

## ERA-8SM Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

TYPE: MMIC Amplifier

MODEL: ERA-8SM Reference Data: RDF-1211B

S PARAMETERS are presented in dB/deg Format

TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 36mA, Vd = 3.71V @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	-16.07	-18.54	31.54	169.28	-33.82	12.05	-12.12	-11.98	1.01	0.80	27.74	13.23	2.13
100	-15.71	-17.75	31.39	159.11	-34.53	10.75	-12.61	-27.15	1.04	0.73	27.24	13.02	2.28
150	-16.25	-26.61	31.18	149.33	-34.14	-1.19	-12.44	-40.29	1.03	0.74	27.07	12.92	2.29
200	-15.90	-35.80	30.87	140.09	-34.61	-2.16	-12.55	-53.59	1.06	0.68	26.27	12.83	2.32
250	-16.43	-42.66	30.46	131.06	-33.82	-2.90	-12.59	-66.56	1.04	0.70	25.87	12.89	2.44
300	-16.96	-50.17	30.09	122.33	-33.56	2.39	-12.29	-77.32	1.03	0.68	26.24	12.68	2.52
350	-16.97	-57.75	29.68	114.26	-33.49	1.83	-12.47	-90.08	1.04	0.65	25.96	12.88	2.49
400	-17.61	-62.75	29.25	106.41	-33.03	-0.76	-12.28	-100.93	1.04	0.65	25.55	12.60	2.55
450	-17.53	-69.70	28.82	98.94	-33.02	0.18	-12.29	-112.10	1.05	0.61	25.15	12.74	2.58
500	-17.76	-76.09	28.38	91.91	-32.54	0.62	-12.13	-121.49	1.04	0.61	25.14	12.68	2.63
550	-18.10	-82.09	27.99	84.66	-32.19	-0.58	-12.04	-132.22	1.04	0.60	24.96	12.78	2.70
600	-18.05	-87.34	27.56	78.12	-32.06	-1.97	-12.05	-141.88	1.05	0.58	24.95	12.84	2.71
650	-18.38	-94.18	27.16	71.51	-31.61	-4.72	-11.84	-149.98	1.05	0.58	24.92	12.87	2.76
700	-18.35	-100.02	26.74	65.27	-31.25	-4.71	-11.83	-159.01	1.05	0.57	25.01	12.88	2.76
750	-18.52	-106.77	26.37	58.88	-30.93	-6.88	-11.68	-166.93	1.05	0.57	24.94	12.96	2.86
800	-18.38	-112.98	25.97	53.02	-30.55	-9.98	-11.55	-174.95	1.04	0.56	24.94	12.88	2.77
850	-18.68	-118.54	25.61	46.95	-30.13	-10.44	-11.48	177.86	1.04	0.57	24.80	12.98	2.74
900	-18.54	-124.56	25.24	41.21	-29.95	-12.43	-11.40	170.00	1.05	0.55	24.73	12.87	2.79
940	-18.32	-129.96	24.95	36.74	-29.53	-14.80	-11.31	163.91	1.04	0.56	24.58	12.77	2.82
1000	-18.54	-137.58	24.53	29.91	-29.16	-18.59	-11.20	155.63	1.04	0.55	24.38	12.82	2.81
1050	-18.44	-144.35	24.19	24.45	-28.84	-20.82	-11.08	149.36	1.04	0.55	24.14	12.66	2.88
1100	-18.47	-151.42	23.88	18.90	-28.34	-23.60	-10.97	142.76	1.02	0.56	24.04	12.78	2.88
1150	-18.21	-156.92	23.57	13.55	-28.26	-25.77	-10.92	135.87	1.03	0.55	23.85	12.44	2.97
1200	-18.31	-162.43	23.22	8.35	-28.01	-28.29	-10.82	129.80	1.04	0.54	23.76	12.52	2.93
1250	-18.13	-169.93	22.93	3.05	-27.56	-32.21	-10.69	123.96	1.03	0.55	23.68	12.24	2.97
1300	-18.05	-176.88	22.64	-2.20	-27.34	-34.79	-10.63	117.79	1.03	0.55	23.38	12.31	3.00
1350	-17.83	176.99	22.34	-7.19	-27.01	-39.18	-10.52	112.25	1.02	0.55	23.01	12.13	3.01
1400	-17.70	170.52	22.07	-12.37	-26.64	-42.15	-10.46	106.13	1.02	0.56	22.80	11.98	3.01
1450	-17.56	163.46	21.79	-17.53	-26.46	-45.10	-10.32	100.71	1.02	0.55	22.85	11.94	2.97
1500	-17.32	156.72	21.54	-22.61	-26.16	-47.86	-10.26	95.39	1.02	0.55	22.71	11.72	3.08
1550	-17.55	150.94	21.21	-27.65	-26.16	-51.30	-10.27	89.09	1.04	0.54	23.00	11.59	3.03
1600	-17.20	144.52	20.98	-32.47	-25.72	-54.84	-10.13	85.08	1.02	0.55	23.14	11.47	3.09
1650	-16.87	138.26	20.73	-37.26	-25.44	-58.16	-10.00	79.37	1.02	0.55	23.53	11.40	2.99
1700	-16.73	133.04	20.48	-42.21	-25.27	-61.08	-9.97	73.55	1.02	0.55	23.30	11.21	2.99
1750	-16.63	125.75	20.24	-47.05	-25.18	-65.48	-9.93	69.34	1.03	0.54	22.56	11.05	2.99
1800	-16.23	120.16	20.00	-52.02	-24.91	-68.47	-9.76	64.43	1.02	0.54	22.49	10.86	3.10
1850	-16.10	114.66	19.75	-56.70	-24.61	-71.02	-9.71	59.01	1.02	0.55	21.68	10.77	2.98
1900	-15.92	108.71	19.53	-61.42	-24.40	-75.55	-9.66	54.18	1.02	0.55	21.86	10.55	2.96
1950	-15.48	102.29	19.30	-66.38	-24.18	-78.73	-9.55	49.48	1.02	0.55	21.30	10.43	2.97
2000	-15.38	95.98	19.09	-71.12	-23.95	-82.27	-9.49	44.53	1.02	0.55	21.62	10.23	2.97

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 29mA, Vd = 3.66V @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	-12.65	-15.95	30.57	169.92	-33.09	-6.23	-10.00	-8.58	1.02	0.82	26.33	10.97	2.12
100	-12.78	-18.94	30.39	160.23	-33.85	-3.14	-10.12	-22.93	1.04	0.74	25.71	11.28	2.24
150	-13.17	-27.76	30.25	150.86	-33.59	-0.36	-10.05	-34.59	1.03	0.74	25.68	11.13	2.27
200	-13.11	-35.38	29.93	142.11	-33.74	-1.56	-10.17	-46.55	1.04	0.70	24.52	10.92	2.33
250	-13.61	-43.26	29.66	133.16	-33.26	2.64	-10.44	-57.83	1.02	0.70	24.15	10.95	2.41
300	-14.12	-51.09	29.28	124.86	-33.28	1.15	-10.18	-67.90	1.03	0.66	24.45	10.58	2.51
350	-14.19	-58.19	28.91	117.06	-33.00	1.23	-10.43	-79.27	1.03	0.64	24.13	10.92	2.48
400	-14.79	-63.98	28.58	109.18	-32.72	-1.32	-10.42	-89.22	1.03	0.63	23.77	10.61	2.55
450	-14.82	-71.19	28.17	101.90	-32.31	-1.47	-10.56	-99.81	1.02	0.62	23.25	10.89	2.53
500	-15.02	-77.52	27.83	94.76	-31.95	-2.49	-10.53	-109.17	1.01	0.62	23.38	10.76	2.62
550	-15.53	-83.10	27.41	87.84	-31.55	-2.44	-10.50	-118.61	1.01	0.61	23.21	11.00	2.70
600	-15.53	-89.52	27.07	81.02	-31.16	-3.91	-10.64	-128.55	1.00	0.61	23.37	10.93	2.67
650	-15.83	-95.56	26.70	74.42	-31.10	-5.82	-10.57	-136.88	1.01	0.58	23.28	11.08	2.74
700	-15.96	-101.58	26.30	68.29	-30.53	-7.13	-10.65	-146.02	1.00	0.59	23.53	11.23	2.71
750	-16.08	-107.77	25.96	61.84	-30.22	-8.31	-10.62	-154.13	1.00	0.58	23.54	11.16	2.84
800	-16.01	-113.89	25.62	55.73	-29.96	-10.93	-10.62	-162.72	1.00	0.57	23.74	11.35	2.75
850	-16.42	-119.13	25.26	49.75	-29.68	-12.81	-10.58	-169.99	1.01	0.56	23.62	11.22	2.73
900	-16.31	-125.09	24.90	43.95	-29.29	-15.77	-10.64	-178.06	1.00	0.56	23.68	11.46	2.78
940	-16.20	-130.36	24.66	39.25	-29.01	-16.49	-10.59	175.40	1.00	0.56	23.61	11.33	2.81
1000	-16.39	-137.67	24.26	32.46	-28.85	-20.13	-10.53	166.67	1.01	0.55	23.40	11.46	2.77
1050	-16.44	-144.19	23.95	26.74	-28.40	-23.21	-10.48	160.03	1.00	0.56	23.32	11.51	2.83
1100	-16.51	-150.62	23.62	21.35	-28.12	-25.55	-10.40	153.55	1.00	0.55	23.22	11.39	2.83
1150	-16.36	-156.29	23.33	15.95	-27.93	-28.50	-10.41	145.88	1.00	0.54	23.17	11.40	2.95
1200	-16.49	-161.61	23.02	10.42	-27.59	-31.30	-10.37	139.18	1.00	0.55	23.11	11.09	2.92
1250	-16.43	-168.84	22.73	5.08	-27.43	-34.11	-10.27	133.37	1.01	0.54	23.09	11.07	2.93
1300	-16.40	-175.32	22.43	-0.12	-26.99	-37.58	-10.20	127.13	1.00	0.55	22.82	11.03	2.97
1350	-16.20	178.62	22.16	-5.20	-26.73	-40.68	-10.16	120.73	1.00	0.54	22.46	11.23	2.97
1400	-16.09	172.68	21.90	-10.61	-26.49	-43.61	-10.16	114.32	1.00	0.54	22.29	10.96	3.00
1450	-16.03	165.94	21.63	-15.76	-26.12	-46.51	-10.02	108.57	0.99	0.55	22.41	11.12	2.96
1500	-15.95	159.11	21.38	-20.83	-25.96	-50.01	-9.98	103.34	0.99	0.55	22.29	10.83	3.05
1550	-16.17	153.38	21.06	-26.04	-25.73	-53.77	-10.02	96.55	1.00	0.54	22.59	10.89	3.01
1600	-15.87	147.14	20.82	-30.83	-25.49	-56.26	-9.85	92.16	1.00	0.54	22.79	10.66	3.07
1650	-15.56	141.13	20.59	-35.79	-25.21	-59.31	-9.80	86.13	0.99	0.55	23.14	10.71	2.99
1700	-15.50	135.61	20.34	-40.78	-24.97	-64.33	-9.79	79.91	0.99	0.55	22.73	10.71	2.93
1750	-15.44	128.42	20.11	-45.73	-24.66	-67.62	-9.75	75.58	0.99	0.55	22.02	10.43	2.98
1800	-15.14	122.75	19.87	-50.66	-24.58	-70.39	-9.57	70.23	0.99	0.54	22.06	10.27	3.02
1850	-15.06	117.60	19.62	-55.43	-24.39	-73.46	-9.58	64.56	1.00	0.54	21.21	10.13	2.97
1900	-14.88	111.71	19.40	-60.21	-24.14	-77.36	-9.50	59.70	0.99	0.54	21.51	10.02	2.94
1950	-14.54	104.85	19.19	-65.30	-23.82	-81.66	-9.41	54.87	0.98	0.55	21.04	9.88	2.93
2000	-14.47	98.77	18.98	-70.02	-23.78	-84.16	-9.35	49.58	0.99	0.54	21.42	9.71	2.95

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 43mA, Vd = 3.75V @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	-18.72	-18.45	32.21	168.73	-34.94	8.53	-14.76	-11.34	1.04	0.75	29.19	14.18	2.13
100	-18.70	-18.44	32.07	158.29	-35.20	-3.75	-15.31	-31.09	1.05	0.72	28.71	13.86	2.32
150	-19.43	-26.01	31.84	148.15	-34.30	-0.94	-15.02	-46.85	1.03	0.77	28.48	13.99	2.31
200	-18.80	-32.91	31.45	138.76	-34.32	8.00	-14.54	-61.38	1.03	0.73	27.78	13.78	2.35
250	-19.60	-41.03	31.06	129.34	-34.74	-2.22	-14.77	-76.76	1.07	0.66	27.28	13.77	2.45
300	-19.94	-46.06	30.60	120.58	-34.56	6.06	-14.26	-88.72	1.07	0.64	27.66	13.63	2.55
350	-19.70	-55.11	30.18	112.27	-34.38	1.81	-14.09	-101.37	1.08	0.62	27.50	13.58	2.51
400	-20.44	-59.95	29.70	104.41	-33.72	1.52	-13.88	-112.57	1.07	0.63	26.97	13.61	2.58
450	-20.29	-66.44	29.22	96.96	-33.50	0.57	-13.54	-123.07	1.07	0.61	26.57	13.48	2.59
500	-20.36	-73.33	28.80	89.68	-33.04	2.20	-13.34	-133.78	1.07	0.60	26.41	13.46	2.66
550	-20.56	-79.11	28.32	82.74	-32.64	1.05	-13.04	-143.68	1.07	0.60	26.26	13.47	2.74
600	-20.56	-84.73	27.89	76.00	-32.46	-2.04	-12.88	-152.65	1.08	0.58	26.03	13.48	2.72
650	-20.76	-91.41	27.44	69.58	-32.19	-0.56	-12.63	-160.93	1.08	0.56	26.01	13.44	2.78
700	-20.58	-97.93	27.02	63.30	-31.49	-5.13	-12.52	-169.30	1.06	0.58	25.88	13.42	2.77
750	-20.59	-104.24	26.61	57.03	-31.26	-6.94	-12.29	-176.81	1.07	0.57	25.84	13.41	2.85
800	-20.47	-110.56	26.22	51.04	-30.81	-7.95	-12.14	-175.23	1.06	0.57	25.65	13.30	2.80
850	-20.65	-116.60	25.82	45.20	-30.43	-8.66	-11.97	-168.14	1.06	0.57	25.47	13.47	2.79
900	-20.38	-123.01	25.44	39.40	-30.03	-11.71	-11.88	-160.84	1.06	0.57	25.34	13.17	2.80
940	-20.28	-129.03	25.15	34.99	-29.85	-13.48	-11.70	-155.63	1.06	0.56	25.22	13.19	2.85
1000	-20.33	-136.65	24.71	28.32	-29.28	-16.14	-11.50	-147.92	1.05	0.56	24.88	13.21	2.82
1050	-20.17	-144.41	24.37	22.78	-29.14	-19.19	-11.40	-141.23	1.06	0.55	24.63	13.04	2.90
1100	-20.04	-151.59	24.03	17.49	-28.83	-21.29	-11.27	-134.97	1.06	0.55	24.50	13.18	2.88
1150	-19.83	-157.47	23.72	12.08	-28.55	-25.86	-11.15	-128.69	1.06	0.55	24.33	12.83	3.01
1200	-19.85	-163.20	23.37	6.90	-28.12	-28.11	-11.03	-122.67	1.05	0.55	24.16	13.05	2.94
1250	-19.59	-171.09	23.07	1.73	-27.79	-29.89	-10.90	-117.31	1.05	0.55	24.04	12.58	2.96
1300	-19.40	-177.97	22.75	-3.39	-27.39	-32.31	-10.79	-111.63	1.04	0.56	23.69	12.81	3.03
1350	-19.14	-175.33	22.46	-8.42	-27.28	-36.30	-10.68	-106.43	1.05	0.55	23.41	12.50	3.03
1400	-19.00	-168.76	22.19	-13.57	-26.91	-40.83	-10.60	-100.66	1.04	0.55	23.24	12.52	3.06
1450	-18.69	-161.98	21.91	-18.68	-26.69	-43.60	-10.45	-95.06	1.04	0.55	23.39	12.35	3.03
1500	-18.39	-154.49	21.64	-23.62	-26.37	-46.73	-10.36	-90.12	1.04	0.56	23.18	12.15	3.15
1550	-18.66	-148.48	21.32	-28.69	-26.25	-49.43	-10.40	-84.06	1.05	0.54	23.26	12.13	3.06
1600	-18.18	-142.49	21.07	-33.38	-25.92	-53.32	-10.24	-80.09	1.04	0.55	23.28	11.95	3.14
1650	-17.80	-135.68	20.82	-38.16	-25.79	-55.56	-10.09	-75.19	1.05	0.54	23.72	11.78	3.04
1700	-17.66	-130.63	20.57	-43.08	-25.48	-59.18	-10.05	-69.55	1.04	0.55	23.55	11.65	3.00
1750	-17.49	-123.30	20.33	-47.90	-25.21	-63.26	-10.03	-64.96	1.04	0.55	22.82	11.50	3.03
1800	-17.03	-117.59	20.09	-52.82	-24.96	-67.47	-9.84	-60.52	1.03	0.55	22.71	11.31	3.12
1850	-16.90	-112.33	19.84	-57.49	-24.66	-68.97	-9.79	-55.45	1.03	0.56	21.92	11.18	3.05
1900	-16.61	-106.59	19.62	-62.17	-24.67	-72.94	-9.71	-50.78	1.04	0.54	22.19	11.00	3.01
1950	-16.20	-99.96	19.39	-67.08	-24.38	-78.70	-9.62	-45.92	1.04	0.55	21.64	10.87	3.01
2000	-16.07	-93.49	19.17	-71.75	-24.06	-80.74	-9.54	-41.18	1.03	0.56	22.24	10.69	3.04

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 36mA, Vd = 3.74V @Temperature = -45degC

**Definitions:**

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

FREQ (MHz)	S11		S21		S12		S22		Stability		IP-3 Output (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta			
50	-17.58	-22.65	32.13	168.68	-34.84	4.44	-14.44	-10.66	1.04	0.75	26.36	13.34	1.71
100	-18.18	-21.65	31.95	158.36	-34.59	0.29	-14.60	-29.74	1.03	0.76	26.37	13.05	1.88
150	-17.90	-28.91	31.72	148.48	-33.57	-3.37	-14.23	-44.11	1.01	0.83	26.68	13.01	1.86
200	-17.92	-37.05	31.41	139.13	-33.79	-0.82	-14.07	-57.05	1.02	0.78	26.17	12.86	1.91
250	-19.38	-44.85	31.01	129.91	-34.21	1.75	-14.37	-72.04	1.04	0.70	26.06	12.84	2.07
300	-19.73	-53.90	30.63	120.95	-34.07	3.99	-14.27	-85.90	1.05	0.68	26.36	12.81	2.19
350	-20.25	-62.04	30.22	112.66	-33.25	-0.90	-14.14	-99.25	1.03	0.71	26.17	12.88	2.01
400	-21.21	-69.51	29.77	104.64	-33.23	0.76	-14.00	-111.94	1.04	0.67	25.82	12.91	2.10
450	-21.11	-77.31	29.34	96.95	-32.94	1.59	-13.71	-122.93	1.04	0.65	25.52	12.99	2.09
500	-21.20	-84.66	28.91	89.69	-32.83	-2.19	-13.48	-133.56	1.05	0.63	25.58	12.95	2.17
550	-21.53	-90.48	28.49	82.33	-32.56	-1.59	-13.13	-143.48	1.05	0.61	25.47	13.18	2.23
600	-21.82	-97.36	28.06	75.61	-32.14	-4.58	-12.89	-152.29	1.05	0.61	25.49	13.09	2.21
650	-21.59	-104.37	27.65	68.88	-31.95	-5.93	-12.72	-161.86	1.06	0.59	25.47	13.23	2.26
700	-21.62	-110.82	27.23	62.48	-31.43	-6.45	-12.57	-169.61	1.05	0.60	25.66	13.17	2.25
750	-21.56	-117.55	26.85	55.95	-31.19	-8.88	-12.38	-177.23	1.06	0.59	25.67	13.24	2.31
800	-21.36	-122.91	26.46	49.94	-30.70	-11.19	-12.19	-174.52	1.05	0.59	25.66	13.25	2.27
850	-21.41	-128.49	26.09	43.70	-30.36	-13.76	-12.06	-166.27	1.05	0.59	25.52	13.26	2.23
900	-21.42	-134.05	25.71	37.80	-29.93	-15.26	-11.91	-160.12	1.04	0.59	25.55	13.27	2.26
940	-21.37	-139.76	25.43	33.25	-29.72	-18.88	-11.74	-154.84	1.04	0.59	25.41	13.15	2.30
1000	-21.41	-148.71	25.02	26.27	-29.31	-20.83	-11.58	-146.31	1.04	0.59	25.17	13.23	2.26
1050	-21.01	-156.77	24.68	20.56	-29.07	-24.70	-11.52	-139.31	1.04	0.58	25.08	13.14	2.32
1100	-20.68	-164.42	24.37	14.86	-28.54	-27.14	-11.40	-132.20	1.03	0.60	25.03	13.16	2.33
1150	-20.48	-170.49	24.06	9.35	-28.42	-29.89	-11.25	-125.53	1.04	0.58	24.92	12.98	2.40
1200	-20.74	-176.39	23.71	3.95	-27.98	-32.73	-11.11	-119.03	1.03	0.59	24.71	13.01	2.39
1250	-20.41	-174.84	23.42	-1.43	-27.74	-35.66	-10.94	-113.58	1.03	0.59	24.74	12.85	2.37
1300	-20.14	-167.61	23.12	-6.91	-27.50	-39.93	-10.81	-107.50	1.03	0.58	24.41	12.84	2.44
1350	-19.84	-161.13	22.84	-12.06	-27.25	-42.60	-10.67	-102.01	1.03	0.58	24.22	12.68	2.44
1400	-19.72	-154.17	22.56	-17.38	-26.84	-46.25	-10.62	-96.13	1.02	0.59	23.97	12.65	2.45
1450	-19.17	-147.38	22.29	-22.70	-26.54	-50.43	-10.47	-89.84	1.02	0.59	24.19	12.63	2.43
1500	-18.84	-140.50	22.04	-27.99	-26.29	-53.31	-10.36	-84.99	1.02	0.59	23.82	12.41	2.56
1550	-19.31	-133.28	21.70	-33.30	-26.22	-56.48	-10.36	-77.87	1.03	0.58	24.31	12.31	2.48
1600	-18.52	-128.54	21.48	-38.09	-25.83	-61.06	-10.23	-74.38	1.02	0.59	24.30	12.24	2.51
1650	-18.24	-122.49	21.23	-43.04	-25.62	-63.59	-10.11	-69.30	1.02	0.59	24.37	12.09	2.44
1700	-18.05	-117.41	20.98	-48.20	-25.33	-67.24	-10.10	-63.37	1.02	0.59	24.19	12.00	2.42
1750	-17.64	-110.51	20.75	-53.24	-25.21	-70.72	-10.06	-58.48	1.02	0.58	23.59	11.84	2.44
1800	-17.13	-105.25	20.52	-58.35	-24.93	-74.70	-9.91	-52.98	1.02	0.59	23.42	11.68	2.50
1850	-17.18	-99.76	20.27	-63.26	-24.74	-77.92	-9.83	-47.98	1.02	0.58	22.75	11.56	2.43
1900	-16.97	-93.99	20.05	-68.11	-24.59	-82.22	-9.72	-43.53	1.02	0.58	23.06	11.42	2.39
1950	-16.37	-87.06	19.83	-73.25	-24.16	-85.56	-9.59	-38.07	1.01	0.60	22.38	11.31	2.40
2000	-16.22	-80.03	19.61	-78.17	-24.06	-89.79	-9.47	-32.94	1.01	0.59	22.87	11.09	2.40

TYPE: MMIC Amplifier

MODEL: ERA-8SM Reference Data:RDF-1211B

S PARAMETERS are presented in dB/deg Format

TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 29mA, Vd = 3.69V @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 (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-14.71	-13.81	31.21	169.31	-32.31	8.22	-11.73	-7.61	1.00	0.93	24.90	11.27	1.70
100	-14.55	-19.85	31.10	159.36	-34.48	-0.97	-11.81	-25.97	1.05	0.72	24.67	11.29	1.84
150	-14.80	-29.55	30.92	149.84	-33.78	-0.91	-11.47	-37.78	1.02	0.76	24.92	10.86	1.85
200	-14.70	-37.51	30.58	141.03	-34.74	1.49	-11.38	-48.84	1.07	0.65	24.13	10.87	1.88
250	-15.62	-45.27	30.30	131.87	-33.64	1.37	-11.89	-61.84	1.03	0.70	24.11	10.88	2.04
300	-16.13	-53.89	29.92	123.34	-33.59	-0.77	-11.83	-73.32	1.04	0.67	24.26	10.68	2.17
350	-16.66	-63.12	29.60	115.02	-33.46	-3.25	-12.07	-86.03	1.04	0.65	24.00	10.96	2.02
400	-17.53	-69.81	29.19	107.13	-32.73	1.26	-11.95	-97.09	1.02	0.66	23.72	10.68	2.09
450	-17.43	-77.91	28.77	99.65	-32.66	-1.12	-11.97	-108.27	1.03	0.63	23.34	10.85	2.08
500	-17.60	-84.88	28.42	92.22	-32.19	-2.94	-11.98	-119.36	1.02	0.64	23.55	10.83	2.13
550	-18.02	-91.14	28.00	85.12	-32.20	-2.47	-11.74	-128.81	1.04	0.60	23.45	11.00	2.20
600	-18.30	-97.76	27.64	78.18	-31.54	-6.17	-11.74	-138.79	1.02	0.62	23.64	11.15	2.19
650	-18.28	-104.15	27.24	71.59	-31.38	-7.49	-11.60	-147.27	1.03	0.60	23.58	11.22	2.22
700	-18.28	-110.63	26.87	65.00	-31.02	-8.86	-11.62	-156.59	1.02	0.59	23.90	11.35	2.21
750	-18.50	-117.23	26.50	58.58	-30.57	-10.96	-11.49	-163.88	1.02	0.60	23.92	11.42	2.31
800	-18.37	-122.88	26.16	52.28	-30.26	-12.77	-11.47	-173.38	1.02	0.59	24.16	11.47	2.23
850	-18.55	-128.49	25.79	46.15	-29.99	-14.66	-11.35	179.34	1.02	0.59	24.08	11.38	2.21
900	-18.76	-134.19	25.45	40.02	-29.46	-16.95	-11.27	171.50	1.01	0.60	24.18	11.55	2.23
940	-18.65	-139.27	25.19	35.43	-29.34	-20.59	-11.15	165.54	1.01	0.59	24.25	11.52	2.27
1000	-18.69	-147.37	24.78	28.49	-29.02	-22.43	-11.08	156.91	1.02	0.58	24.13	11.63	2.24
1050	-18.60	-154.89	24.48	22.55	-28.65	-26.26	-11.05	149.36	1.01	0.59	24.09	11.59	2.29
1100	-18.48	-162.06	24.15	16.97	-28.26	-29.21	-10.94	142.58	1.01	0.59	23.95	11.51	2.30
1150	-18.33	-168.34	23.87	11.23	-28.05	-32.27	-10.87	134.92	1.01	0.58	24.09	11.73	2.38
1200	-18.55	-174.02	23.54	5.70	-27.63	-35.34	-10.77	127.88	1.00	0.59	24.02	11.44	2.37
1250	-18.40	178.23	23.25	0.36	-27.38	-38.84	-10.63	122.53	1.00	0.59	24.06	11.71	2.40
1300	-18.25	171.08	22.96	-5.11	-27.08	-41.50	-10.53	116.12	1.00	0.59	23.78	11.54	2.43
1350	-18.01	164.85	22.69	-10.46	-26.94	-44.66	-10.44	109.65	1.00	0.58	23.51	11.63	2.41
1400	-17.97	158.04	22.42	-15.89	-26.53	-48.30	-10.38	103.33	1.00	0.59	23.32	11.48	2.40
1450	-17.69	151.24	22.15	-21.23	-26.36	-51.88	-10.27	97.52	1.00	0.58	23.59	11.64	2.42
1500	-17.34	144.09	21.89	-26.44	-25.99	-55.48	-10.18	92.08	0.99	0.59	23.26	11.34	2.51
1550	-17.78	137.35	21.57	-31.89	-25.98	-57.99	-10.20	84.69	1.01	0.58	23.71	11.50	2.46
1600	-17.21	132.17	21.35	-36.72	-25.52	-61.70	-10.04	80.85	0.99	0.59	23.88	11.32	2.50
1650	-16.86	126.51	21.10	-41.80	-25.40	-65.44	-9.95	74.89	1.00	0.58	24.04	11.37	2.41
1700	-16.84	121.44	20.87	-47.02	-25.06	-69.85	-9.95	68.98	0.99	0.59	23.82	11.34	2.40
1750	-16.61	113.93	20.64	-52.12	-24.86	-73.24	-9.91	64.35	1.00	0.59	23.22	11.10	2.40
1800	-16.13	108.65	20.40	-57.23	-24.73	-76.14	-9.76	58.74	1.00	0.58	22.88	11.02	2.50
1850	-16.11	103.45	20.16	-62.12	-24.52	-79.95	-9.70	52.98	1.00	0.58	22.21	10.90	2.39
1900	-16.01	96.93	19.95	-67.15	-24.30	-84.31	-9.62	48.05	1.00	0.58	22.51	10.79	2.36
1950	-15.56	89.82	19.73	-72.36	-24.08	-88.03	-9.49	42.71	0.99	0.59	22.19	10.69	2.39
2000	-15.41	83.43	19.51	-77.21	-23.84	-91.49	-9.39	37.38	0.99	0.59	22.40	10.55	2.39

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 43mA, Vd = 3.79V @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	-21.07	-21.15	32.74	168.22	-35.26	9.61	-18.13	-11.22	1.04	0.76	27.53	14.48	1.74
100	-21.98	-19.61	32.59	157.60	-35.75	-1.35	-17.53	-36.73	1.06	0.70	27.74	14.24	1.91
150	-22.06	-27.11	32.26	147.47	-36.17	4.39	-16.60	-50.13	1.09	0.65	28.05	14.19	1.87
200	-21.65	-34.48	31.93	137.84	-35.73	3.22	-16.71	-67.54	1.08	0.65	27.64	14.10	1.90
250	-22.89	-41.35	31.52	128.35	-34.73	-1.30	-16.62	-83.37	1.05	0.69	27.39	14.09	2.08
300	-23.88	-49.09	31.10	119.30	-34.02	0.93	-16.16	-98.97	1.04	0.71	27.71	14.11	2.24
350	-24.41	-59.91	30.65	110.87	-34.20	2.60	-15.80	-113.08	1.06	0.66	27.60	14.23	2.07
400	-25.42	-65.42	30.14	103.00	-33.56	2.15	-15.33	-125.60	1.05	0.67	27.18	14.08	2.10
450	-25.30	-75.02	29.70	95.09	-33.26	1.46	-14.86	-137.58	1.05	0.66	26.89	14.17	2.14
500	-24.83	-82.98	29.25	87.82	-33.27	0.37	-14.46	-146.04	1.07	0.62	26.76	14.16	2.18
550	-25.50	-87.65	28.78	80.63	-32.58	-0.70	-13.93	-156.23	1.06	0.64	26.68	14.17	2.22
600	-25.16	-95.09	28.33	73.83	-32.70	-1.74	-13.64	-164.20	1.08	0.59	26.57	14.22	2.22
650	-25.12	-102.90	27.90	67.13	-32.08	-3.75	-13.29	-172.87	1.07	0.61	26.56	14.21	2.27
700	-24.67	-109.27	27.49	60.67	-31.89	-5.84	-13.11	179.58	1.08	0.59	26.54	14.15	2.26
750	-24.61	-116.26	27.07	54.33	-31.43	-8.59	-12.89	171.85	1.07	0.59	26.50	14.17	2.35
800	-23.86	-122.30	26.66	48.25	-31.07	-8.67	-12.65	164.89	1.07	0.59	26.34	14.09	2.27
850	-24.17	-127.36	26.28	42.15	-30.64	-12.52	-12.42	157.71	1.06	0.59	26.23	14.20	2.26
900	-23.84	-133.58	25.89	36.28	-30.11	-14.50	-12.20	151.54	1.05	0.60	26.13	13.95	2.31
940	-23.62	-139.39	25.60	31.78	-29.93	-15.51	-12.01	146.43	1.06	0.59	26.06	13.95	2.31
1000	-23.82	-149.07	25.18	24.81	-29.46	-20.20	-11.84	138.12	1.05	0.59	25.76	14.02	2.27
1050	-23.10	-157.64	24.83	19.19	-29.18	-22.13	-11.72	132.25	1.05	0.59	25.59	13.83	2.34
1100	-22.82	-165.90	24.50	13.62	-28.90	-25.87	-11.59	125.38	1.05	0.59	25.45	13.92	2.35
1150	-22.30	-172.86	24.19	8.04	-28.52	-27.95	-11.42	119.21	1.05	0.59	25.36	13.55	2.44
1200	-22.49	-178.93	23.84	2.74	-28.16	-31.68	-11.24	113.03	1.04	0.59	25.20	13.77	2.39
1250	-22.14	172.26	23.54	-2.53	-27.84	-34.56	-11.09	107.46	1.04	0.59	25.10	13.31	2.42
1300	-21.71	164.72	23.23	-7.96	-27.71	-36.88	-10.94	101.78	1.05	0.58	24.63	13.53	2.47
1350	-21.27	158.43	22.95	-13.20	-27.38	-41.22	-10.81	96.71	1.04	0.59	24.46	13.27	2.44
1400	-20.94	150.82	22.66	-18.39	-26.98	-45.02	-10.73	91.02	1.04	0.59	24.36	13.19	2.45
1450	-20.40	144.10	22.38	-23.64	-26.82	-48.15	-10.55	85.21	1.04	0.59	24.60	13.05	2.43
1500	-19.96	136.80	22.12	-28.82	-26.44	-51.96	-10.45	80.14	1.03	0.59	24.17	12.90	2.58
1550	-20.43	129.56	21.78	-34.12	-26.35	-54.18	-10.44	73.59	1.05	0.58	24.48	12.86	2.50
1600	-19.61	125.01	21.57	-38.91	-26.06	-58.73	-10.28	70.31	1.04	0.58	24.95	12.70	2.55
1650	-19.19	119.06	21.32	-43.90	-25.72	-62.67	-10.20	65.18	1.03	0.59	24.57	12.54	2.47
1700	-18.91	114.93	21.07	-48.98	-25.35	-66.15	-10.16	59.56	1.02	0.60	24.66	12.38	2.45
1750	-18.53	107.62	20.83	-53.92	-25.34	-69.91	-10.10	55.30	1.03	0.59	24.03	12.28	2.49
1800	-18.04	102.33	20.60	-59.05	-25.01	-73.44	-9.93	49.81	1.03	0.59	23.70	12.07	2.53
1850	-17.93	96.97	20.35	-63.90	-24.77	-77.74	-9.87	44.66	1.03	0.59	23.27	11.97	2.44
1900	-17.63	91.24	20.13	-68.74	-24.63	-80.51	-9.76	40.13	1.03	0.59	23.26	11.75	2.40
1950	-16.98	84.53	19.91	-73.86	-24.31	-84.48	-9.62	35.15	1.02	0.60	22.51	11.66	2.42
2000	-16.93	77.17	19.69	-78.75	-24.31	-88.17	-9.49	30.02	1.03	0.59	23.03	11.48	2.46

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS:INPUT POWER = -35dBm, Icc = 36mA, Vd = 3.68V @Temperature = +85degC

**Definitions:**

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

FREQ (MHz)	S11		S21		S12		S22		Stability		IP-3 Output (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta			
50	-13.60	-11.90	30.96	169.75	-39.20	4.47	-10.73	-9.65	1.38	0.45	28.07	12.97	2.53
100	-14.20	-16.72	30.92	159.55	-34.52	-1.06	-11.29	-24.62	1.05	0.71	27.52	12.80	2.65
150	-14.70	-25.80	30.67	149.96	-33.80	3.57	-11.42	-38.41	1.03	0.74	27.51	12.67	2.68
200	-14.65	-34.26	30.37	140.76	-33.24	-0.58	-11.24	-51.42	1.02	0.76	26.38	12.72	2.72
250	-15.16	-41.43	29.98	131.71	-33.65	4.25	-11.44	-64.03	1.04	0.68	25.90	12.41	2.88
300	-15.20	-49.20	29.57	123.22	-33.50	-0.56	-11.17	-74.27	1.04	0.66	26.28	12.26	2.96
350	-15.31	-55.47	29.22	115.11	-33.15	3.59	-11.27	-85.38	1.03	0.65	25.96	12.36	2.90
400	-15.59	-60.75	28.74	107.64	-33.39	1.18	-11.23	-95.70	1.06	0.59	25.43	12.33	2.99
450	-15.50	-67.18	28.34	100.17	-32.60	1.90	-11.12	-104.93	1.03	0.61	24.93	12.24	3.01
500	-15.70	-73.00	27.92	93.26	-32.15	0.43	-11.21	-114.95	1.03	0.61	24.88	12.22	3.07
550	-16.01	-78.08	27.51	86.22	-31.89	0.68	-11.13	-124.90	1.03	0.59	24.71	12.30	3.17
600	-16.23	-83.44	27.10	79.67	-31.94	-2.03	-11.16	-134.15	1.06	0.56	24.70	12.40	3.15
650	-16.26	-89.27	26.67	73.41	-31.42	-2.55	-11.03	-142.70	1.04	0.56	24.61	12.29	3.20
700	-16.42	-94.87	26.29	67.02	-31.06	-4.16	-11.08	-151.04	1.04	0.55	24.63	12.33	3.19
750	-16.45	-101.44	25.91	60.85	-30.83	-6.47	-10.98	-158.65	1.05	0.54	24.59	12.30	3.31
800	-16.43	-106.44	25.52	55.10	-30.24	-7.76	-10.97	-166.83	1.03	0.55	24.51	12.26	3.23
850	-16.49	-111.73	25.15	49.21	-30.09	-9.66	-10.97	-174.06	1.04	0.53	24.35	12.33	3.22
900	-16.48	-117.37	24.80	43.37	-29.61	-11.75	-10.98	178.41	1.03	0.54	24.26	12.15	3.25
940	-16.48	-122.13	24.51	39.11	-29.36	-13.02	-10.91	172.69	1.03	0.53	24.06	12.17	3.33
1000	-16.47	-129.32	24.10	32.39	-28.89	-15.86	-10.83	164.78	1.03	0.54	23.82	12.20	3.29
1050	-16.56	-135.44	23.76	27.00	-28.57	-19.57	-10.84	157.62	1.03	0.53	23.60	12.01	3.34
1100	-16.53	-141.66	23.44	21.60	-28.26	-21.50	-10.75	150.97	1.02	0.53	23.42	12.05	3.37
1150	-16.45	-147.15	23.14	16.28	-28.09	-23.89	-10.74	144.17	1.03	0.52	23.33	11.79	3.44
1200	-16.59	-152.77	22.79	11.19	-27.70	-26.74	-10.67	137.94	1.03	0.53	23.12	11.84	3.42
1250	-16.47	-160.11	22.49	6.08	-27.38	-29.23	-10.61	131.90	1.02	0.53	23.09	11.56	3.42
1300	-16.47	-166.36	22.20	0.86	-27.22	-31.95	-10.50	125.96	1.03	0.52	22.68	11.69	3.47
1350	-16.39	-172.48	21.92	-4.13	-26.82	-35.67	-10.40	120.22	1.02	0.52	22.37	11.44	3.47
1400	-16.40	-179.07	21.63	-9.14	-26.68	-37.88	-10.38	114.05	1.03	0.52	22.34	11.38	3.50
1450	-16.19	-174.66	21.36	-14.15	-26.32	-41.08	-10.27	108.14	1.02	0.52	22.18	11.31	3.48
1500	-16.09	167.60	21.11	-19.21	-26.13	-46.14	-10.19	102.93	1.02	0.52	21.88	11.02	3.56
1550	-16.29	161.93	20.78	-24.04	-25.93	-47.56	-10.25	96.82	1.04	0.51	22.23	10.93	3.52
1600	-16.04	155.40	20.54	-28.86	-25.69	-51.65	-10.08	92.30	1.03	0.51	22.44	10.81	3.59
1650	-15.87	148.52	20.30	-33.67	-25.40	-55.65	-9.94	87.11	1.02	0.51	22.64	10.71	3.52
1700	-15.83	143.14	20.04	-38.43	-25.27	-57.80	-9.92	81.35	1.03	0.51	22.57	10.59	3.46
1750	-15.65	136.05	19.79	-43.17	-24.95	-61.31	-9.89	76.52	1.03	0.51	21.75	10.42	3.52
1800	-15.31	129.69	19.55	-48.02	-24.69	-65.03	-9.73	71.59	1.02	0.52	21.62	10.24	3.55
1850	-15.28	124.49	19.30	-52.68	-24.54	-67.57	-9.68	66.70	1.03	0.51	21.08	10.08	3.51
1900	-15.12	118.57	19.07	-57.25	-24.34	-70.89	-9.62	61.45	1.03	0.51	21.09	9.82	3.49
1950	-14.76	111.80	18.85	-62.12	-24.16	-75.06	-9.55	56.58	1.03	0.51	20.66	9.76	3.46
2000	-14.62	105.52	18.62	-66.73	-23.81	-78.21	-9.46	51.78	1.02	0.52	20.84	9.53	3.48

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 29mA, Vd = 3.63V @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	-11.47	-11.06	29.97	170.41	-32.32	-5.69	-8.92	-8.42	1.01	0.86	26.92	11.28	2.53
100	-11.73	-17.08	29.90	160.70	-33.23	-2.84	-9.03	-21.95	1.03	0.77	26.24	11.23	2.61
150	-12.05	-26.17	29.66	151.60	-33.63	2.88	-9.24	-33.57	1.04	0.71	26.26	10.85	2.64
200	-12.27	-34.12	29.43	142.73	-33.59	3.71	-9.24	-44.95	1.04	0.68	24.67	10.98	2.72
250	-12.50	-42.03	29.09	133.95	-33.07	2.48	-9.43	-56.01	1.02	0.68	24.21	10.92	2.86
300	-12.81	-49.62	28.77	125.66	-33.30	-0.81	-9.25	-65.68	1.04	0.64	24.47	10.44	2.94
350	-12.89	-56.18	28.39	118.01	-32.72	0.65	-9.35	-75.81	1.02	0.64	24.15	10.80	2.90
400	-13.33	-61.94	27.98	110.58	-32.48	0.26	-9.50	-85.48	1.02	0.61	23.61	10.32	2.97
450	-13.38	-68.24	27.68	103.10	-32.35	2.03	-9.47	-94.44	1.02	0.59	23.04	10.68	3.02
500	-13.46	-74.08	27.28	96.37	-31.82	1.04	-9.60	-103.68	1.01	0.59	23.08	10.48	3.04
550	-13.98	-79.67	26.91	89.38	-31.67	-1.51	-9.64	-113.08	1.02	0.57	22.87	10.74	3.10
600	-14.08	-85.15	26.54	82.90	-31.44	-1.04	-9.77	-122.22	1.02	0.55	23.04	10.78	3.10
650	-14.23	-91.00	26.19	76.34	-30.95	-4.20	-9.78	-130.61	1.01	0.56	22.88	10.68	3.18
700	-14.32	-96.71	25.83	70.08	-30.47	-5.89	-9.84	-138.73	1.00	0.56	23.12	10.96	3.17
750	-14.57	-102.23	25.48	63.85	-30.18	-7.44	-9.86	-146.82	1.00	0.55	23.10	10.99	3.27
800	-14.44	-108.01	25.11	58.06	-29.73	-9.46	-9.93	-154.96	0.99	0.55	23.21	11.08	3.22
850	-14.69	-113.21	24.78	52.01	-29.59	-11.30	-9.97	-162.22	1.00	0.53	23.08	10.96	3.21
900	-14.66	-118.48	24.43	46.35	-29.21	-13.93	-10.05	-169.82	1.00	0.53	23.10	11.13	3.21
940	-14.62	-123.53	24.17	41.89	-29.01	-15.71	-10.06	-176.09	1.00	0.53	23.07	10.97	3.29
1000	-14.79	-129.84	23.80	34.95	-28.63	-18.61	-10.06	-175.62	1.00	0.52	22.83	11.04	3.27
1050	-14.75	-136.10	23.48	29.57	-28.25	-21.04	-10.09	-168.41	0.99	0.53	22.62	10.97	3.29
1100	-14.95	-141.89	23.17	24.08	-27.95	-23.61	-10.08	-161.60	0.99	0.52	22.58	10.94	3.33
1150	-14.82	-147.49	22.88	18.75	-27.62	-26.22	-10.09	-154.87	0.99	0.52	22.54	10.95	3.43
1200	-14.95	-152.72	22.56	13.50	-27.27	-29.06	-10.10	-147.76	0.99	0.53	22.37	10.81	3.40
1250	-14.99	-159.77	22.28	8.28	-27.04	-32.30	-10.07	-141.15	0.99	0.52	22.29	10.74	3.39
1300	-15.04	-165.91	21.99	3.03	-26.93	-34.20	-10.03	-135.28	1.00	0.51	22.08	10.68	3.44
1350	-14.87	-172.05	21.72	-2.13	-26.52	-37.44	-9.97	-129.46	0.99	0.52	21.76	10.69	3.43
1400	-14.89	-178.01	21.44	-7.19	-26.23	-41.94	-9.99	-122.78	0.99	0.52	21.59	10.43	3.47
1450	-14.90	-175.48	21.17	-12.25	-26.05	-44.16	-9.91	-116.09	0.99	0.51	21.54	10.54	3.45
1500	-14.86	168.81	20.93	-17.39	-25.62	-46.80	-9.87	-111.15	0.98	0.53	21.50	10.25	3.57
1550	-14.98	163.37	20.61	-22.34	-25.52	-50.54	-9.92	-104.24	1.00	0.51	21.63	10.17	3.51
1600	-14.82	156.81	20.39	-27.23	-25.28	-53.41	-9.79	-99.66	0.99	0.52	21.85	10.01	3.56
1650	-14.63	150.33	20.14	-32.20	-25.00	-57.26	-9.65	-94.11	0.98	0.52	22.46	9.90	3.49
1700	-14.60	145.23	19.89	-36.89	-24.76	-59.87	-9.71	-87.78	0.99	0.52	21.91	10.02	3.48
1750	-14.53	138.16	19.64	-41.71	-24.61	-63.66	-9.67	-83.00	0.99	0.51	21.24	9.68	3.46
1800	-14.29	132.13	19.42	-46.71	-24.43	-67.02	-9.53	-77.71	0.99	0.51	21.21	9.59	3.53
1850	-14.27	127.01	19.17	-51.43	-24.12	-70.32	-9.52	-72.49	0.99	0.52	20.47	9.42	3.46
1900	-14.13	120.64	18.94	-56.01	-24.06	-73.44	-9.43	-67.18	1.00	0.51	20.59	9.27	3.41
1950	-13.79	113.98	18.72	-60.94	-23.80	-76.74	-9.39	-61.97	0.99	0.51	20.20	9.09	3.44
2000	-13.72	107.62	18.51	-65.64	-23.67	-80.73	-9.30	-57.08	1.00	0.51	20.20	8.95	3.48

TYPE: MMIC Amplifier  
 MODEL: ERA-8SM Reference Data:RDF-1211B  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -35dBm, Icc = 43mA, Vd = 3.73V @Temperature = +85degC

**Definitions:**

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

FREQ (MHz)	S11		S21		S12		S22		Stability		IP-3 Output (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K	Delta			
50	-15.89	-18.13	31.77	169.17	-36.84	2.19	-13.18	-9.71	1.14	0.59	29.32	13.48	2.56
100	-16.57	-15.95	31.61	158.76	-34.46	-3.44	-13.53	-27.97	1.04	0.75	28.73	13.17	2.66
150	-17.40	-24.60	31.38	148.74	-33.74	-1.49	-13.31	-43.14	1.02	0.79	28.56	13.23	2.66
200	-17.22	-32.34	31.00	139.37	-34.61	3.63	-13.36	-59.39	1.06	0.68	27.74	12.99	2.74
250	-17.66	-39.49	30.60	130.04	-33.91	3.44	-13.18	-72.41	1.04	0.70	27.27	13.02	2.89
300	-17.56	-46.77	30.19	121.23	-33.84	0.41	-12.90	-84.02	1.05	0.67	27.58	12.88	3.00
350	-17.56	-53.89	29.72	113.23	-33.86	2.81	-12.74	-94.80	1.06	0.62	27.35	12.83	2.90
400	-17.92	-57.65	29.25	105.50	-33.47	2.09	-12.58	-104.69	1.06	0.62	26.74	12.79	2.99
450	-17.63	-64.58	28.78	98.12	-33.29	-1.50	-12.52	-116.19	1.07	0.59	26.29	12.73	3.02
500	-17.69	-70.31	28.36	91.00	-32.93	2.65	-12.36	-125.02	1.07	0.58	26.09	12.73	3.09
550	-17.91	-75.63	27.89	84.10	-32.50	-0.74	-12.20	-135.28	1.07	0.58	25.92	12.76	3.16
600	-18.09	-80.93	27.44	77.62	-32.39	-1.44	-12.10	-144.03	1.08	0.55	25.71	12.72	3.16
650	-18.06	-87.25	27.03	71.12	-31.89	-1.35	-11.96	-153.32	1.07	0.55	25.65	12.73	3.22
700	-18.13	-92.96	26.59	65.00	-31.49	-3.04	-11.89	-161.49	1.07	0.55	25.49	12.65	3.19
750	-18.20	-98.88	26.18	58.90	-31.06	-4.58	-11.75	-168.67	1.07	0.55	25.45	12.68	3.32
800	-18.00	-104.50	25.79	53.07	-30.62	-5.81	-11.63	-176.11	1.06	0.55	25.30	12.53	3.24
850	-18.00	-109.72	25.41	47.17	-30.34	-7.02	-11.61	176.43	1.06	0.54	25.06	12.74	3.26
900	-18.01	-115.23	25.01	41.64	-30.15	-9.01	-11.50	170.03	1.07	0.52	24.91	12.45	3.27
940	-17.88	-120.64	24.71	37.34	-29.67	-11.11	-11.41	164.33	1.06	0.53	24.74	12.51	3.34
1000	-17.93	-128.04	24.29	30.72	-29.38	-14.67	-11.32	155.71	1.06	0.52	24.34	12.50	3.30
1050	-17.85	-134.55	23.96	25.27	-28.98	-17.94	-11.23	149.82	1.06	0.53	24.19	12.29	3.36
1100	-17.86	-141.12	23.62	20.00	-28.66	-19.34	-11.14	143.19	1.06	0.52	23.97	12.42	3.38
1150	-17.75	-146.73	23.30	14.83	-28.27	-22.03	-11.08	136.88	1.05	0.53	23.88	12.08	3.44
1200	-17.84	-152.21	22.95	9.70	-27.80	-25.05	-10.94	131.17	1.04	0.54	23.69	12.24	3.45
1250	-17.76	-160.23	22.65	4.65	-27.79	-27.52	-10.85	125.19	1.06	0.52	23.47	11.77	3.42
1300	-17.66	-166.72	22.34	-0.45	-27.53	-30.99	-10.76	119.25	1.06	0.51	23.13	12.03	3.50
1350	-17.45	-172.90	22.05	-5.37	-27.18	-34.13	-10.67	113.87	1.05	0.52	22.78	11.74	3.56
1400	-17.47	-179.28	21.77	-10.37	-26.76	-37.85	-10.58	108.43	1.04	0.53	22.55	11.71	3.54
1450	-17.28	-173.75	21.48	-15.38	-26.36	-40.58	-10.43	102.75	1.03	0.53	22.78	11.59	3.50
1500	-17.08	166.57	21.23	-20.31	-26.36	-42.57	-10.38	97.38	1.05	0.52	22.34	11.45	3.60
1550	-17.33	160.91	20.90	-25.13	-26.17	-46.26	-10.39	91.68	1.06	0.51	22.48	11.30	3.56
1600	-16.98	154.45	20.66	-29.89	-25.89	-48.89	-10.23	87.09	1.05	0.51	22.77	11.17	3.62
1650	-16.73	147.44	20.40	-34.58	-25.59	-52.86	-10.08	81.89	1.04	0.52	23.02	11.11	3.54
1700	-16.69	141.48	20.14	-39.29	-25.33	-55.31	-10.02	76.90	1.04	0.52	22.86	10.99	3.51
1750	-16.47	134.18	19.90	-44.04	-25.08	-58.97	-9.99	72.68	1.04	0.52	22.28	10.80	3.52
1800	-16.07	128.56	19.66	-48.89	-24.85	-63.41	-9.82	67.37	1.04	0.52	22.25	10.61	3.58
1850	-16.05	122.84	19.40	-53.44	-24.66	-65.45	-9.75	62.28	1.04	0.52	21.36	10.51	3.54
1900	-15.88	116.38	19.17	-57.95	-24.46	-69.33	-9.66	57.95	1.04	0.52	21.39	10.30	3.50
1950	-15.41	109.73	18.94	-62.82	-24.13	-73.68	-9.62	53.23	1.03	0.53	21.10	10.13	3.53
2000	-15.22	103.87	18.73	-67.41	-23.90	-76.63	-9.51	48.45	1.03	0.53	21.50	9.93	3.53