

ERA-21SM Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.50V @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			
50	-39.58	22.10	14.66	174.02	-18.86	-4.17	-32.42	173.17	1.12	0.62	28.75	12.28	3.32
100	-41.22	-51.20	14.69	169.12	-18.89	-7.37	-31.61	174.79	1.12	0.62	28.72	12.46	3.44
200	-37.68	-69.05	14.63	159.04	-18.89	-14.33	-30.57	169.76	1.12	0.61	28.85	12.36	3.29
400	-33.45	-123.31	14.50	138.68	-18.83	-28.51	-28.09	156.82	1.12	0.61	28.33	12.13	3.37
600	-30.60	-167.01	14.35	118.97	-18.81	-43.02	-25.84	132.82	1.13	0.60	28.10	12.37	3.34
800	-28.90	158.67	14.18	99.28	-18.76	-57.63	-24.14	111.74	1.14	0.59	28.17	12.01	3.46
1000	-26.30	136.03	14.01	79.76	-18.76	-72.32	-22.79	90.55	1.15	0.58	28.52	11.78	3.40
1200	-24.44	113.53	13.85	60.38	-18.76	-87.09	-21.62	71.79	1.16	0.57	28.51	11.78	3.48
1400	-22.98	93.58	13.69	41.16	-18.75	-101.73	-20.75	52.89	1.17	0.56	28.21	12.03	3.49
1600	-21.63	75.80	13.52	21.98	-18.79	-116.57	-19.98	35.35	1.18	0.55	28.23	11.65	3.52
1800	-20.58	56.64	13.34	2.81	-18.80	-131.24	-19.47	19.00	1.19	0.54	28.19	11.65	3.53
2000	-19.90	41.68	13.18	-16.13	-18.81	-145.92	-19.22	0.34	1.21	0.53	27.85	11.88	3.45
2200	-18.95	23.95	12.99	-35.13	-18.84	-160.69	-18.92	-16.78	1.22	0.52	27.49	12.01	3.57
2400	-18.20	8.56	12.81	-54.08	-18.86	-175.55	-18.77	-33.08	1.24	0.51	27.25	11.75	3.58
2600	-17.64	-7.02	12.62	-72.82	-18.92	169.70	-18.70	-51.32	1.26	0.50	27.19	11.36	3.55
2800	-16.77	-23.73	12.42	-91.53	-18.92	154.89	-18.51	-68.63	1.27	0.49	27.00	11.53	3.57
3000	-16.52	-39.11	12.21	-110.30	-19.00	140.14	-18.55	-86.65	1.30	0.47	26.67	11.87	3.41
3200	-15.69	-54.76	12.01	-128.85	-19.06	125.15	-18.39	-105.01	1.32	0.46	26.35	11.60	3.44
3400	-15.26	-71.72	11.81	-147.34	-19.07	110.28	-18.24	-122.41	1.34	0.45	26.13	10.94	3.60
3600	-14.86	-88.25	11.58	-165.83	-19.15	95.16	-17.93	-141.24	1.37	0.44	25.82	11.17	3.67
3800	-14.30	-105.06	11.39	176.05	-19.24	80.51	-17.70	-158.80	1.39	0.43	25.79	11.64	3.70
4000	-13.67	-122.86	11.20	157.41	-19.27	65.31	-17.11	-174.39	1.41	0.42	25.28	11.39	3.67
4200	-13.32	-139.27	10.96	139.46	-19.37	50.37	-16.93	167.09	1.45	0.41	25.18	10.76	3.66
4400	-12.70	-155.95	10.77	121.19	-19.43	35.69	-16.51	151.73	1.47	0.40	25.20	10.93	3.77
4600	-12.27	-175.20	10.55	102.91	-19.51	20.15	-16.00	136.72	1.50	0.39	24.87	11.53	3.97
4800	-11.71	169.79	10.38	84.99	-19.59	5.53	-15.69	121.54	1.52	0.39	24.58	11.20	3.99
5000	-11.06	152.49	10.14	66.89	-19.68	-9.40	-15.44	106.78	1.55	0.38	24.14	10.29	4.16
5200	-10.85	135.39	9.90	48.88	-19.72	-25.03	-15.21	92.66	1.59	0.37	24.14	10.15	4.08
5400	-10.38	119.62	9.73	30.96	-19.82	-39.71	-15.17	78.62	1.61	0.36	23.75	10.83	4.14
5600	-9.93	102.82	9.49	13.20	-19.90	-54.91	-14.97	63.30	1.64	0.35	23.28	10.65	4.20
5800	-9.83	86.68	9.26	-4.46	-20.06	-70.31	-14.98	48.89	1.70	0.34	23.31	10.16	4.28
6000	-9.49	72.13	9.08	-22.08	-20.11	-85.23	-15.21	35.07	1.72	0.33	23.27	9.54	4.20
6200	-9.31	55.11	8.87	-39.78	-20.14	-100.43	-15.48	21.56	1.75	0.32	22.77	10.03	4.28
6400	-9.28	39.05	8.76	-57.41	-20.21	-115.44	-15.99	6.87	1.78	0.31	22.62	10.35	4.54
6600	-8.95	23.45	8.52	-74.84	-20.24	-131.17	-16.12	-9.37	1.81	0.30	22.55	10.00	4.63
6800	-8.99	6.42	8.39	-92.37	-20.37	-146.36	-16.57	-23.41	1.86	0.29	22.26	9.14	4.75
7000	-8.83	-8.84	8.27	-109.53	-20.44	-161.84	-17.16	-41.71	1.89	0.29	22.18	9.55	4.71
7200	-8.71	-26.41	8.14	-126.70	-20.49	-178.05	-17.58	-61.76	1.92	0.28	21.91	9.78	4.76
7600	-8.32	-59.83	7.97	-162.91	-20.66	-151.85	-18.37	-99.07	1.97	0.27	21.56	8.60	5.16
8000	-7.94	-94.41	7.91	160.69	-21.02	121.32	-19.15	-136.47	2.03	0.26	20.85	9.06	5.29

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, 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			
50	-29.70	14.64	14.38	174.09	-18.67	-4.20	-63.88	85.66	1.12	0.61	25.00	9.96	3.29
100	-30.39	-21.41	14.42	169.14	-18.67	-7.40	-51.24	-150.67	1.12	0.61	24.95	10.43	3.38
200	-30.42	-40.11	14.37	159.04	-18.68	-14.25	-43.31	-160.05	1.12	0.61	25.08	10.19	3.28
400	-30.23	-83.35	14.23	138.70	-18.63	-28.61	-35.34	174.84	1.13	0.60	24.71	9.89	3.34
600	-30.29	-129.19	14.09	118.98	-18.58	-43.23	-31.01	138.27	1.13	0.60	24.61	10.36	3.32
800	-30.30	-168.47	13.93	99.34	-18.55	-57.87	-28.15	113.66	1.14	0.59	24.67	10.02	3.45
1000	-27.75	159.69	13.76	79.77	-18.55	-72.52	-25.98	90.31	1.15	0.58	25.13	9.93	3.38
1200	-25.86	131.08	13.60	60.31	-18.54	-87.39	-24.30	70.97	1.16	0.57	25.45	9.79	3.45
1400	-24.18	108.13	13.47	41.18	-18.53	-102.27	-23.07	51.56	1.17	0.56	25.17	10.17	3.46
1600	-22.59	87.80	13.29	21.87	-18.57	-117.07	-22.05	34.04	1.18	0.55	25.39	9.85	3.49
1800	-21.44	67.26	13.12	2.73	-18.58	-131.76	-21.33	17.97	1.20	0.54	25.61	9.91	3.48
2000	-20.49	51.65	12.96	-16.39	-18.60	-146.64	-20.98	-1.07	1.21	0.53	25.44	10.03	3.42
2200	-19.46	33.11	12.79	-35.33	-18.62	-161.46	-20.58	-18.30	1.22	0.52	25.11	10.24	3.50
2400	-18.62	17.06	12.61	-54.27	-18.65	-176.38	-20.33	-34.73	1.24	0.51	25.08	10.02	3.52
2600	-17.96	0.92	12.41	-73.13	-18.69	168.82	-20.23	-53.11	1.26	0.50	25.28	9.79	3.53
2800	-16.95	-16.87	12.22	-91.91	-18.72	153.88	-19.95	-70.64	1.27	0.49	25.29	9.95	3.52
3000	-16.64	-32.42	12.02	-110.72	-18.80	139.07	-19.90	-88.90	1.30	0.47	24.98	10.36	3.33
3200	-15.75	-48.64	11.82	-129.33	-18.86	123.98	-19.70	-107.61	1.32	0.46	24.74	10.22	3.40
3400	-15.27	-66.13	11.63	-147.83	-18.89	109.06	-19.46	-125.21	1.34	0.45	24.85	9.84	3.55
3600	-14.86	-82.98	11.39	-166.41	-18.98	93.86	-19.08	-144.47	1.37	0.44	24.75	9.97	3.62
3800	-14.24	-100.31	11.21	175.34	-19.06	79.10	-18.77	-162.26	1.40	0.43	24.57	10.35	3.63
4000	-13.63	-118.62	11.02	156.70	-19.12	63.84	-18.11	-177.68	1.42	0.42	24.27	10.35	3.61
4200	-13.23	-135.12	10.79	138.60	-19.23	48.81	-17.84	163.61	1.45	0.40	24.24	9.88	3.61
4400	-12.59	-152.24	10.59	120.33	-19.31	34.13	-17.41	148.36	1.48	0.40	24.44	9.93	3.72
4600	-12.16	-171.68	10.38	102.01	-19.38	18.52	-16.86	133.54	1.51	0.39	24.12	10.48	3.88
4800	-11.59	172.98	10.19	84.00	-19.48	3.76	-16.53	118.33	1.53	0.38	23.78	10.37	3.88
5000	-10.96	155.33	9.96	65.86	-19.58	-11.32	-16.25	103.69	1.56	0.37	23.49	9.61	4.06
5200	-10.71	138.24	9.73	47.76	-19.65	-26.85	-16.03	89.80	1.60	0.36	23.42	9.39	3.98
5400	-10.25	122.23	9.55	29.77	-19.74	-41.54	-16.02	75.96	1.62	0.35	23.08	10.04	4.03
5600	-9.78	105.14	9.30	11.95	-19.84	-56.81	-15.82	60.60	1.66	0.34	22.73	10.01	4.12
5800	-9.67	88.92	9.08	-5.65	-19.98	-72.34	-15.87	46.51	1.71	0.33	22.68	9.54	4.20
6000	-9.35	74.25	8.89	-23.41	-20.08	-87.27	-16.16	32.82	1.74	0.32	22.66	8.87	4.09
6200	-9.15	57.22	8.69	-41.17	-20.12	-102.38	-16.48	19.45	1.78	0.31	22.29	9.47	4.17
6400	-9.10	40.97	8.56	-58.91	-20.22	-117.47	-17.08	4.88	1.81	0.30	22.16	9.74	4.43
6600	-8.78	25.40	8.33	-76.39	-20.27	-133.29	-17.26	-11.40	1.85	0.29	22.07	9.35	4.55
6800	-8.81	8.20	8.19	-94.08	-20.40	-148.38	-17.79	-25.42	1.90	0.28	21.84	8.58	4.62
7000	-8.63	-7.17	8.06	-111.22	-20.48	-163.90	-18.50	-44.13	1.93	0.27	21.74	8.96	4.57
7200	-8.51	-24.67	7.93	-128.49	-20.55	179.82	-19.02	-64.59	1.96	0.27	21.49	9.20	4.61
7600	-8.11	-58.33	7.76	-164.62	-20.77	149.84	-19.97	-103.27	2.02	0.26	21.23	8.02	5.00
8000	-7.71	-93.16	7.67	158.80	-21.17	119.38	-20.92	-141.98	2.09	0.24	20.42	8.49	5.12

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.57V @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 (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-41.00	107.28	14.81	174.14	-18.99	-4.23	-28.39	174.40	1.12	0.62	31.49	13.62	3.37
100	-42.49	-128.37	14.86	169.11	-19.03	-7.25	-27.80	173.59	1.12	0.62	31.49	13.61	3.49
200	-39.95	-140.63	14.79	158.96	-19.03	-14.31	-27.17	167.22	1.12	0.61	31.59	13.67	3.33
400	-32.71	-156.49	14.67	138.70	-18.96	-28.51	-25.48	153.53	1.12	0.61	30.81	13.47	3.40
600	-29.22	172.76	14.49	118.98	-18.93	-42.90	-23.72	131.58	1.13	0.60	30.34	13.56	3.35
800	-27.33	144.12	14.32	99.33	-18.89	-57.51	-22.42	111.55	1.14	0.59	30.21	13.07	3.51
1000	-25.07	125.81	14.15	79.84	-18.90	-72.09	-21.30	90.98	1.15	0.58	30.20	12.61	3.45
1200	-23.40	105.16	13.99	60.47	-18.89	-86.75	-20.32	72.41	1.16	0.57	29.85	12.81	3.52
1400	-22.09	86.82	13.84	41.34	-18.89	-101.45	-19.59	53.71	1.17	0.57	29.47	13.03	3.55
1600	-20.94	69.26	13.66	22.15	-18.90	-116.14	-18.96	36.33	1.18	0.56	29.18	12.45	3.58
1800	-19.99	51.05	13.48	3.16	-18.95	-130.90	-18.52	20.00	1.19	0.54	28.92	12.37	3.59
2000	-19.37	36.20	13.32	-15.81	-18.95	-145.48	-18.34	1.54	1.21	0.53	28.34	12.78	3.52
2200	-18.51	18.82	13.13	-34.82	-18.97	-160.25	-18.08	-15.43	1.22	0.52	28.01	12.94	3.62
2400	-17.89	3.80	12.94	-53.59	-18.99	-175.01	-17.96	-32.03	1.24	0.51	27.74	12.40	3.63
2600	-17.43	-11.78	12.74	-72.37	-19.03	-170.35	-17.93	-49.73	1.25	0.50	27.52	11.87	3.60
2800	-16.57	-27.90	12.55	-91.05	-19.05	155.49	-17.77	-66.92	1.27	0.49	27.19	12.06	3.64
3000	-16.38	-43.44	12.34	-109.67	-19.12	140.84	-17.82	-84.71	1.30	0.48	26.92	12.47	3.45
3200	-15.58	-58.74	12.13	-128.23	-19.17	125.95	-17.72	-102.80	1.32	0.46	26.62	12.04	3.52
3400	-15.21	-75.42	11.94	-146.65	-19.18	111.09	-17.58	-120.01	1.34	0.46	26.24	11.26	3.66
3600	-14.87	-92.00	11.70	-165.08	-19.26	95.92	-17.31	-138.66	1.37	0.44	25.88	11.62	3.77
3800	-14.30	-108.16	11.51	176.84	-19.34	81.39	-17.10	-156.14	1.39	0.43	25.89	12.18	3.76
4000	-13.69	-126.02	11.33	158.27	-19.37	66.25	-16.58	-171.77	1.41	0.43	25.44	11.76	3.74
4200	-13.34	-141.99	11.08	140.36	-19.46	51.33	-16.38	169.88	1.44	0.41	25.33	11.08	3.74
4400	-12.77	-158.46	10.90	122.14	-19.52	36.77	-16.02	154.52	1.47	0.41	25.32	11.33	3.87
4600	-12.33	-177.65	10.66	103.83	-19.58	21.18	-15.51	139.33	1.49	0.40	24.93	11.98	4.04
4800	-11.77	167.49	10.49	86.02	-19.64	6.62	-15.24	124.01	1.52	0.39	24.57	11.54	4.11
5000	-11.16	150.34	10.26	67.99	-19.73	-8.37	-14.97	109.38	1.54	0.38	24.22	10.59	4.25
5200	-10.90	133.45	10.02	50.03	-19.78	-23.70	-14.73	95.07	1.58	0.37	24.14	10.41	4.19
5400	-10.47	117.89	9.86	32.13	-19.83	-38.41	-14.68	81.05	1.59	0.37	23.74	11.17	4.22
5600	-10.00	101.11	9.61	14.41	-19.94	-53.78	-14.45	65.62	1.63	0.36	23.27	10.97	4.33
5800	-9.90	84.95	9.38	-3.13	-20.06	-69.24	-14.46	51.26	1.68	0.35	23.33	10.39	4.43
6000	-9.61	70.62	9.22	-20.74	-20.13	-83.81	-14.64	37.45	1.71	0.34	23.27	9.84	4.34
6200	-9.43	53.60	9.01	-38.41	-20.14	-99.10	-14.86	23.71	1.73	0.33	22.83	10.39	4.41
6400	-9.40	37.51	8.89	-55.98	-20.20	-113.97	-15.30	9.14	1.76	0.32	22.65	10.66	4.68
6600	-9.07	22.08	8.66	-73.35	-20.23	-129.68	-15.41	-7.15	1.79	0.31	22.76	10.32	4.78
6800	-9.13	4.98	8.53	-90.86	-20.31	-144.74	-15.76	-21.29	1.83	0.30	22.38	9.52	4.89
7000	-8.98	-10.44	8.39	-107.96	-20.39	-160.48	-16.29	-39.26	1.87	0.30	22.24	9.87	4.85
7200	-8.86	-27.75	8.27	-125.06	-20.41	-176.61	-16.66	-58.68	1.89	0.29	21.98	10.12	4.91
7600	-8.48	-60.99	8.12	-161.13	-20.56	153.35	-17.35	-95.33	1.93	0.28	21.67	8.90	5.28
8000	-8.11	-95.50	8.06	162.66	-20.89	122.75	-18.04	-132.16	1.98	0.27	20.82	9.41	5.45

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, Vd = 3.68V @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			
50	-34.77	-10.43	14.63	174.13	-18.85	-4.07	-36.29	170.89	1.12	0.61	29.60	12.43	2.93
100	-33.26	-25.65	14.69	169.07	-18.86	-7.24	-35.93	-179.97	1.12	0.62	29.57	12.72	2.99
200	-33.37	-40.40	14.65	158.94	-18.82	-14.64	-34.13	-178.42	1.12	0.62	29.73	12.61	2.88
400	-32.51	-92.63	14.51	138.41	-18.77	-29.19	-31.00	161.82	1.12	0.61	29.30	12.40	2.91
600	-31.58	-148.23	14.37	118.44	-18.73	-43.96	-27.64	133.45	1.13	0.61	29.17	12.68	2.87
800	-30.72	166.90	14.21	98.58	-18.69	-58.90	-25.36	112.21	1.13	0.60	29.26	12.38	2.98
1000	-27.59	140.97	14.06	78.79	-18.68	-73.94	-23.75	89.46	1.14	0.59	29.70	12.26	2.92
1200	-25.57	111.47	13.91	59.15	-18.65	-89.13	-22.31	71.96	1.15	0.58	29.85	12.18	2.95
1400	-23.79	89.95	13.76	39.68	-18.67	-104.09	-21.24	51.83	1.16	0.57	29.51	12.43	2.99
1600	-22.17	73.30	13.59	20.33	-18.70	-119.15	-20.42	33.67	1.17	0.56	29.62	12.15	3.02
1800	-20.78	52.30	13.44	0.90	-18.68	-134.50	-19.66	18.68	1.18	0.56	29.67	12.18	3.02
2000	-20.40	36.20	13.27	-18.43	-18.72	-149.42	-19.54	-0.05	1.19	0.54	29.28	12.35	2.93
2200	-19.35	18.80	13.09	-37.62	-18.73	-164.59	-19.26	-17.86	1.21	0.53	28.90	12.48	3.00
2400	-18.61	2.15	12.92	-56.78	-18.75	-179.69	-19.04	-34.05	1.22	0.52	28.75	12.28	3.02
2600	-17.87	-14.17	12.74	-75.89	-18.78	165.06	-18.93	-51.46	1.24	0.51	28.77	12.10	3.03
2800	-17.13	-30.99	12.55	-94.91	-18.80	149.90	-18.84	-69.38	1.25	0.50	28.59	12.22	3.03
3000	-16.74	-46.90	12.34	-113.84	-18.89	134.73	-18.80	-88.21	1.28	0.49	28.30	12.50	2.87
3200	-15.96	-64.83	12.13	-132.74	-18.97	119.07	-18.56	-106.72	1.30	0.47	28.16	12.30	2.93
3400	-15.44	-81.64	11.98	-151.54	-18.92	103.90	-18.48	-122.88	1.31	0.47	27.99	11.90	3.01
3600	-15.07	-97.55	11.74	-170.24	-19.02	88.61	-18.17	-143.02	1.34	0.45	27.78	12.08	3.12
3800	-14.47	-115.03	11.54	171.38	-19.13	73.53	-17.84	-161.25	1.37	0.44	27.78	12.38	3.07
4000	-13.81	-134.01	11.38	152.48	-19.14	58.04	-17.25	-176.51	1.38	0.44	27.24	12.25	3.11
4200	-13.64	-151.58	11.10	134.26	-19.31	42.46	-16.90	163.43	1.43	0.42	27.38	11.82	3.05
4400	-12.89	-167.63	10.98	115.64	-19.29	27.65	-16.55	149.48	1.43	0.42	27.31	12.01	3.19
4600	-12.37	171.53	10.70	96.94	-19.38	11.31	-15.86	133.24	1.47	0.41	27.15	12.47	3.31
4800	-11.85	156.17	10.58	78.82	-19.44	-3.20	-15.69	118.94	1.48	0.40	26.60	12.19	3.37
5000	-11.13	138.73	10.36	60.35	-19.51	-18.69	-15.28	104.38	1.50	0.39	26.44	11.49	3.53
5200	-10.90	119.86	10.07	41.99	-19.56	-34.96	-14.86	89.80	1.54	0.38	26.48	11.34	3.48
5400	-10.35	104.65	9.96	23.71	-19.60	-49.59	-14.92	76.61	1.55	0.38	25.93	11.89	3.46
5600	-9.75	88.22	9.73	5.26	-19.63	-65.00	-14.63	61.81	1.56	0.37	25.50	11.67	3.54
5800	-9.82	71.43	9.54	-12.09	-19.86	-80.78	-14.86	45.71	1.63	0.36	25.49	11.24	3.60
6000	-9.82	56.58	9.41	-29.50	-20.05	-95.91	-15.15	30.85	1.67	0.34	25.54	10.85	3.61
6200	-9.44	39.09	9.17	-47.95	-19.96	-111.69	-15.18	17.92	1.68	0.34	25.18	11.24	3.60
6400	-9.34	20.94	8.98	-66.17	-19.92	-127.42	-15.34	4.28	1.70	0.33	25.12	11.37	3.86
6600	-8.94	5.48	8.79	-84.20	-19.94	-142.75	-15.59	-10.96	1.71	0.32	25.07	11.12	3.85
6800	-9.00	-11.68	8.72	-102.39	-20.04	-157.95	-16.10	-24.01	1.75	0.31	24.77	10.56	3.95
7000	-9.12	-28.55	8.60	-118.55	-20.26	-175.51	-16.72	-47.35	1.82	0.30	24.86	10.81	3.94
7200	-8.93	-46.65	8.48	-136.63	-20.30	168.53	-17.15	-64.17	1.84	0.30	24.47	10.89	4.06
7600	-8.27	-80.56	8.26	-173.38	-20.37	137.93	-17.72	-101.29	1.85	0.29	23.97	9.89	4.34
8000	-8.00	-115.78	8.27	149.75	-20.80	106.20	-18.59	-140.53	1.92	0.28	23.45	10.24	4.57

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.61V @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			
50	-28.55	5.56	14.40	174.11	-18.60	-4.17	-44.51	1.68	1.12	0.62	25.55	9.86	2.90
100	-28.39	-19.49	14.45	169.13	-18.67	-7.54	-44.92	-37.13	1.12	0.62	25.49	10.43	2.93
200	-28.51	-32.31	14.41	158.91	-18.65	-14.61	-43.02	-90.03	1.12	0.61	25.67	10.16	2.84
400	-28.78	-70.76	14.28	138.39	-18.59	-29.29	-39.32	-161.68	1.12	0.61	25.37	9.78	2.90
600	-29.71	-116.10	14.14	118.49	-18.53	-44.11	-33.37	140.18	1.13	0.60	25.32	10.41	2.86
800	-30.91	-157.95	14.00	98.62	-18.49	-59.14	-29.42	114.34	1.14	0.60	25.40	10.06	2.97
1000	-28.55	165.39	13.84	78.76	-18.48	-74.24	-26.90	88.78	1.14	0.59	25.88	10.02	2.90
1200	-26.93	129.08	13.69	59.07	-18.48	-89.28	-24.86	71.26	1.15	0.58	26.27	9.83	2.93
1400	-24.92	103.42	13.54	39.60	-18.47	-104.62	-23.39	50.47	1.16	0.57	25.95	10.28	2.96
1600	-23.09	84.42	13.38	20.16	-18.50	-119.80	-22.28	32.15	1.17	0.56	26.29	9.94	2.99
1800	-21.49	61.88	13.24	0.72	-18.50	-135.12	-21.32	17.86	1.18	0.55	26.56	10.10	2.98
2000	-20.98	45.59	13.08	-18.61	-18.53	-150.02	-21.12	-1.33	1.20	0.54	26.29	10.17	2.88
2200	-19.88	27.01	12.90	-37.78	-18.54	-165.21	-20.75	-19.30	1.21	0.53	25.97	10.41	2.97
2400	-18.94	9.82	12.73	-57.01	-18.57	179.56	-20.46	-35.43	1.22	0.52	25.94	10.18	2.98
2600	-18.15	-7.02	12.56	-76.15	-18.60	164.27	-20.29	-53.01	1.24	0.51	26.24	10.03	2.97
2800	-17.32	-24.68	12.37	-95.23	-18.64	149.11	-20.13	-71.18	1.25	0.50	26.32	10.18	2.98
3000	-16.88	-40.77	12.17	-114.26	-18.72	133.87	-20.07	-90.23	1.28	0.48	26.11	10.64	2.82
3200	-16.07	-59.09	11.97	-133.25	-18.80	118.10	-19.73	-109.28	1.30	0.47	25.90	10.55	2.87
3400	-15.49	-76.56	11.81	-152.06	-18.76	102.92	-19.63	-125.36	1.31	0.46	26.09	10.26	2.98
3600	-15.04	-92.66	11.58	-170.77	-18.87	87.52	-19.24	-145.99	1.34	0.45	26.06	10.41	3.06
3800	-14.47	-110.54	11.39	170.76	-18.98	72.34	-18.81	-164.41	1.37	0.44	26.05	10.72	3.02
4000	-13.76	-129.81	11.22	151.75	-18.99	56.84	-18.14	-179.32	1.38	0.43	25.61	10.82	3.04
4200	-13.58	-147.62	10.94	133.53	-19.17	41.13	-17.71	160.14	1.43	0.41	25.69	10.54	3.00
4400	-12.80	-164.28	10.80	114.78	-19.17	26.25	-17.34	146.27	1.44	0.41	25.96	10.56	3.10
4600	-12.31	174.86	10.54	96.12	-19.27	9.86	-16.59	130.39	1.47	0.40	25.77	11.06	3.22
4800	-11.75	159.31	10.43	77.95	-19.34	-4.78	-16.41	116.21	1.49	0.39	25.42	10.98	3.30
5000	-11.06	141.42	10.20	59.36	-19.39	-20.24	-16.00	101.80	1.51	0.39	25.14	10.48	3.43
5200	-10.83	122.48	9.91	41.02	-19.46	-36.68	-15.57	87.42	1.55	0.38	25.20	10.35	3.40
5400	-10.25	106.88	9.81	22.60	-19.51	-51.10	-15.65	74.32	1.55	0.37	24.90	10.86	3.42
5600	-9.64	90.49	9.57	4.19	-19.58	-66.71	-15.37	59.61	1.57	0.36	24.44	10.81	3.46
5800	-9.71	73.48	9.37	-13.25	-19.82	-82.40	-15.62	43.59	1.64	0.35	24.44	10.41	3.53
6000	-9.67	58.66	9.23	-30.79	-20.02	-97.82	-15.96	28.62	1.69	0.33	24.44	10.01	3.47
6200	-9.30	41.10	9.00	-49.24	-19.95	-113.52	-16.04	16.06	1.70	0.33	24.19	10.44	3.51
6400	-9.20	22.85	8.81	-67.53	-19.90	-129.35	-16.23	2.61	1.72	0.32	24.08	10.60	3.76
6600	-8.80	7.20	8.63	-85.59	-19.95	-144.65	-16.54	-12.44	1.74	0.31	23.91	10.27	3.75
6800	-8.83	-9.97	8.54	-103.83	-20.07	-159.66	-17.16	-25.17	1.77	0.30	23.78	9.72	3.86
7000	-8.92	-26.78	8.41	-120.16	-20.30	-177.34	-17.87	-49.63	1.85	0.29	23.66	10.06	3.86
7200	-8.74	-44.95	8.30	-138.25	-20.36	166.58	-18.36	-66.50	1.87	0.28	23.50	10.15	3.93
7600	-8.10	-79.02	8.08	-175.03	-20.46	136.07	-19.04	-104.83	1.89	0.28	23.20	9.16	4.22
8000	-7.80	-114.35	8.08	147.97	-20.92	104.30	-20.04	-145.21	1.96	0.26	22.56	9.51	4.41

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.75V @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			
50	-48.32	65.40	14.79	174.08	-18.94	-4.04	-31.05	172.60	1.12	0.62	32.63	13.97	3.00
100	-38.77	-44.70	14.83	169.11	-18.96	-7.44	-30.74	176.07	1.11	0.62	32.47	14.13	3.06
200	-38.94	-60.44	14.79	158.94	-18.95	-14.60	-29.83	173.78	1.12	0.62	32.60	14.09	2.88
400	-34.63	-117.59	14.67	138.46	-18.90	-29.07	-27.83	156.55	1.12	0.61	32.08	13.89	2.97
600	-31.17	-171.17	14.51	118.42	-18.83	-43.88	-25.34	132.03	1.12	0.61	31.70	14.01	2.89
800	-29.23	149.75	14.35	98.60	-18.81	-58.89	-23.57	111.75	1.13	0.60	31.73	13.64	3.01
1000	-26.50	129.18	14.19	78.86	-18.80	-73.80	-22.24	90.03	1.14	0.59	31.92	13.38	2.95
1200	-24.54	102.63	14.03	59.21	-18.79	-88.93	-21.05	72.48	1.15	0.58	31.64	13.43	3.00
1400	-22.93	82.92	13.89	39.80	-18.78	-103.74	-20.15	52.66	1.16	0.58	31.26	13.64	3.02
1600	-21.48	66.86	13.71	20.39	-18.81	-119.05	-19.43	34.69	1.17	0.56	31.02	13.24	3.05
1800	-20.19	47.04	13.56	1.10	-18.83	-134.28	-18.76	19.57	1.18	0.56	30.68	13.22	3.06
2000	-19.89	30.90	13.38	-18.20	-18.85	-149.27	-18.69	0.89	1.19	0.54	30.18	13.51	2.98
2200	-18.95	14.11	13.22	-37.31	-18.83	-164.24	-18.45	-16.86	1.20	0.54	29.92	13.61	3.08
2400	-18.29	-2.30	13.04	-56.43	-18.86	-179.18	-18.27	-33.01	1.22	0.53	29.72	13.26	3.08
2600	-17.62	-18.52	12.86	-75.50	-18.89	-165.54	-18.17	-50.33	1.23	0.51	29.51	12.90	3.08
2800	-16.94	-35.07	12.66	-94.45	-18.93	150.45	-18.12	-67.95	1.25	0.50	29.09	13.04	3.08
3000	-16.62	-50.94	12.45	-113.34	-19.00	135.40	-18.13	-86.21	1.28	0.49	29.00	13.35	2.92
3200	-15.86	-68.08	12.23	-132.21	-19.08	119.80	-17.92	-104.70	1.30	0.47	28.72	13.01	2.97
3400	-15.36	-85.16	12.08	-151.00	-19.02	104.64	-17.84	-120.88	1.31	0.47	28.51	12.37	3.08
3600	-15.02	-100.96	11.86	-169.68	-19.12	89.36	-17.60	-140.88	1.34	0.46	28.19	12.68	3.16
3800	-14.47	-118.16	11.64	171.98	-19.21	74.33	-17.30	-158.93	1.36	0.44	28.12	13.15	3.14
4000	-13.83	-136.73	11.48	153.14	-19.22	58.93	-16.75	-174.14	1.38	0.44	27.77	12.82	3.17
4200	-13.63	-154.37	11.20	135.00	-19.38	43.33	-16.43	165.77	1.43	0.42	27.59	12.26	3.09
4400	-12.91	-170.26	11.07	116.46	-19.37	28.58	-16.10	151.74	1.43	0.42	27.63	12.53	3.24
4600	-12.41	169.11	10.81	97.80	-19.46	12.24	-15.43	135.44	1.46	0.41	27.29	13.06	3.36
4800	-11.89	154.10	10.69	79.77	-19.50	-2.30	-15.27	121.15	1.47	0.40	27.07	12.67	3.44
5000	-11.18	136.82	10.47	61.25	-19.56	-17.64	-14.85	106.49	1.50	0.40	26.64	11.85	3.59
5200	-10.95	117.97	10.18	42.97	-19.63	-34.06	-14.45	91.77	1.53	0.39	26.53	11.71	3.56
5400	-10.42	102.80	10.07	24.71	-19.64	-48.54	-14.47	78.49	1.54	0.38	26.06	12.33	3.52
5600	-9.81	86.72	9.84	6.43	-19.68	-63.80	-14.17	63.71	1.55	0.38	25.60	12.05	3.65
5800	-9.90	69.78	9.64	-10.89	-19.91	-79.52	-14.36	47.77	1.62	0.36	25.81	11.61	3.71
6000	-9.90	54.88	9.50	-28.34	-20.06	-94.71	-14.64	32.83	1.66	0.35	25.81	11.25	3.72
6200	-9.54	37.62	9.27	-46.71	-19.97	-110.52	-14.64	19.76	1.67	0.34	25.42	11.65	3.69
6400	-9.42	19.28	9.08	-64.92	-19.91	-126.27	-14.75	5.80	1.68	0.34	25.12	11.76	3.96
6600	-9.03	4.01	8.90	-82.82	-19.92	-141.36	-14.97	-9.23	1.70	0.33	25.26	11.54	3.97
6800	-9.13	-13.13	8.83	-100.94	-20.03	-156.48	-15.43	-22.38	1.73	0.32	25.05	10.99	4.07
7000	-9.21	-30.12	8.71	-117.16	-20.23	-174.10	-16.00	-45.14	1.79	0.31	24.97	11.24	4.07
7200	-9.04	-48.26	8.59	-135.15	-20.26	169.98	-16.39	-61.67	1.81	0.31	24.52	11.27	4.17
7600	-8.42	-81.93	8.39	-171.79	-20.31	139.20	-16.86	-98.45	1.83	0.30	24.35	10.31	4.52
8000	-8.15	-117.04	8.40	151.53	-20.69	107.43	-17.63	-136.94	1.88	0.29	23.56	10.72	4.73

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 40mA, 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			
50	-38.84	18.10	14.60	174.07	-18.83	-3.95	-32.43	175.23	1.12	0.61	28.43	12.18	3.66
100	-43.91	-49.30	14.63	169.15	-18.87	-7.27	-31.24	174.02	1.12	0.61	28.39	12.23	3.80
200	-37.01	-90.50	14.57	159.05	-18.87	-14.32	-30.16	165.34	1.12	0.61	28.41	12.15	3.65
400	-33.53	-129.64	14.43	138.76	-18.82	-28.19	-27.65	155.53	1.13	0.60	27.86	11.89	3.71
600	-30.09	-167.82	14.26	119.05	-18.79	-42.54	-25.61	132.85	1.14	0.59	27.48	12.07	3.71
800	-28.70	160.40	14.10	99.56	-18.76	-57.01	-24.16	113.16	1.14	0.59	27.43	11.66	3.85
1000	-26.35	139.66	13.92	80.09	-18.75	-71.43	-22.99	91.95	1.15	0.58	27.59	11.31	3.79
1200	-24.54	117.42	13.75	60.82	-18.77	-86.01	-21.92	72.84	1.17	0.57	27.42	11.39	3.87
1400	-23.28	97.75	13.59	41.70	-18.77	-100.56	-21.05	53.43	1.18	0.56	27.08	11.68	3.91
1600	-21.79	79.81	13.41	22.64	-18.78	-115.08	-20.34	36.00	1.19	0.55	26.94	11.19	3.94
1800	-20.69	61.32	13.23	3.60	-18.78	-129.58	-19.78	19.62	1.20	0.54	26.78	11.09	3.94
2000	-19.79	46.73	13.07	-15.35	-18.81	-144.15	-19.45	0.49	1.22	0.53	26.31	11.41	3.88
2200	-18.85	29.64	12.87	-34.19	-18.83	-158.83	-19.16	-17.11	1.23	0.52	25.94	11.60	3.97
2400	-18.20	14.54	12.69	-52.92	-18.87	-173.23	-19.01	-33.85	1.25	0.50	25.70	11.16	4.01
2600	-17.61	-0.84	12.48	-71.68	-18.93	-172.08	-18.87	-52.14	1.27	0.49	25.50	10.69	4.00
2800	-16.67	-17.72	12.28	-90.27	-18.95	157.40	-18.59	-69.94	1.29	0.48	25.18	10.84	4.01
3000	-16.49	-33.14	12.06	-108.78	-19.02	142.86	-18.62	-87.62	1.31	0.46	24.84	11.22	3.84
3200	-15.68	-49.30	11.84	-127.27	-19.11	128.07	-18.35	-106.12	1.34	0.45	24.58	10.83	3.90
3400	-15.18	-65.94	11.66	-145.71	-19.09	113.35	-18.17	-122.54	1.36	0.44	24.26	10.12	4.07
3600	-14.84	-82.89	11.39	-164.03	-19.22	98.39	-17.85	-141.34	1.40	0.43	23.87	10.36	4.14
3800	-14.24	-99.42	11.19	178.07	-19.32	84.10	-17.62	-158.90	1.43	0.42	23.86	10.89	4.21
4000	-13.59	-117.07	11.00	159.54	-19.34	69.08	-17.09	-174.19	1.44	0.41	23.36	10.54	4.14
4200	-13.06	-133.21	10.76	141.49	-19.41	54.03	-16.80	167.90	1.48	0.40	23.21	9.78	4.15
4400	-12.55	-148.90	10.55	123.55	-19.51	39.78	-16.50	152.15	1.51	0.39	23.18	9.97	4.29
4600	-12.09	-168.55	10.26	105.34	-19.60	23.86	-15.84	136.62	1.55	0.38	22.82	10.69	4.50
4800	-11.63	178.14	10.14	87.76	-19.67	9.95	-15.84	121.86	1.57	0.37	22.42	10.32	4.54
5000	-11.11	161.28	9.89	69.89	-19.79	-4.85	-15.67	106.82	1.60	0.36	22.14	9.31	4.68
5200	-10.87	144.20	9.62	51.98	-19.82	-20.35	-15.39	93.12	1.64	0.35	22.05	9.06	4.58
5400	-10.44	129.01	9.44	34.24	-19.93	-34.90	-15.39	78.79	1.67	0.34	21.58	9.87	4.67
5600	-9.80	112.25	9.20	16.13	-19.91	-49.88	-15.18	65.35	1.68	0.34	21.15	9.78	4.80
5800	-9.97	96.84	9.02	-0.69	-20.18	-64.97	-15.55	50.10	1.76	0.32	21.20	9.17	4.87
6000	-9.62	83.10	8.85	-17.93	-20.38	-79.46	-15.92	35.29	1.81	0.31	21.03	8.40	4.72
6200	-9.44	65.72	8.63	-35.85	-20.34	-94.67	-16.16	22.87	1.83	0.30	20.58	9.05	4.88
6400	-9.25	49.43	8.38	-53.30	-20.31	-110.46	-16.16	7.19	1.87	0.30	20.43	9.45	5.14
6600	-9.16	35.97	8.34	-69.84	-20.73	-125.36	-17.32	-11.56	1.95	0.28	20.39	8.96	5.27
6800	-8.97	20.48	8.23	-88.42	-20.72	-138.74	-18.04	-20.37	1.96	0.27	20.06	8.03	5.36
7000	-8.75	5.33	8.09	-105.67	-20.82	-154.07	-18.81	-36.92	2.00	0.26	19.95	8.49	5.33
7200	-8.71	-12.28	7.91	-122.77	-20.82	-170.52	-19.20	-56.99	2.03	0.26	19.79	8.81	5.35
7600	-8.35	-46.07	7.67	-158.70	-20.96	159.80	-20.03	-93.67	2.09	0.25	19.30	7.44	5.79
8000	-8.00	-80.24	7.54	165.18	-21.35	129.77	-21.04	-130.75	2.18	0.23	18.55	8.02	5.88

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 32mA, Vd = 3.31V @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			
50	-29.69	10.74	14.29	174.08	-18.59	-4.24	-53.24	-10.01	1.12	0.61	24.84	9.99	3.61
100	-31.46	-20.41	14.35	169.17	-18.64	-7.29	-52.08	-144.80	1.12	0.61	24.80	10.37	3.72
200	-30.81	-43.94	14.28	159.03	-18.64	-14.34	-44.41	-177.74	1.13	0.61	24.90	10.20	3.63
400	-30.43	-84.98	14.15	138.81	-18.59	-28.45	-35.14	172.25	1.13	0.60	24.45	9.86	3.69
600	-29.91	-129.42	14.00	119.11	-18.54	-42.79	-31.07	138.86	1.14	0.59	24.27	10.32	3.69
800	-29.95	-164.63	13.82	99.58	-18.52	-57.25	-28.45	116.08	1.15	0.58	24.28	9.97	3.82
1000	-27.58	165.44	13.65	80.12	-18.51	-71.75	-26.54	92.46	1.16	0.57	24.66	9.81	3.74
1200	-25.88	136.83	13.50	60.76	-18.50	-86.41	-24.88	72.54	1.17	0.56	24.88	9.71	3.81
1400	-24.38	113.90	13.35	41.68	-18.54	-101.06	-23.65	52.53	1.18	0.55	24.54	10.07	3.87
1600	-22.73	93.36	13.17	22.47	-18.54	-115.68	-22.63	34.79	1.19	0.54	24.69	9.74	3.87
1800	-21.55	73.31	13.00	3.48	-18.55	-130.23	-21.87	18.63	1.20	0.53	24.77	9.75	3.87
2000	-20.40	57.45	12.83	-15.54	-18.59	-144.96	-21.38	-1.10	1.22	0.52	24.64	9.89	3.79
2200	-19.34	39.49	12.66	-34.42	-18.60	-159.61	-20.97	-18.84	1.23	0.51	24.28	10.10	3.89
2400	-18.52	23.08	12.47	-53.28	-18.65	-174.31	-20.69	-35.57	1.25	0.50	24.20	9.89	3.92
2600	-17.83	6.93	12.25	-72.00	-18.70	-170.98	-20.49	-54.18	1.27	0.49	24.23	9.49	3.92
2800	-16.84	-10.70	12.06	-90.69	-18.74	156.30	-20.11	-72.16	1.29	0.48	24.15	9.66	3.91
3000	-16.54	-26.33	11.86	-109.37	-18.82	141.57	-20.09	-90.24	1.32	0.46	23.81	10.12	3.74
3200	-15.71	-43.12	11.64	-127.83	-18.90	126.60	-19.70	-109.14	1.34	0.45	23.53	9.92	3.81
3400	-15.17	-60.20	11.45	-146.26	-18.91	111.84	-19.50	-125.62	1.36	0.44	23.48	9.33	3.97
3600	-14.81	-77.73	11.19	-164.67	-19.03	96.87	-19.03	-144.82	1.40	0.42	23.19	9.47	4.05
3800	-14.20	-94.70	11.01	177.24	-19.13	82.41	-18.76	-162.67	1.43	0.41	23.09	9.96	4.09
4000	-13.50	-112.86	10.81	158.76	-19.17	67.34	-18.13	-177.78	1.45	0.41	22.67	9.85	4.03
4200	-12.97	-129.14	10.56	140.61	-19.24	52.21	-17.80	164.24	1.48	0.40	22.59	9.18	4.05
4400	-12.45	-145.36	10.36	122.58	-19.37	37.85	-17.44	148.47	1.51	0.38	22.64	9.27	4.18
4600	-12.00	-165.29	10.07	104.27	-19.45	21.80	-16.74	133.24	1.55	0.37	22.35	9.95	4.38
4800	-11.52	-178.74	9.94	86.70	-19.57	7.94	-16.75	118.32	1.58	0.37	21.99	9.72	4.38
5000	-10.96	163.98	9.70	68.75	-19.68	-6.94	-16.57	103.36	1.61	0.36	21.66	8.81	4.56
5200	-10.72	146.69	9.44	50.73	-19.73	-22.60	-16.26	90.07	1.65	0.35	21.58	8.52	4.45
5400	-10.30	131.27	9.25	32.90	-19.81	-37.30	-16.28	75.94	1.68	0.34	21.20	9.29	4.55
5600	-9.65	114.25	9.01	14.77	-19.85	-52.07	-16.07	62.72	1.70	0.33	20.78	9.22	4.66
5800	-9.80	98.76	8.83	-2.15	-20.15	-67.30	-16.50	47.21	1.79	0.31	20.81	8.70	4.71
6000	-9.45	84.97	8.66	-19.46	-20.36	-81.93	-16.98	32.44	1.84	0.30	20.62	7.85	4.57
6200	-9.27	67.38	8.44	-37.37	-20.33	-97.27	-17.28	20.44	1.86	0.29	20.32	8.52	4.71
6400	-9.06	51.13	8.17	-54.96	-20.29	-112.92	-17.31	5.17	1.89	0.28	20.11	8.97	4.98
6600	-8.96	37.49	8.13	-71.55	-20.74	-128.03	-18.62	-14.45	1.99	0.27	20.08	8.45	5.11
6800	-8.76	21.77	8.01	-90.10	-20.79	-141.39	-19.56	-22.13	2.00	0.26	19.74	7.36	5.19
7000	-8.54	6.50	7.87	-107.43	-20.87	-156.59	-20.50	-39.14	2.04	0.25	19.71	7.96	5.15
7200	-8.48	-11.20	7.69	-124.68	-20.90	-173.02	-20.96	-60.10	2.08	0.24	19.43	8.25	5.17
7600	-8.12	-45.08	7.43	-160.65	-21.07	157.22	-22.01	-98.06	2.15	0.23	19.05	6.76	5.65
8000	-7.75	-79.45	7.30	163.04	-21.52	127.19	-23.35	-137.10	2.25	0.22	18.25	7.48	5.68

TYPE: MMIC Amplifier
 MODEL: ERA-21SM Reference Data: RDF-1048
 S PARAMETERS are presented in dB/deg Format
 TEST CONDITIONS: INPUT POWER = -20dBm, Icc = 48mA, Vd = 3.44V @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			
50	-38.84	119.78	14.77	174.09	-18.95	-4.49	-28.03	174.65	1.12	0.62	31.27	13.29	3.71
100	-40.24	-165.51	14.80	169.06	-19.01	-7.33	-27.33	172.72	1.12	0.62	31.30	13.08	3.88
200	-36.52	-147.37	14.75	159.07	-19.02	-14.23	-26.64	164.05	1.12	0.61	31.02	13.21	3.70
400	-31.89	-164.59	14.60	138.77	-18.96	-28.17	-24.98	152.29	1.13	0.61	30.01	13.08	3.77
600	-28.57	172.72	14.44	119.12	-18.94	-42.39	-23.44	131.43	1.13	0.60	29.27	13.07	3.75
800	-27.02	145.45	14.25	99.60	-18.90	-56.82	-22.31	112.51	1.14	0.59	28.85	12.47	3.89
1000	-25.10	128.24	14.08	80.20	-18.90	-71.15	-21.40	92.16	1.15	0.58	28.56	11.94	3.85
1200	-23.51	108.19	13.90	60.95	-18.91	-85.73	-20.52	73.44	1.16	0.57	27.90	12.20	3.93
1400	-22.31	89.64	13.74	41.81	-18.91	-100.15	-19.83	54.32	1.17	0.56	27.51	12.42	3.97
1600	-21.03	72.81	13.54	22.83	-18.93	-114.72	-19.20	36.86	1.19	0.55	27.13	11.69	4.01
1800	-20.07	55.34	13.37	3.86	-18.94	-129.18	-18.75	20.54	1.20	0.54	26.86	11.54	4.02
2000	-19.31	40.93	13.20	-15.05	-18.97	-143.73	-18.47	1.60	1.22	0.53	26.16	12.05	3.94
2200	-18.51	24.53	13.01	-33.80	-18.97	-158.11	-18.24	-15.90	1.23	0.52	25.80	12.24	4.05
2400	-17.86	9.23	12.80	-52.57	-19.01	-172.56	-18.11	-32.59	1.25	0.50	25.50	11.57	4.07
2600	-17.39	-5.78	12.61	-71.23	-19.06	-172.79	-18.03	-50.58	1.27	0.49	25.20	10.98	4.07
2800	-16.50	-22.11	12.40	-89.73	-19.09	158.17	-17.81	-68.17	1.29	0.48	24.77	11.24	4.08
3000	-16.37	-37.44	12.18	-108.29	-19.15	143.68	-17.86	-85.72	1.31	0.47	24.51	11.57	3.91
3200	-15.59	-53.06	11.95	-126.62	-19.24	128.90	-17.63	-103.97	1.34	0.45	24.21	11.04	3.98
3400	-15.11	-69.51	11.76	-144.97	-19.22	114.29	-17.50	-120.24	1.36	0.45	23.90	10.27	4.14
3600	-14.79	-86.48	11.51	-163.24	-19.34	99.44	-17.19	-138.92	1.39	0.43	23.43	10.60	4.24
3800	-14.28	-102.67	11.30	178.82	-19.42	85.11	-17.01	-156.20	1.42	0.42	23.41	11.22	4.27
4000	-13.60	-119.95	11.11	160.36	-19.45	70.16	-16.51	-171.59	1.44	0.41	22.99	10.77	4.23
4200	-13.11	-135.73	10.87	142.38	-19.51	55.19	-16.25	170.60	1.47	0.40	22.81	9.97	4.27
4400	-12.60	-151.41	10.66	124.53	-19.60	41.04	-15.97	154.88	1.50	0.39	22.74	10.27	4.37
4600	-12.14	-170.95	10.38	106.38	-19.69	25.09	-15.36	139.19	1.54	0.38	22.42	10.97	4.61
4800	-11.69	176.20	10.23	88.86	-19.76	11.32	-15.35	124.66	1.56	0.38	22.05	10.52	4.64
5000	-11.18	159.40	10.01	71.07	-19.85	-3.37	-15.17	109.50	1.60	0.37	21.73	9.50	4.81
5200	-10.94	142.43	9.74	53.18	-19.87	-18.92	-14.87	95.55	1.63	0.36	21.62	9.24	4.70
5400	-10.53	127.41	9.55	35.54	-19.96	-33.40	-14.86	81.21	1.66	0.35	21.18	10.14	4.80
5600	-9.88	110.80	9.32	17.47	-19.98	-48.34	-14.62	67.67	1.68	0.35	20.80	9.98	4.90
5800	-10.07	95.22	9.14	0.66	-20.22	-63.38	-14.96	52.42	1.75	0.33	20.84	9.38	4.99
6000	-9.73	81.68	8.98	-16.47	-20.40	-77.84	-15.30	37.76	1.80	0.32	20.73	8.54	4.87
6200	-9.54	64.39	8.75	-34.39	-20.34	-93.09	-15.48	25.24	1.82	0.31	20.33	9.27	4.96
6400	-9.35	48.23	8.49	-51.75	-20.28	-108.65	-15.46	9.45	1.84	0.30	20.13	9.68	5.27
6600	-9.31	34.74	8.49	-68.21	-20.71	-123.45	-16.52	-8.97	1.93	0.29	20.10	9.19	5.43
6800	-9.13	19.45	8.37	-86.74	-20.70	-137.02	-17.11	-18.21	1.94	0.28	19.69	8.23	5.49
7000	-8.90	4.29	8.23	-103.91	-20.76	-152.14	-17.77	-34.46	1.96	0.27	19.70	8.77	5.50
7200	-8.87	-13.18	8.06	-120.99	-20.76	-168.69	-18.12	-54.02	2.00	0.27	19.43	9.06	5.52
7600	-8.53	-46.86	7.82	-156.83	-20.88	161.46	-18.85	-90.25	2.05	0.26	18.98	7.68	5.95
8000	-8.15	-80.89	7.70	167.15	-21.23	131.45	-19.62	-126.37	2.13	0.25	18.27	8.28	6.07