42.62	11.15	-28.44	-17.26	-163.04	-20.16	-28.94	1.25	0.50	27.45	12.05	4.43
2400	-26.51	-56.82	11.02	-46.87	-17.30	-178.04	-19.97	-46.33	1.26	0.49	27.62	11.94	4.55
2600	-25.96	-69.36	10.89	-65.40	-17.42	166.95	-20.04	-62.80	1.29	0.47	27.57	12.05	4.51
2800	-25.08	-80.05	10.76	-83.85	-17.48	152.03	-20.03	-80.13	1.30	0.47	27.65	12.10	4.47
3000	-25.81	-95.42	10.62	-102.03	-17.53	137.30	-20.37	-98.09	1.32	0.45	27.38	12.05	4.49
3200	-25.31	-107.11	10.48	-120.18	-17.66	122.48	-20.52	-119.84	1.35	0.44	27.25	12.22	4.48
3400	-24.05	-116.15	10.35	-138.53	-17.72	107.33	-20.16	-137.08	1.37	0.43	27.58	12.17	4.58
3600	-24.23	-135.13	10.18	-156.58	-17.87	92.80	-20.08	-156.71	1.41	0.42	27.38	12.16	4.56
3800	-23.40	-147.27	10.00	-174.61	-18.04	77.62	-19.62	-176.85	1.45	0.40	27.39	12.32	4.65
4000	-22.32	-159.70	9.90	167.16	-18.11	62.66	-19.29	166.92	1.46	0.39	26.82	12.37	4.68
4200	-22.85	-172.66	9.77	149.91	-18.32	48.71	-19.15	146.18	1.51	0.38	26.94	12.36	4.62
4400	-20.88	175.67	9.59	131.43	-18.41	32.91	-18.11	130.25	1.54	0.37	27.02	12.41	4.59
4600	-20.48	159.80	9.49	113.98	-18.58	18.86	-17.70	114.66	1.57	0.36	26.52	12.54	4.60
4800	-19.36	143.58	9.26	95.90	-18.71	3.13	-16.90	102.39	1.62	0.35	26.09	12.52	4.78
5000	-18.88	131.90	9.22	78.56	-18.89	-10.66	-17.02	88.52	1.65	0.34	25.76	12.32	4.66
5200	-18.26	116.52	9.08	60.62	-19.03	-25.83	-16.69	75.42	1.69	0.33	25.45	12.19	4.83
5400	-17.64	99.84	8.84	43.32	-19.28	-41.41	-16.03	59.58	1.76	0.32	24.61	12.15	4.94
5600	-16.58	85.00	8.70	25.28	-19.35	-56.34	-15.57	48.75	1.79	0.32	24.45	11.96	4.93
5800	-16.85	74.00	8.74	7.85	-19.57	-69.41	-16.06	37.72	1.83	0.31	24.25	11.95	5.01
6000	-15.72	58.43	8.51	-9.97	-19.61	-84.98	-15.41	27.89	1.86	0.31	23.54	11.93	5.03
6200	-15.33	38.34	8.27	-26.90	-19.79	-101.36	-15.50	13.29	1.94	0.29	23.46	11.62	5.04
6400	-15.37	30.42	8.32	-45.27	-19.87	-113.86	-16.07	4.03	1.95	0.29	22.99	11.52	5.03
6600	-15.25	14.67	8.23	-62.00	-20.13	-129.08	-16.30	-11.64	2.02	0.28	22.35	11.67	5.25
6800	-15.26	-9.10	8.01	-77.80	-20.30	-147.29	-16.23	-30.41	2.10	0.27	22.15	11.46	5.25
7000	-15.71	-11.41	8.31	-96.34	-20.85	-157.73	-18.36	-37.16	2.17	0.25	22.19	11.32	5.22
7200	-15.44	-27.31	8.25	-113.69	-20.97	-173.03	-18.93	-52.87	2.21	0.25	21.50	11.35	5.40
7600	-14.62	-58.17	8.10	-149.07	-20.99	158.03	-19.14	-81.62	2.23	0.24	20.73	10.84	5.41
8000	-14.03	-91.58	8.05	175.79	-20.93	128.03	-19.41	-117.03	2.22	0.25	20.05	10.55	5.86

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 32mA, Vd = 3.33V @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	-24.26	-3.78	11.92	174.67	-16.63	-4.13	-46.19	23.09	1.15	0.58	22.64	8.64	4.47
100	-23.86	-5.86	11.93	169.97	-16.65	-7.73	-46.03	38.45	1.15	0.58	22.49	8.45	4.37
200	-24.10	-15.01	11.91	160.30	-16.65	-15.13	-43.39	71.45	1.15	0.58	22.64	8.52	4.41
400	-24.68	-30.33	11.82	140.98	-16.66	-29.82	-39.22	74.28	1.16	0.57	22.38	8.31	4.44
600	-25.72	-46.40	11.75	121.76	-16.68	-44.63	-33.71	74.35	1.16	0.57	22.40	8.73	4.42
800	-27.08	-58.34	11.65	102.66	-16.70	-59.59	-30.56	63.98	1.17	0.56	22.54	8.66	4.36
1000	-29.42	-70.95	11.57	83.71	-16.72	-74.41	-27.87	54.04	1.18	0.55	23.06	8.29	4.32
1200	-31.90	-77.55	11.47	64.81	-16.75	-89.30	-25.87	40.51	1.19	0.54	23.47	8.88	4.39
1400	-34.10	-74.08	11.34	46.08	-16.80	-104.23	-24.31	27.57	1.20	0.53	23.07	8.73	4.33
1600	-35.95	-60.88	11.22	27.43	-16.84	-119.13	-23.55	13.01	1.21	0.52	23.47	8.59	4.43
1800	-34.49	-51.12	11.13	8.73	-16.90	-134.11	-22.71	-1.11	1.22	0.51	22.98	8.94	4.30
2000	-33.99	-50.79	11.00	-9.76	-16.94	-148.94	-22.32	-15.53	1.24	0.50	22.99	9.04	4.36
2200	-32.99	-51.52	10.90	-28.37	-17.01	-163.95	-22.29	-31.83	1.25	0.50	22.70	9.02	4.36
2400	-31.52	-61.00	10.79	-46.86	-17.09	-179.06	-21.97	-49.08	1.27	0.49	23.01	8.96	4.48
2600	-30.46	-68.76	10.66	-65.38	-17.18	166.00	-22.07	-65.33	1.29	0.47	22.61	9.15	4.44
2800	-28.85	-74.62	10.51	-83.83	-17.26	150.87	-21.97	-82.63	1.31	0.46	22.76	9.18	4.40
3000	-29.80	-87.59	10.40	-102.12	-17.33	136.17	-22.30	-100.93	1.33	0.45	22.89	9.12	4.42
3200	-28.79	-96.77	10.25	-120.31	-17.47	121.15	-22.36	-123.75	1.36	0.44	22.88	9.63	4.44
3400	-26.63	-103.97	10.14	-138.65	-17.52	105.92	-21.88	-140.82	1.38	0.43	23.44	9.48	4.51
3600	-26.80	-123.35	9.98	-156.69	-17.68	91.37	-21.69	-160.98	1.41	0.42	23.49	9.51	4.48
3800	-25.42	-135.57	9.81	-174.74	-17.86	76.05	-21.05	178.74	1.45	0.40	23.68	9.87	4.57
4000	-23.86	-148.38	9.71	166.93	-17.96	61.03	-20.61	162.71	1.47	0.39	23.77	10.19	4.61
4200	-24.27	-159.59	9.59	149.62	-18.15	46.95	-20.34	141.67	1.51	0.38	23.92	10.21	4.53
4400	-21.83	-173.62	9.40	131.10	-18.25	31.12	-19.13	126.41	1.55	0.37	24.40	10.35	4.52
4600	-21.31	170.11	9.32	113.61	-18.44	17.00	-18.67	110.97	1.58	0.36	24.42	10.68	4.50
4800	-20.06	152.33	9.10	95.42	-18.57	1.18	-17.78	99.56	1.63	0.35	24.26	10.77	4.57
5000	-19.37	140.39	9.06	78.00	-18.76	-12.85	-17.91	85.85	1.66	0.34	23.97	10.53	4.59
5200	-18.67	124.53	8.91	60.04	-18.93	-28.00	-17.56	73.06	1.71	0.33	23.99	10.65	4.75
5400	-18.02	107.46	8.68	42.66	-19.17	-43.78	-16.79	57.39	1.78	0.32	23.52	10.82	4.84
5600	-16.84	91.50	8.55	24.54	-19.26	-58.73	-16.32	47.21	1.81	0.31	23.24	10.55	4.85
5800	-17.00	81.04	8.59	7.10	-19.51	-71.80	-16.87	36.49	1.85	0.30	22.89	10.47	4.89
6000	-15.81	64.20	8.36	-10.85	-19.55	-87.42	-16.14	27.17	1.89	0.30	22.46	10.71	4.92
6200	-15.48	44.21	8.13	-27.78	-19.75	-103.99	-16.26	12.65	1.96	0.29	22.49	10.49	4.93
6400	-15.35	36.22	8.18	-46.25	-19.86	-116.44	-16.91	4.12	1.98	0.28	21.91	10.22	4.81
6600	-15.20	20.25	8.09	-63.09	-20.14	-131.79	-17.13	-11.61	2.05	0.27	21.31	10.42	4.98
6800	-15.34	-3.10	7.85	-79.01	-20.33	-150.15	-17.08	-30.74	2.14	0.26	21.21	10.30	5.14
7000	-15.45	-5.23	8.16	-97.58	-20.95	-160.57	-19.46	-36.22	2.22	0.24	21.25	10.09	5.07
7200	-15.14	-21.22	8.10	-114.99	-21.08	-175.86	-20.13	-51.67	2.26	0.24	20.61	10.16	5.24
7600	-14.26	-52.86	7.95	-150.46	-21.16	155.19	-20.39	-79.79	2.30	0.23	19.77	9.70	5.15
8000	-13.66	-86.38	7.89	174.18	-21.16	125.27	-20.76	-115.70	2.31	0.23	19.28	9.61	5.72

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 48mA, Vd = 3.49V @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	-31.60	-1.56	12.42	174.62	-17.00	-4.18	-28.80	170.90	1.14	0.59	30.32	13.74	5.03
100	-30.76	-0.72	12.44	169.94	-17.01	-7.71	-28.47	164.91	1.14	0.59	30.33	13.72	4.71
200	-31.11	-7.55	12.41	160.16	-17.01	-15.07	-27.64	151.63	1.14	0.59	30.66	13.82	4.53
400	-31.83	-17.56	12.32	140.82	-17.03	-29.64	-26.75	129.95	1.15	0.58	30.35	13.67	4.52
600	-34.25	-23.83	12.24	121.57	-17.04	-44.43	-25.06	107.86	1.15	0.57	30.25	13.68	4.52
800	-35.41	-15.09	12.13	102.45	-17.07	-59.23	-23.73	88.25	1.16	0.57	30.34	13.60	4.43
1000	-36.27	4.82	12.02	83.45	-17.08	-73.98	-22.38	70.67	1.17	0.56	30.99	13.41	4.41
1200	-33.44	14.19	11.91	64.59	-17.11	-88.80	-21.27	53.03	1.18	0.55	30.98	13.44	4.50
1400	-30.55	7.45	11.77	45.84	-17.16	-103.52	-20.35	36.71	1.19	0.54	30.58	13.43	4.43
1600	-28.48	-0.15	11.64	27.15	-17.22	-118.31	-19.86	20.52	1.20	0.53	30.56	13.43	4.56
1800	-26.82	-14.64	11.53	8.46	-17.26	-133.17	-19.36	4.53	1.21	0.52	30.16	13.35	4.43
2000	-26.06	-27.50	11.40	-10.00	-17.30	-147.89	-19.12	-11.07	1.23	0.51	30.19	13.50	4.48
2200	-25.33	-40.36	11.30	-28.58	-17.37	-162.77	-19.20	-27.91	1.24	0.50	29.83	13.61	4.47
2400	-24.66	-55.50	11.16	-47.06	-17.43	-177.63	-19.05	-45.33	1.26	0.49	29.68	13.39	4.60
2600	-24.22	-69.42	11.03	-65.47	-17.54	167.46	-19.13	-61.93	1.28	0.48	29.67	13.46	4.54
2800	-23.50	-81.28	10.88	-83.92	-17.59	152.53	-19.14	-79.26	1.30	0.47	29.49	13.61	4.52
3000	-24.12	-97.32	10.74	-102.05	-17.66	137.84	-19.49	-97.07	1.32	0.46	28.98	13.48	4.55
3200	-23.75	-110.28	10.58	-120.27	-17.79	123.00	-19.67	-118.51	1.35	0.44	28.74	13.42	4.53
3400	-22.79	-120.15	10.47	-138.61	-17.83	107.90	-19.34	-135.68	1.37	0.43	28.64	13.42	4.63
3600	-22.95	-139.03	10.30	-156.58	-17.99	93.38	-19.33	-155.26	1.40	0.42	28.22	13.36	4.61
3800	-22.27	-151.81	10.11	-174.60	-18.15	78.26	-18.92	-175.04	1.44	0.40	28.16	13.44	4.72
4000	-21.40	-164.32	10.00	167.17	-18.22	63.26	-18.66	168.47	1.46	0.40	27.52	13.44	4.72
4200	-21.96	-178.08	9.87	150.00	-18.41	49.39	-18.57	147.97	1.50	0.38	27.63	13.38	4.68
4400	-20.23	170.84	9.68	131.47	-18.50	33.70	-17.60	131.84	1.53	0.37	27.43	13.38	4.63
4600	-19.91	155.01	9.58	114.06	-18.66	19.65	-17.22	116.11	1.57	0.36	27.04	13.44	4.62
4800	-18.88	139.25	9.36	96.05	-18.80	3.95	-16.48	103.51	1.61	0.35	26.60	13.42	4.82
5000	-18.45	127.53	9.30	78.68	-18.96	-9.79	-16.58	89.39	1.64	0.34	26.30	13.18	4.72
5200	-17.91	112.34	9.16	60.78	-19.09	-24.95	-16.27	76.17	1.68	0.34	25.98	12.92	4.89
5400	-17.33	95.85	8.92	43.53	-19.33	-40.46	-15.63	60.26	1.75	0.32	25.13	12.76	4.97
5600	-16.33	81.33	8.79	25.53	-19.39	-55.38	-15.17	49.33	1.78	0.32	25.02	12.61	5.02
5800	-16.67	70.08	8.83	8.14	-19.62	-68.35	-15.67	38.05	1.82	0.31	24.90	12.67	5.07
6000	-15.56	54.75	8.59	-9.68	-19.63	-83.91	-15.02	27.93	1.85	0.31	24.19	12.52	5.11
6200	-15.16	34.95	8.36	-26.50	-19.81	-100.22	-15.11	13.25	1.92	0.30	24.03	12.15	5.16
6400	-15.30	26.82	8.41	-44.92	-19.87	-112.77	-15.66	3.86	1.93	0.30	23.63	12.09	5.20
6600	-15.19	10.84	8.31	-61.59	-20.13	-127.98	-15.86	-11.76	2.00	0.28	23.00	12.27	5.33
6800	-15.13	-12.92	8.08	-77.41	-20.30	-145.99	-15.82	-30.43	2.08	0.27	22.76	12.01	5.33
7000	-15.76	-15.72	8.39	-95.85	-20.83	-156.55	-17.83	-37.70	2.14	0.26	22.79	11.88	5.48
7200	-15.49	-31.54	8.33	-113.16	-20.91	-171.72	-18.34	-53.44	2.17	0.25	22.09	11.91	5.49
7600	-14.71	-62.29	8.18	-148.49	-20.90	159.16	-18.54	-82.32	2.20	0.25	21.34	11.39	5.50
8000	-14.17	-95.48	8.12	176.50	-20.81	129.09	-18.78	-117.74	2.18	0.25	20.61	11.02	5.99

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 40mA, Vd = 3.60V @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	-28.79	-5.14	12.40	174.62	-16.95	-4.31	-31.61	169.07	1.14	0.59	27.13	11.81	4.15
100	-27.75	-5.88	12.43	169.87	-16.96	-7.75	-31.66	163.42	1.14	0.59	27.02	11.66	3.97
200	-27.78	-8.75	12.40	160.05	-16.96	-15.34	-31.05	150.79	1.14	0.59	27.31	11.80	3.92
400	-28.75	-25.79	12.32	140.54	-16.97	-30.25	-29.27	121.51	1.14	0.58	27.07	11.55	3.90
600	-31.09	-32.61	12.25	120.96	-16.96	-45.35	-26.63	102.25	1.15	0.58	27.12	11.89	3.89
800	-32.04	-34.52	12.14	101.66	-16.97	-60.42	-25.03	82.67	1.15	0.57	27.28	11.85	3.83
1000	-34.61	-23.37	12.06	82.44	-16.99	-75.64	-23.30	66.13	1.16	0.57	27.92	11.49	3.80
1200	-33.82	-8.73	11.94	63.29	-17.02	-90.76	-22.00	48.56	1.17	0.56	28.37	11.99	3.86
1400	-30.96	-3.68	11.82	44.23	-17.05	-105.93	-20.79	32.78	1.18	0.55	27.93	11.88	3.82
1600	-29.12	-9.45	11.70	25.39	-17.09	-121.03	-20.22	16.46	1.19	0.54	28.38	11.72	3.92
1800	-27.50	-20.85	11.61	6.40	-17.14	-136.29	-19.62	0.03	1.20	0.53	28.29	11.98	3.78
2000	-26.22	-34.00	11.47	-12.36	-17.17	-151.36	-19.31	-15.05	1.21	0.52	28.30	12.16	3.81
2200	-25.86	-45.86	11.37	-31.13	-17.23	-166.73	-19.39	-32.63	1.23	0.51	27.97	12.16	3.81
2400	-24.68	-62.47	11.24	-49.92	-17.30	178.14	-19.15	-49.52	1.24	0.50	28.22	12.04	3.95
2600	-24.12	-74.86	11.12	-68.67	-17.39	162.81	-19.20	-66.09	1.26	0.49	28.13	12.16	3.88
2800	-23.68	-88.48	10.97	-87.36	-17.45	147.45	-19.28	-83.87	1.28	0.48	28.24	12.22	3.86
3000	-23.93	-104.31	10.85	-105.90	-17.51	132.31	-19.55	-101.75	1.30	0.47	28.12	12.16	3.87
3200	-23.70	-119.26	10.70	-124.38	-17.63	117.13	-19.79	-123.86	1.32	0.45	28.09	12.48	3.89
3400	-22.48	-128.13	10.58	-142.98	-17.67	101.59	-19.42	-140.96	1.34	0.45	28.73	12.39	3.97
3600	-23.08	-146.79	10.43	-161.22	-17.82	86.78	-19.48	-161.67	1.37	0.43	28.67	12.43	3.95
3800	-22.41	-160.98	10.23	-179.47	-17.99	71.39	-19.02	177.21	1.41	0.41	28.84	12.66	4.06
4000	-21.46	-174.22	10.13	161.99	-18.04	55.99	-18.67	161.20	1.42	0.41	28.67	12.79	4.07
4200	-21.97	173.58	10.02	144.34	-18.20	41.67	-18.46	140.78	1.46	0.40	28.99	12.82	3.98
4400	-20.20	160.37	9.80	125.59	-18.31	25.40	-17.36	123.76	1.49	0.38	29.52	12.89	3.96
4600	-20.04	143.72	9.72	107.92	-18.48	11.07	-16.95	107.83	1.52	0.37	29.28	13.03	3.97
4800	-18.82	125.22	9.48	89.60	-18.62	-5.09	-16.14	95.61	1.57	0.36	29.13	13.09	4.17
5000	-18.08	114.19	9.44	71.87	-18.73	-19.38	-16.19	81.57	1.59	0.36	28.88	12.88	4.02
5200	-17.92	97.33	9.29	54.05	-18.94	-34.77	-15.86	66.32	1.64	0.35	29.06	12.83	4.23
5400	-16.85	80.83	9.06	36.20	-19.12	-50.77	-15.15	51.83	1.69	0.34	28.33	12.80	4.28
5600	-16.01	66.38	8.92	18.16	-19.23	-66.09	-14.66	39.40	1.72	0.33	28.12	12.69	4.22
5800	-16.10	55.59	8.97	-0.01	-19.33	-79.41	-15.13	29.96	1.74	0.33	28.01	12.60	4.34
6000	-15.16	39.29	8.74	-18.13	-19.36	-95.44	-14.59	19.28	1.77	0.33	27.46	12.64	4.31
6200	-15.06	18.97	8.56	-34.58	-19.68	-111.80	-14.86	2.40	1.86	0.31	27.40	12.41	4.33
6400	-15.02	7.93	8.52	-53.71	-19.60	-125.44	-15.17	-6.83	1.85	0.31	27.05	12.33	4.37
6600	-14.95	-9.13	8.44	-70.48	-19.86	-141.17	-15.32	-23.40	1.92	0.30	26.30	12.47	4.41
6800	-15.13	-33.06	8.28	-86.26	-20.18	-159.51	-15.55	-43.39	2.01	0.28	26.05	12.30	4.51
7000	-15.65	-37.56	8.55	-105.53	-20.53	-170.16	-17.45	-50.14	2.04	0.27	26.46	12.19	4.57
7200	-15.30	-54.37	8.48	-123.03	-20.64	174.06	-17.94	-66.58	2.08	0.27	25.29	12.17	4.61
7600	-14.88	-87.40	8.44	-158.07	-20.92	142.22	-18.95	-103.36	2.15	0.26	24.75	11.80	4.84
8000	-13.98	-120.62	8.28	166.19	-20.56	111.75	-18.20	-138.50	2.09	0.27	23.50	11.51	5.13

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 32mA, Vd = 3.50V @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	-25.04	-3.30	12.12	174.63	-16.75	-4.25	-46.22	138.45	1.14	0.59	22.14	8.34	3.86
100	-24.38	-6.15	12.13	169.92	-16.75	-7.79	-46.61	127.12	1.14	0.59	21.96	8.09	3.77
200	-24.39	-12.52	12.12	160.13	-16.75	-15.34	-43.34	114.72	1.14	0.59	22.16	8.30	3.81
400	-25.04	-30.60	12.03	140.63	-16.75	-30.28	-36.30	89.29	1.15	0.58	21.93	8.02	3.83
600	-26.70	-43.83	11.97	121.11	-16.75	-45.47	-31.51	83.34	1.15	0.58	22.02	8.35	3.83
800	-27.77	-53.99	11.89	101.81	-16.76	-60.66	-28.80	68.76	1.16	0.57	22.13	8.39	3.76
1000	-30.61	-62.15	11.80	82.56	-16.78	-75.89	-26.30	56.72	1.16	0.56	22.66	8.06	3.73
1200	-32.97	-60.83	11.69	63.43	-16.81	-91.06	-24.55	41.12	1.17	0.55	23.12	8.62	3.77
1400	-34.03	-46.02	11.58	44.41	-16.85	-106.31	-23.00	27.33	1.18	0.54	22.67	8.46	3.71
1600	-33.39	-36.06	11.47	25.51	-16.90	-121.57	-22.20	12.07	1.20	0.53	23.12	8.35	3.83
1800	-31.65	-36.19	11.36	6.54	-16.94	-136.79	-21.43	-3.45	1.21	0.53	22.80	8.64	3.70
2000	-29.93	-43.00	11.24	-12.24	-16.96	-152.01	-21.06	-17.80	1.22	0.52	22.75	8.76	3.72
2200	-29.70	-51.20	11.16	-31.05	-17.04	-167.30	-21.06	-35.14	1.23	0.51	22.52	8.81	3.71
2400	-27.95	-65.19	11.04	-49.87	-17.10	177.34	-20.74	-51.70	1.25	0.50	22.83	8.70	3.86
2600	-27.17	-74.72	10.92	-68.61	-17.19	162.05	-20.74	-67.98	1.26	0.49	22.39	8.91	3.81
2800	-26.46	-85.98	10.77	-87.33	-17.27	146.53	-20.75	-85.76	1.28	0.48	22.51	8.91	3.77
3000	-26.65	-100.57	10.66	-105.91	-17.31	131.38	-21.08	-103.96	1.30	0.47	22.61	8.88	3.79
3200	-26.31	-113.95	10.51	-124.45	-17.46	115.90	-21.26	-126.94	1.33	0.45	22.62	9.44	3.81
3400	-24.47	-121.02	10.40	-143.03	-17.51	100.56	-20.77	-143.79	1.34	0.45	23.18	9.29	3.90
3600	-25.23	-138.76	10.25	-161.30	-17.65	85.65	-20.72	-164.88	1.38	0.43	23.23	9.34	3.86
3800	-24.17	-152.96	10.06	-179.61	-17.83	70.12	-20.15	173.53	1.42	0.41	23.44	9.72	3.95
4000	-22.85	-166.30	9.96	161.79	-17.87	54.61	-19.76	157.72	1.43	0.41	23.72	10.02	3.97
4200	-23.28	-177.11	9.86	144.13	-18.06	40.25	-19.40	137.14	1.46	0.39	23.84	10.22	3.90
4400	-21.13	168.51	9.66	125.37	-18.18	23.94	-18.15	120.57	1.50	0.38	24.43	10.27	3.89
4600	-20.91	151.74	9.57	107.60	-18.34	9.54	-17.71	104.93	1.53	0.37	24.75	10.82	3.87
4800	-19.56	131.77	9.34	89.23	-18.48	-6.64	-16.83	93.34	1.57	0.36	24.95	11.02	4.02
5000	-18.64	120.77	9.30	71.43	-18.62	-21.23	-16.88	79.42	1.60	0.36	24.74	10.75	3.90
5200	-18.44	103.91	9.17	53.57	-18.84	-36.42	-16.52	64.44	1.65	0.34	25.16	11.02	4.12
5400	-17.28	86.69	8.93	35.63	-19.03	-52.57	-15.73	50.27	1.70	0.33	25.26	11.30	4.18
5600	-16.34	71.73	8.79	17.51	-19.14	-68.01	-15.24	38.11	1.74	0.33	24.98	10.96	4.12
5800	-16.33	61.37	8.86	-0.70	-19.26	-81.27	-15.75	28.96	1.75	0.33	24.61	10.79	4.25
6000	-15.34	44.16	8.62	-18.87	-19.28	-97.39	-15.19	18.53	1.78	0.32	24.65	11.25	4.28
6200	-15.31	23.85	8.44	-35.35	-19.64	-113.94	-15.47	1.55	1.88	0.30	24.86	11.06	4.24
6400	-15.12	12.86	8.41	-54.54	-19.57	-127.54	-15.80	-7.02	1.87	0.30	24.32	10.73	4.31
6600	-15.06	-3.90	8.31	-71.40	-19.86	-143.33	-15.99	-23.54	1.94	0.29	23.86	10.98	4.29
6800	-15.34	-27.79	8.17	-87.26	-20.16	-161.91	-16.19	-43.99	2.04	0.28	23.89	10.94	4.42
7000	-15.62	-31.72	8.43	-106.61	-20.58	-172.47	-18.27	-49.94	2.08	0.27	24.17	10.66	4.35
7200	-15.25	-48.43	8.37	-124.12	-20.73	171.67	-18.82	-66.31	2.12	0.26	23.41	10.73	4.47
7600	-14.79	-81.73	8.33	-159.26	-21.06	139.76	-19.97	-103.73	2.20	0.25	22.74	10.36	4.68
8000	-13.87	-115.12	8.18	164.84	-20.79	109.73	-19.26	-138.89	2.16	0.26	22.18	10.45	4.92

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 48mA, Vd = 3.67V @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	-32.00	-7.39	12.55	174.57	-17.07	-4.09	-28.14	171.36	1.14	0.59	30.63	13.81	4.36
100	-30.26	-3.61	12.57	169.90	-17.06	-7.73	-28.25	165.88	1.13	0.60	30.63	13.89	4.07
200	-30.29	-5.10	12.54	160.03	-17.06	-15.26	-27.87	153.97	1.13	0.59	31.02	14.00	3.96
400	-31.53	-20.17	12.46	140.47	-17.07	-30.16	-26.71	127.01	1.14	0.59	30.74	13.86	3.95
600	-34.27	-18.57	12.39	121.00	-17.08	-45.21	-24.73	106.55	1.14	0.58	30.77	14.00	3.94
800	-34.44	-11.25	12.30	101.61	-17.09	-60.37	-23.41	86.62	1.15	0.58	30.95	13.91	3.86
1000	-34.42	9.26	12.19	82.41	-17.11	-75.44	-21.96	69.33	1.16	0.57	31.72	13.66	3.85
1200	-31.78	13.71	12.08	63.20	-17.13	-90.61	-20.88	51.03	1.17	0.56	32.02	13.80	3.89
1400	-28.83	7.88	11.95	44.22	-17.17	-105.72	-19.82	34.70	1.18	0.55	31.63	13.77	3.86
1600	-27.10	-2.47	11.83	25.33	-17.22	-120.92	-19.31	18.13	1.19	0.54	31.91	13.76	3.97
1800	-25.73	-16.07	11.72	6.36	-17.26	-136.07	-18.77	1.39	1.20	0.53	31.78	13.74	3.86
2000	-24.62	-30.97	11.59	-12.40	-17.29	-151.12	-18.53	-14.06	1.21	0.52	31.93	13.89	3.88
2200	-24.33	-44.26	11.48	-31.20	-17.35	-166.37	-18.60	-31.59	1.22	0.51	31.56	13.98	3.89
2400	-23.35	-61.59	11.35	-49.96	-17.40	178.43	-18.43	-48.60	1.24	0.50	31.65	13.81	3.99
2600	-22.84	-74.94	11.22	-68.70	-17.49	163.17	-18.47	-65.19	1.26	0.49	31.86	13.87	3.95
2800	-22.42	-89.16	11.07	-87.37	-17.55	147.91	-18.54	-82.99	1.28	0.48	31.81	13.99	3.92
3000	-22.71	-105.47	10.94	-105.86	-17.60	132.68	-18.84	-100.87	1.29	0.47	31.36	13.94	3.93
3200	-22.51	-120.84	10.79	-124.33	-17.74	117.62	-19.08	-122.44	1.32	0.45	31.34	13.93	3.93
3400	-21.50	-130.87	10.68	-142.89	-17.77	102.09	-18.77	-139.72	1.34	0.45	31.76	13.93	4.03
3600	-22.02	-149.60	10.51	-161.12	-17.90	87.32	-18.83	-160.09	1.37	0.43	31.55	13.91	4.00
3800	-21.40	-163.92	10.32	-179.37	-18.09	71.90	-18.46	178.89	1.41	0.41	31.62	14.01	4.09
4000	-20.64	-177.75	10.22	162.10	-18.13	56.56	-18.17	162.62	1.42	0.41	31.01	14.05	4.13
4200	-21.15	169.28	10.10	144.51	-18.28	42.17	-17.97	142.35	1.45	0.40	31.57	13.99	4.06
4400	-19.60	156.44	9.88	125.80	-18.38	26.08	-16.94	125.17	1.49	0.39	31.61	14.02	4.01
4600	-19.45	139.77	9.80	108.10	-18.54	11.71	-16.57	109.09	1.52	0.38	31.15	14.10	4.02
4800	-18.32	121.59	9.56	89.85	-18.68	-4.30	-15.79	96.60	1.56	0.36	30.85	14.09	4.14
5000	-17.69	110.64	9.51	72.08	-18.79	-18.67	-15.83	82.56	1.58	0.36	30.66	13.89	4.05
5200	-17.53	93.86	9.36	54.32	-19.00	-33.91	-15.54	67.22	1.63	0.35	30.64	13.69	4.24
5400	-16.52	77.73	9.12	36.50	-19.17	-49.93	-14.84	52.69	1.68	0.34	29.61	13.58	4.37
5600	-15.72	63.41	8.98	18.47	-19.27	-65.27	-14.38	40.10	1.71	0.33	29.48	13.51	4.33
5800	-15.89	52.23	9.03	0.36	-19.36	-78.46	-14.82	30.38	1.73	0.33	29.61	13.51	4.45
6000	-14.98	36.16	8.80	-17.74	-19.38	-94.38	-14.28	19.52	1.76	0.33	28.90	13.35	4.41
6200	-14.86	15.76	8.61	-34.05	-19.70	-110.94	-14.54	2.58	1.84	0.31	28.56	13.07	4.44
6400	-14.87	4.59	8.57	-53.25	-19.60	-124.51	-14.85	-6.74	1.84	0.31	28.43	13.06	4.52
6600	-14.81	-12.38	8.50	-70.00	-19.87	-140.12	-15.00	-23.18	1.90	0.30	27.66	13.18	4.57
6800	-14.87	-36.58	8.34	-85.71	-20.15	-158.39	-15.17	-42.99	1.99	0.29	27.26	12.94	4.66
7000	-15.55	-41.70	8.60	-104.86	-20.51	-169.05	-17.00	-50.23	2.03	0.28	27.56	12.89	4.63
7200	-15.20	-58.53	8.54	-122.37	-20.60	175.11	-17.44	-66.81	2.06	0.27	26.28	12.84	4.68
7600	-14.88	-92.04	8.48	-157.28	-20.84	143.14	-18.38	-103.73	2.12	0.26	25.84	12.42	5.12
8000	-13.97	-124.33	8.34	167.00	-20.54	112.86	-17.79	-137.56	2.07	0.27	24.22	12.01	5.20

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 40mA, Vd = 3.30V @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	-27.60	-1.52	12.13	174.65	-16.80	-4.27	-35.43	167.85	1.15	0.58	26.91	11.94	5.39
100	-27.27	-1.99	12.14	169.98	-16.81	-7.69	-34.09	159.31	1.15	0.58	26.84	11.77	5.18
200	-28.06	-13.32	12.11	160.23	-16.82	-15.00	-31.85	142.06	1.15	0.58	27.10	11.94	5.07
400	-28.10	-26.08	12.02	140.97	-16.85	-29.49	-30.81	123.83	1.16	0.57	26.76	11.76	5.08
600	-29.82	-41.16	11.93	121.70	-16.85	-44.11	-28.51	101.96	1.16	0.57	26.71	11.89	5.07
800	-30.64	-49.71	11.83	102.69	-16.88	-58.73	-26.91	82.25	1.17	0.56	26.85	11.79	5.03
1000	-33.75	-55.47	11.73	83.80	-16.90	-73.44	-25.08	66.35	1.18	0.55	27.45	11.55	4.98
1200	-35.45	-45.26	11.61	64.95	-16.96	-88.18	-23.83	50.18	1.19	0.54	27.73	11.74	5.07
1400	-34.89	-32.57	11.49	46.19	-17.01	-102.79	-22.70	34.75	1.20	0.53	27.30	11.69	5.02
1600	-33.36	-23.95	11.35	27.73	-17.05	-117.50	-22.04	19.27	1.22	0.52	27.54	11.64	5.13
1800	-30.92	-27.09	11.24	9.03	-17.11	-132.18	-21.34	4.08	1.23	0.51	27.34	11.67	5.00
2000	-30.36	-32.95	11.11	-9.39	-17.16	-146.80	-21.05	-11.86	1.24	0.50	27.37	11.80	5.05
2200	-29.44	-41.14	10.99	-27.77	-17.24	-161.61	-21.05	-28.57	1.26	0.49	27.00	11.86	5.06
2400	-28.38	-52.53	10.88	-46.29	-17.31	-176.31	-20.73	-46.03	1.28	0.48	27.06	11.73	5.20
2600	-27.88	-64.71	10.73	-64.67	-17.42	168.89	-20.78	-62.83	1.30	0.47	27.02	11.82	5.14
2800	-26.72	-73.21	10.59	-83.00	-17.49	154.08	-20.59	-80.31	1.32	0.46	27.05	11.88	5.14
3000	-27.53	-87.47	10.45	-101.18	-17.58	139.53	-20.95	-97.23	1.35	0.44	26.68	11.84	5.16
3200	-26.86	-100.41	10.30	-119.13	-17.71	124.93	-21.15	-119.00	1.38	0.43	26.50	11.93	5.18
3400	-25.21	-107.30	10.19	-137.54	-17.74	109.96	-20.68	-134.72	1.39	0.42	26.66	11.91	5.23
3600	-25.15	-125.19	10.03	-155.44	-17.93	95.56	-20.57	-153.52	1.43	0.41	26.41	11.78	5.24
3800	-23.93	-138.13	9.83	-173.47	-18.11	80.44	-20.05	-172.88	1.48	0.39	26.40	11.94	5.34
4000	-22.59	-149.07	9.73	168.31	-18.17	65.62	-19.74	171.61	1.50	0.38	25.78	11.96	5.36
4200	-22.92	-159.95	9.59	151.05	-18.38	51.72	-19.67	151.21	1.54	0.37	25.90	11.97	5.32
4400	-21.07	-172.47	9.41	132.84	-18.50	36.48	-18.82	133.74	1.58	0.36	25.92	11.97	5.30
4600	-20.56	173.45	9.31	115.35	-18.68	22.37	-18.30	118.02	1.61	0.35	25.49	12.06	5.29
4800	-19.52	159.52	9.11	97.33	-18.79	7.09	-17.64	106.63	1.66	0.34	25.15	12.01	5.43
5000	-19.46	145.32	9.04	80.43	-19.08	-6.60	-18.06	90.91	1.72	0.33	24.81	11.81	5.47
5200	-18.59	132.75	8.92	62.20	-19.15	-21.53	-17.69	79.24	1.74	0.32	24.55	11.66	5.61
5400	-17.71	115.32	8.64	44.56	-19.33	-37.41	-16.79	64.17	1.81	0.31	23.80	11.51	5.72
5600	-17.01	101.31	8.60	26.91	-19.48	-51.10	-16.81	53.53	1.84	0.31	23.65	11.31	5.79
5800	-16.81	89.57	8.52	9.27	-19.66	-64.92	-16.80	43.06	1.89	0.30	23.39	11.35	5.78
6000	-15.44	73.97	8.29	-8.78	-19.65	-79.97	-16.09	34.88	1.91	0.30	22.79	11.27	5.83
6200	-15.34	51.89	8.01	-25.09	-19.92	-97.06	-16.07	18.37	2.02	0.28	22.66	10.91	5.87
6400	-15.12	48.89	8.17	-43.71	-20.06	-107.93	-17.07	12.24	2.02	0.28	22.28	10.79	5.78
6600	-15.31	34.99	8.13	-60.27	-20.46	-122.63	-17.48	-2.79	2.11	0.26	21.55	10.96	5.85
6800	-15.18	13.25	7.86	-76.80	-20.50	-139.93	-17.29	-18.55	2.18	0.25	21.35	10.68	6.09
7000	-15.13	6.05	8.00	-94.40	-20.96	-152.31	-18.92	-28.33	2.26	0.24	21.38	10.54	6.26
7200	-15.05	-7.62	8.03	-111.72	-21.28	-166.71	-19.75	-41.67	2.32	0.23	20.68	10.62	6.28
7600	-14.18	-39.32	7.83	-147.38	-21.18	165.49	-19.31	-65.26	2.33	0.23	19.96	10.01	6.28
8000	-13.13	-69.01	7.74	176.20	-21.16	139.72	-19.69	-89.31	2.32	0.22	19.20	9.74	6.78

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 32mA, Vd = 3.21V @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	-23.58	-2.15	11.77	174.69	-16.55	-4.30	-38.77	5.65	1.15	0.58	22.69	8.82	5.06
100	-23.37	-5.08	11.78	169.97	-16.56	-7.70	-39.98	12.57	1.15	0.58	22.53	8.62	4.98
200	-23.95	-15.31	11.75	160.31	-16.58	-15.04	-40.59	44.89	1.16	0.57	22.69	8.76	4.99
400	-23.99	-30.98	11.66	141.08	-16.60	-29.57	-40.50	47.89	1.16	0.57	22.38	8.52	5.01
600	-25.09	-48.75	11.58	121.88	-16.62	-44.32	-35.87	61.18	1.17	0.56	22.37	8.84	5.02
800	-25.85	-61.86	11.49	102.93	-16.65	-58.95	-32.78	53.29	1.18	0.55	22.50	8.74	4.98
1000	-27.74	-77.27	11.40	84.02	-16.66	-73.69	-29.89	48.03	1.19	0.54	23.02	8.48	4.95
1200	-29.70	-86.62	11.28	65.23	-16.70	-88.49	-27.81	37.54	1.20	0.53	23.41	9.03	5.01
1400	-31.76	-91.84	11.16	46.56	-16.75	-103.28	-26.06	25.97	1.21	0.52	23.03	8.88	4.95
1600	-34.58	-90.45	11.04	27.99	-16.82	-118.05	-25.20	12.25	1.22	0.51	23.42	8.63	5.06
1800	-35.93	-78.99	10.95	9.32	-16.86	-132.81	-24.22	-1.10	1.24	0.51	23.18	9.01	4.91
2000	-38.06	-72.00	10.82	-9.07	-16.91	-147.49	-23.66	-15.86	1.25	0.50	23.17	9.22	4.97
2200	-37.88	-58.28	10.72	-27.58	-16.97	-162.42	-23.62	-32.23	1.27	0.49	22.92	9.20	4.98
2400	-35.89	-56.75	10.60	-46.02	-17.06	-177.23	-23.12	-49.48	1.28	0.48	23.21	9.15	5.11
2600	-34.39	-61.01	10.48	-64.53	-17.18	167.98	-23.09	-65.98	1.31	0.46	22.92	9.28	5.05
2800	-31.68	-61.87	10.34	-82.82	-17.27	153.05	-22.83	-83.46	1.33	0.45	23.05	9.33	5.05
3000	-32.68	-71.08	10.21	-100.97	-17.36	138.50	-23.15	-100.37	1.35	0.44	23.12	9.26	5.06
3200	-31.27	-82.64	10.06	-119.06	-17.50	123.71	-23.29	-123.38	1.38	0.43	23.09	9.73	5.07
3400	-27.96	-89.93	9.96	-137.43	-17.54	108.64	-22.61	-138.39	1.40	0.42	23.60	9.72	5.15
3600	-27.83	-108.52	9.80	-155.36	-17.71	94.18	-22.43	-157.73	1.44	0.40	23.58	9.59	5.13
3800	-25.93	-123.20	9.61	-173.40	-17.91	79.02	-21.71	-177.28	1.48	0.39	23.70	9.93	5.24
4000	-24.01	-135.63	9.53	168.26	-17.98	64.03	-21.25	167.74	1.50	0.38	23.59	10.08	5.26
4200	-24.02	-145.24	9.40	151.04	-18.20	50.08	-21.07	146.70	1.55	0.37	23.70	10.11	5.22
4400	-21.78	-160.12	9.21	132.88	-18.33	34.76	-20.02	129.44	1.59	0.36	24.03	10.21	5.19
4600	-21.14	-175.18	9.11	115.29	-18.54	20.64	-19.41	114.22	1.63	0.35	23.88	10.46	5.15
4800	-19.95	169.57	8.91	97.21	-18.65	5.17	-18.66	103.55	1.67	0.34	23.60	10.52	5.26
5000	-19.75	155.57	8.86	80.20	-18.95	-8.65	-19.10	88.05	1.73	0.32	23.31	10.31	5.32
5200	-18.72	142.07	8.74	61.93	-19.04	-23.61	-18.70	76.94	1.76	0.32	23.20	10.35	5.47
5400	-17.87	123.43	8.46	44.33	-19.23	-39.64	-17.73	62.16	1.83	0.31	22.66	10.40	5.55
5600	-17.08	108.84	8.42	26.50	-19.40	-53.34	-17.74	52.18	1.87	0.30	22.44	10.17	5.64
5800	-16.74	96.58	8.35	8.87	-19.61	-67.33	-17.76	42.16	1.92	0.29	22.09	10.07	5.64
6000	-15.38	79.82	8.12	-9.30	-19.59	-82.44	-16.94	34.96	1.94	0.29	21.62	10.27	5.72
6200	-15.40	58.30	7.84	-25.57	-19.89	-99.53	-16.98	18.16	2.05	0.27	21.60	10.00	5.72
6400	-14.93	54.46	7.99	-44.30	-20.06	-110.47	-18.05	13.21	2.05	0.27	21.14	9.76	5.72
6600	-15.00	40.72	7.94	-60.94	-20.52	-125.31	-18.51	-1.70	2.16	0.25	20.45	9.96	5.81
6800	-14.96	19.16	7.68	-77.48	-20.56	-142.71	-18.29	-17.63	2.23	0.24	20.31	9.76	5.95
7000	-14.73	11.70	7.81	-95.17	-21.08	-155.13	-20.18	-26.30	2.32	0.23	20.35	9.55	6.01
7200	-14.57	-1.89	7.84	-112.57	-21.43	-169.38	-21.15	-38.44	2.40	0.22	19.68	9.63	6.03
7600	-13.70	-34.40	7.64	-148.30	-21.43	162.81	-20.66	-60.95	2.43	0.21	18.93	9.16	5.96
8000	-12.63	-65.23	7.54	175.16	-21.45	137.24	-20.87	-83.91	2.43	0.21	18.30	8.99	6.63

TYPE: MMIC Amplifier
MODEL: ERA-1 Reference Data: RDF-960
S PARAMETERS are presented in dB/deg Format
TEST CONDITIONS: INPUT POWER = -15dBm, Icc = 48mA, Vd = 3.38V @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	-30.71	-2.01	12.32	174.61	-16.95	-4.30	-29.72	171.11	1.14	0.59	30.01	13.56	5.59
100	-30.18	0.09	12.34	169.93	-16.95	-7.64	-29.06	164.19	1.14	0.59	30.01	13.54	5.34
200	-31.49	-9.96	12.30	160.23	-16.96	-14.88	-27.78	149.18	1.14	0.58	30.30	13.61	5.17
400	-31.62	-19.56	12.21	140.94	-16.99	-29.41	-27.16	130.53	1.15	0.58	29.88	13.48	5.15
600	-33.94	-30.73	12.13	121.65	-17.00	-43.94	-25.68	108.50	1.16	0.57	29.71	13.45	5.14
800	-34.45	-30.46	12.01	102.64	-17.02	-58.57	-24.53	88.28	1.17	0.56	29.76	13.31	5.09
1000	-37.33	-17.21	11.90	83.71	-17.04	-73.17	-23.14	70.86	1.18	0.55	30.25	13.12	5.08
1200	-35.17	-1.53	11.79	64.88	-17.09	-87.81	-22.13	53.83	1.19	0.54	30.09	13.09	5.15
1400	-32.31	-0.70	11.64	46.16	-17.12	-102.42	-21.21	37.62	1.20	0.53	29.68	13.10	5.12
1600	-30.14	-5.95	11.52	27.61	-17.20	-117.04	-20.68	21.51	1.21	0.52	29.53	13.08	5.22
1800	-28.12	-16.44	11.41	8.99	-17.25	-131.76	-20.11	5.84	1.23	0.51	29.01	13.00	5.11
2000	-27.53	-26.25	11.26	-9.41	-17.29	-146.29	-19.87	-10.39	1.24	0.50	29.02	13.13	5.15
2200	-26.79	-37.46	11.16	-27.86	-17.38	-161.02	-19.90	-27.21	1.26	0.49	28.66	13.25	5.18
2400	-26.10	-51.10	11.02	-46.29	-17.44	-175.66	-19.65	-44.88	1.28	0.48	28.47	12.98	5.29
2600	-25.70	-64.68	10.88	-64.61	-17.56	169.69	-19.71	-61.58	1.30	0.47	28.38	13.04	5.26
2800	-24.83	-74.95	10.73	-82.99	-17.62	154.91	-19.59	-79.02	1.32	0.46	28.22	13.21	5.24
3000	-25.48	-90.37	10.59	-101.05	-17.70	140.37	-19.93	-95.86	1.34	0.44	27.75	13.01	5.27
3200	-25.04	-104.10	10.42	-119.11	-17.83	125.81	-20.19	-116.98	1.38	0.43	27.48	12.93	5.27
3400	-23.84	-112.23	10.31	-137.47	-17.87	110.80	-19.79	-132.90	1.39	0.42	27.41	12.95	5.36
3600	-23.81	-129.98	10.15	-155.31	-18.03	96.56	-19.74	-151.59	1.43	0.41	26.98	12.83	5.37
3800	-22.80	-143.17	9.96	-173.24	-18.22	81.55	-19.31	-170.79	1.47	0.39	26.98	12.84	5.46
4000	-21.73	-154.25	9.85	168.54	-18.28	66.73	-19.04	173.46	1.49	0.39	26.37	12.89	5.49
4200	-22.09	-165.98	9.71	151.35	-18.46	52.98	-19.02	153.45	1.53	0.37	26.46	12.87	5.46
4400	-20.49	-177.46	9.51	133.17	-18.60	37.79	-18.25	135.78	1.58	0.36	26.38	12.83	5.43
4600	-20.12	168.70	9.42	115.69	-18.77	23.79	-17.79	120.07	1.61	0.35	26.05	12.90	5.39
4800	-19.19	155.13	9.22	97.70	-18.88	8.43	-17.14	108.08	1.65	0.34	25.75	12.88	5.49
5000	-19.11	141.07	9.15	80.79	-19.14	-5.11	-17.55	92.77	1.70	0.33	25.46	12.65	5.58
5200	-18.35	128.66	9.01	62.61	-19.23	-19.95	-17.20	80.82	1.74	0.32	25.15	12.40	5.73
5400	-17.56	111.72	8.73	45.10	-19.40	-35.78	-16.39	65.45	1.80	0.31	24.38	12.20	5.87
5600	-16.85	98.09	8.69	27.33	-19.52	-49.46	-16.37	54.81	1.83	0.31	24.31	12.03	5.91
5800	-16.70	86.44	8.61	9.80	-19.70	-63.26	-16.35	44.03	1.88	0.30	24.07	12.07	5.96
6000	-15.38	70.89	8.38	-8.23	-19.69	-78.36	-15.67	35.44	1.90	0.30	23.49	11.94	6.06
6200	-15.30	49.25	8.10	-24.44	-19.96	-95.16	-15.73	19.00	2.01	0.28	23.30	11.57	6.03
6400	-15.16	46.00	8.25	-43.05	-20.06	-106.12	-16.61	12.62	2.00	0.28	22.96	11.45	5.99
6600	-15.34	32.15	8.21	-59.65	-20.44	-120.72	-17.00	-2.54	2.09	0.27	22.23	11.67	6.05
6800	-15.19	10.39	7.94	-76.01	-20.47	-137.92	-16.80	-18.36	2.15	0.26	22.01	11.37	6.25
7000	-15.23	3.07	8.08	-93.59	-20.94	-150.25	-18.36	-28.72	2.23	0.24	22.01	11.26	6.41
7200	-15.20	-9.90	8.12	-110.93	-21.20	-164.33	-19.14	-41.25	2.28	0.24	21.28	11.34	6.43
7600	-14.36	-41.25	7.92	-146.55	-21.07	167.48	-18.76	-65.58	2.28	0.23	20.57	10.76	6.68
8000	-13.34	-71.10	7.83	177.21	-21.00	141.37	-19.04	-91.17	2.27	0.23	19.76	10.40	6.99