

## GALI-33 Performance Data

**NOTE: Use PDF Bookmarks to view DATA at required conditions**

TYPE: MMIC Amplifier

MODEL: GALI-33 Reference Data: RDF-1079A

S PARAMETERS are presented in dB/deg Format

TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 40mA, Vd = 4.26V @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	-31.21	87.43	19.83	173.88	-22.56	-6.81	-26.25	-33.86	1.05	0.73	28.26	14.52	3.04
100	-39.46	98.54	19.80	168.75	-21.89	-12.21	-27.86	-7.14	1.03	0.79	27.93	14.22	3.18
200	-29.43	59.65	19.80	158.11	-22.24	-17.35	-27.70	-23.17	1.04	0.76	28.68	14.33	3.01
300	-26.09	41.08	19.71	136.48	-22.17	-32.28	-26.99	-64.47	1.04	0.76	28.26	14.32	3.09
400	-22.23	26.61	19.66	115.34	-22.02	-46.98	-26.83	-96.22	1.03	0.77	28.13	14.38	3.02
500	-20.45	6.03	19.50	94.01	-22.11	-62.66	-25.81	-131.22	1.04	0.74	27.80	14.37	3.11
600	-18.72	-12.06	19.38	73.01	-22.12	-78.42	-25.00	-161.82	1.05	0.74	27.69	14.19	3.04
700	-17.72	-33.64	19.23	52.02	-22.32	-94.22	-23.30	172.64	1.06	0.71	27.97	14.14	3.19
800	-16.50	-53.43	19.07	31.16	-22.39	-110.13	-21.85	149.94	1.06	0.69	28.48	13.81	3.09
900	-15.66	-75.62	18.92	10.36	-22.52	-125.36	-20.56	130.01	1.08	0.68	28.28	13.73	3.12
1000	-14.87	-97.29	18.77	-10.30	-22.70	-141.63	-19.17	113.24	1.09	0.66	27.76	13.63	3.02
1100	-14.12	-119.53	18.58	-30.85	-22.86	-156.63	-18.03	95.99	1.10	0.63	28.06	13.80	3.08
1200	-13.59	-142.42	18.39	-51.31	-22.99	-171.96	-17.19	78.90	1.12	0.62	28.13	13.76	3.08
1300	-13.00	-163.95	18.23	-71.52	-23.06	-172.09	-16.37	62.14	1.13	0.61	27.81	13.68	3.08
1400	-12.29	173.32	18.05	-91.39	-23.20	156.83	-15.68	47.50	1.14	0.59	27.57	13.75	3.07
1500	-12.01	151.93	17.84	-111.65	-23.46	141.15	-15.18	31.76	1.17	0.56	27.48	13.44	3.10
1600	-11.64	130.79	17.73	-131.84	-23.56	126.59	-14.79	14.08	1.18	0.55	27.78	13.57	3.14
1700	-11.24	110.46	17.55	-151.56	-23.73	110.36	-14.56	-2.55	1.20	0.54	28.20	13.31	3.02
1800	-10.79	89.89	17.47	-170.92	-23.91	95.03	-14.44	-19.91	1.21	0.52	27.88	13.57	3.09
1900	-10.62	69.73	17.35	169.03	-24.06	78.85	-14.18	-38.50	1.23	0.51	27.34	13.39	3.08
2000	-10.51	51.29	17.23	149.08	-24.26	65.20	-14.16	-59.84	1.25	0.49	27.00	13.28	3.10
2100	-10.42	32.01	17.15	129.49	-24.35	47.66	-14.24	-80.24	1.26	0.48	26.76	13.13	3.06
2200	-10.23	14.07	17.12	109.75	-24.52	32.35	-14.31	-101.17	1.27	0.47	26.40	12.69	3.05
2300	-10.39	-4.58	17.05	89.63	-24.53	17.84	-14.10	-124.48	1.28	0.46	26.29	12.67	3.02
2400	-10.38	-23.15	17.09	70.11	-24.83	0.93	-13.75	-146.69	1.30	0.44	25.93	12.54	3.10
2500	-10.87	-59.68	17.05	29.52	-24.90	-31.18	-12.88	165.07	1.30	0.43	25.49	12.75	3.06
2600	-11.97	-105.96	17.10	-21.85	-24.92	-72.37	-11.05	107.52	1.27	0.42	25.32	12.59	3.19
2700	-14.11	-156.82	17.23	-75.03	-24.60	-114.72	-9.26	50.64	1.20	0.43	24.93	12.52	3.08
2800	-17.35	136.74	17.43	-131.47	-24.58	-160.08	-7.46	-5.61	1.11	0.42	24.69	12.44	3.15
2900	-22.41	38.35	17.20	168.66	-24.21	150.54	-6.14	-66.49	1.03	0.41	24.25	12.36	3.11
3000	-19.10	-91.93	16.14	107.15	-23.96	100.61	-5.44	-128.35	1.05	0.39	24.00	12.23	3.16
3100	-14.43	-162.43	14.16	48.24	-23.88	50.54	-5.34	175.41	1.20	0.34	23.60	11.60	3.10
3200	-10.79	98.52	9.71	-55.10	-23.57	-39.97	-5.68	85.95	1.73	0.23	23.18	12.03	3.19
3300	-9.08	19.16	6.09	-147.27	-21.44	-124.32	-5.97	12.86	1.90	0.16	22.85	11.95	3.19
3400	-7.63	-58.00	3.80	121.05	-18.77	146.07	-6.12	-64.10	1.66	0.10	22.52	11.94	3.24
3500	-7.32	-132.04	2.01	30.21	-16.56	60.81	-6.65	-143.68	1.60	0.03	22.40	11.48	3.17
3600	-8.14	156.90	0.85	-62.30	-12.56	-24.30	-7.15	140.30	1.29	0.12	22.21	11.31	3.23
3700	-10.10	72.78	0.68	-157.77	-7.62	-119.50	-8.58	54.27	1.01	0.38	21.97	11.42	3.11
3800	-9.85	-106.62	0.32	93.29	-3.55	122.56	-8.91	-114.13	0.88	0.67	21.78	10.98	3.18
4000	-4.48	119.21	-3.38	-2.96	-4.69	12.80	-3.99	112.01	0.97	0.72	21.22	10.64	3.13

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 32mA, Vd = 4.21V @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	-26.07	46.38	19.46	173.8	-21.91	-1.81	-20.92	-16.58	1.04	0.76	24.6	11.56	3.06
100	-31.49	15.22	19.42	168.68	-22.25	-9.07	-22.54	-8.11	1.05	0.72	24.3	11.11	3.12
200	-26.68	21.23	19.4	158.26	-21.63	-16.92	-21.91	-22.05	1.03	0.78	24.9	11.44	3.03
300	-23.96	11.99	19.32	136.78	-21.8	-31.7	-22.04	-53.44	1.04	0.76	24.51	11.45	3.04
400	-21.71	3.66	19.31	115.58	-21.79	-48.10	-22.54	-83.93	1.04	0.76	24.40	11.38	3.03
500	-20.03	-13.45	19.15	94.48	-21.94	-63.23	-22.03	-113.49	1.05	0.73	24.11	11.46	3.08
600	-18.63	-26.39	19.03	73.39	-21.98	-79.50	-21.75	-141.37	1.05	0.72	24.07	11.25	3.05
700	-17.62	-45.45	18.88	52.62	-22.05	-94.72	-20.88	-168.27	1.06	0.71	24.27	11.30	3.17
800	-16.46	-63.87	18.73	31.71	-22.24	-109.90	-19.81	167.45	1.07	0.68	24.71	10.86	3.08
900	-15.65	-85.50	18.59	10.86	-22.40	-125.78	-18.91	143.59	1.09	0.66	24.56	10.90	3.10
1000	-14.80	-106.11	18.45	-9.78	-22.48	-142.10	-17.67	124.62	1.09	0.65	24.10	10.81	3.01
1100	-14.01	-127.82	18.28	-30.00	-22.61	-156.55	-16.63	105.71	1.10	0.64	24.43	11.02	3.07
1200	-13.45	-149.76	18.10	-50.60	-22.76	-173.21	-15.86	86.81	1.12	0.62	24.50	10.76	3.05
1300	-12.82	-170.51	17.96	-70.84	-22.85	171.47	-15.16	68.53	1.13	0.61	24.27	10.83	3.06
1400	-12.13	168.15	17.78	-90.88	-23.18	156.14	-14.53	52.94	1.15	0.58	24.17	10.98	3.07
1500	-11.83	147.39	17.58	-111.03	-23.22	140.45	-13.98	36.05	1.17	0.57	24.17	10.73	3.10
1600	-11.44	125.84	17.48	-131.13	-23.37	125.23	-13.60	18.22	1.18	0.56	24.47	10.87	3.13
1700	-11.00	105.77	17.31	-150.97	-23.61	109.06	-13.54	0.39	1.20	0.54	24.81	10.55	3.02
1800	-10.59	85.69	17.24	-170.29	-23.80	94.56	-13.48	-17.22	1.21	0.52	24.64	10.90	3.03
1900	-10.38	66.00	17.13	169.71	-23.93	78.68	-13.19	-36.06	1.23	0.51	24.27	10.73	3.06
2000	-10.28	47.28	17.02	149.78	-23.90	63.19	-13.11	-57.08	1.23	0.50	24.10	10.69	3.07
2100	-10.21	28.32	16.94	130.16	-24.25	47.43	-13.15	-77.18	1.26	0.48	23.91	10.52	3.06
2200	-10.04	10.54	16.92	110.24	-24.33	31.20	-13.14	-97.85	1.26	0.47	23.73	10.10	2.99
2300	-10.17	-8.27	16.86	90.27	-24.46	16.05	-13.03	-121.15	1.28	0.46	23.69	10.06	3.02
2400	-10.14	-27.28	16.92	70.47	-24.45	0.46	-12.85	-144.13	1.26	0.46	23.48	9.92	3.05
2500	-10.70	-64.16	16.88	29.86	-24.66	-31.90	-12.04	168.34	1.27	0.43	23.22	10.30	3.07
2600	-11.83	-110.82	16.96	-21.67	-24.62	-72.47	-10.40	110.23	1.24	0.43	23.30	10.01	3.15
2700	-13.97	-163.47	17.08	-74.97	-24.36	-115.40	-8.70	53.25	1.16	0.43	23.06	10.23	3.09
2800	-16.84	127.87	17.29	-131.70	-24.20	-161.49	-7.01	-3.85	1.06	0.42	22.95	10.23	3.14
2900	-20.53	30.29	17.02	168.30	-23.76	149.40	-5.82	-65.15	0.98	0.41	22.64	10.18	3.08
3000	-17.85	-87.52	15.94	106.92	-23.58	98.29	-5.20	-127.21	1.00	0.38	22.48	10.03	3.16
3100	-13.95	-158.93	13.94	48.09	-23.69	48.81	-5.18	176.33	1.17	0.32	22.14	9.64	3.09
3200	-10.60	99.98	9.45	-54.95	-23.40	-42.02	-5.56	86.39	1.71	0.22	21.80	10.11	3.16
3300	-8.94	19.88	5.93	-147.13	-21.30	-125.07	-5.86	13.10	1.88	0.16	21.59	10.11	3.16
3400	-7.50	-57.90	3.57	121.09	-18.74	145.41	-6.02	-64.04	1.67	0.10	21.30	10.25	3.23
3500	-7.21	-132.00	1.83	30.35	-16.64	59.95	-6.52	-143.96	1.62	0.03	21.25	9.95	3.15
3600	-8.09	156.39	0.68	-62.13	-12.55	-24.40	-7.11	139.65	1.30	0.12	21.10	9.81	3.23
3700	-10.15	71.81	0.55	-157.58	-7.56	-119.84	-8.61	53.08	1.01	0.37	20.90	9.79	3.08
3800	-9.86	-107.21	0.18	93.49	-3.58	122.39	-8.94	-115.14	0.89	0.66	20.76	9.52	3.11
4000	-4.51	119.07	-3.42	-2.53	-4.73	13.01	-3.99	111.91	0.98	0.72	20.27	9.49	3.11

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 48mA, Vd = 4.30V @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	-27.94	135.3	20.09	173.91	-21.77	-7.31	-31.29	-32.07	1.02	0.82	31.25	16.64	3.1
100	-32.45	150.78	20.05	168.6	-22.07	-8.93	-34.92	-10.96	1.03	0.79	30.88	16.39	3.2
200	-28.77	96.96	20.02	158.14	-22.21	-14.83	-33.53	-31.26	1.03	0.78	31.86	16.52	3.02
300	-25.5	65.35	19.95	136.46	-22.2	-31.91	-31.53	-78.88	1.03	0.77	31.43	16.48	3.14
400	-21.89	40.71	19.89	115.28	-22.20	-46.65	-30.46	-118.16	1.03	0.77	31.28	16.44	3.04
500	-20.24	16.99	19.74	94.00	-22.35	-62.96	-28.00	-150.55	1.04	0.74	30.89	16.47	3.16
600	-18.54	-2.97	19.59	72.84	-22.42	-77.96	-26.43	-179.09	1.05	0.73	30.78	16.33	3.06
700	-17.58	-25.30	19.45	51.84	-22.49	-94.09	-24.48	156.94	1.05	0.71	31.06	16.19	3.23
800	-16.43	-46.39	19.28	30.91	-22.61	-109.41	-22.72	137.16	1.06	0.69	31.68	15.94	3.11
900	-15.59	-69.34	19.10	10.15	-22.75	-125.10	-21.39	119.32	1.08	0.67	31.42	15.88	3.15
1000	-14.86	-91.45	18.94	-10.50	-22.73	-140.94	-19.94	105.33	1.08	0.66	30.74	15.73	3.05
1100	-14.19	-114.83	18.77	-30.94	-23.04	-155.40	-18.74	89.17	1.10	0.63	31.14	15.86	3.10
1200	-13.65	-138.33	18.57	-51.47	-23.14	-171.11	-17.91	74.03	1.12	0.62	31.06	15.81	3.11
1300	-13.07	-159.79	18.43	-71.64	-23.17	173.94	-17.05	57.73	1.12	0.61	30.67	15.65	3.11
1400	-12.44	-177.30	18.23	-91.57	-23.50	158.23	-16.37	43.81	1.15	0.58	30.24	15.68	3.13
1500	-12.17	155.64	18.04	-111.79	-23.55	142.13	-15.86	28.65	1.16	0.57	29.97	15.43	3.12
1600	-11.80	133.93	17.90	-131.94	-23.56	125.27	-15.41	11.40	1.17	0.56	30.16	15.49	3.17
1700	-11.38	113.25	17.70	-151.67	-23.84	110.50	-15.25	-4.82	1.20	0.53	30.63	15.20	3.02
1800	-10.95	92.77	17.62	-170.93	-24.03	94.95	-15.18	-21.81	1.21	0.52	30.17	15.35	3.10
1900	-10.77	72.80	17.48	168.85	-24.15	79.91	-14.93	-40.42	1.23	0.51	29.48	15.27	3.06
2000	-10.66	54.13	17.37	149.04	-24.43	64.93	-14.89	-61.79	1.26	0.48	29.09	15.09	3.15
2100	-10.58	35.05	17.29	129.33	-24.47	48.86	-14.90	-81.93	1.27	0.48	28.67	14.91	3.08
2200	-10.36	17.14	17.26	109.61	-24.62	33.89	-14.88	-102.86	1.27	0.47	28.22	14.59	3.09
2300	-10.56	-1.35	17.19	89.76	-24.66	16.99	-14.72	-126.27	1.28	0.46	27.95	14.42	3.03
2400	-10.49	-20.02	17.20	70.06	-24.86	2.46	-14.34	-148.60	1.29	0.44	27.43	14.28	3.14
2500	-10.98	-56.19	17.18	29.75	-24.96	-30.00	-13.36	163.50	1.30	0.43	26.94	14.32	3.10
2600	-12.03	-101.70	17.25	-21.42	-25.19	-71.96	-11.45	105.94	1.29	0.42	26.50	13.95	3.21
2700	-14.10	-151.06	17.40	-74.35	-24.96	-114.41	-9.53	49.55	1.23	0.42	26.08	13.72	3.11
2800	-17.51	145.63	17.61	-130.66	-24.78	-158.57	-7.60	-6.35	1.13	0.42	25.69	13.69	3.21
2900	-24.15	46.09	17.39	169.47	-24.38	152.12	-6.25	-66.67	1.04	0.42	25.23	13.48	3.12
3000	-19.96	-96.07	16.38	107.81	-24.18	102.06	-5.47	-128.53	1.06	0.40	24.91	13.35	3.20
3100	-14.78	-163.82	14.40	48.60	-24.26	52.93	-5.37	175.06	1.23	0.34	24.51	12.57	3.14
3200	-10.97	97.04	9.93	-54.87	-23.79	-38.50	-5.70	85.18	1.75	0.24	24.09	12.97	3.21
3300	-9.14	18.78	6.39	-147.17	-21.39	-124.75	-5.95	12.48	1.84	0.17	23.66	12.87	3.23
3400	-7.72	-58.39	3.97	121.12	-18.83	146.94	-6.17	-64.21	1.66	0.10	23.30	12.72	3.25
3500	-7.40	-132.03	2.19	30.07	-16.68	61.03	-6.74	-143.79	1.61	0.02	23.16	12.37	3.20
3600	-8.14	157.46	1.01	-62.37	-12.57	-24.02	-7.22	140.65	1.27	0.13	22.91	12.13	3.29
3700	-10.05	73.28	0.80	-157.93	-7.60	-119.58	-8.55	54.93	0.99	0.38	22.70	12.23	3.16
3800	-9.82	-105.70	0.43	93.06	-3.53	122.72	-8.91	-113.22	0.88	0.68	22.53	11.70	3.19
4000	-4.42	119.17	-3.31	-3.35	-4.70	12.81	-3.97	112.25	0.96	0.73	21.97	11.35	3.15

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 40mA, Vd = 4.48V @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	-30.25	97.38	19.83	173.87	-21.43	-2.67	-25.60	-19.69	1.01	0.83	28.87	14.39	2.73
100	-39.21	100.69	19.83	168.61	-22.03	-7.87	-28.51	-10.73	1.03	0.78	28.66	14.02	2.81
200	-29.35	58.22	19.83	158.17	-22.20	-16.13	-26.33	-26.07	1.04	0.76	29.60	14.08	2.60
300	-25.89	44.29	19.73	136.10	-21.87	-32.10	-27.49	-65.79	1.03	0.78	29.32	14.15	2.63
400	-22.25	26.94	19.68	114.72	-22.08	-49.05	-26.84	-99.16	1.04	0.76	29.34	14.20	2.57
500	-20.44	7.12	19.52	93.17	-22.00	-64.59	-26.13	-136.02	1.04	0.76	29.10	14.12	2.65
600	-18.74	-10.32	19.42	71.75	-22.15	-80.04	-25.36	-167.86	1.04	0.74	29.14	14.03	2.59
700	-17.48	-31.92	19.27	50.66	-22.25	-96.93	-23.31	166.41	1.05	0.72	29.50	13.91	2.71
800	-16.45	-50.55	19.11	29.53	-22.32	-112.59	-21.93	140.69	1.06	0.70	30.11	13.71	2.60
900	-15.66	-72.94	18.94	8.54	-22.54	-128.83	-20.72	120.37	1.08	0.68	29.89	13.63	2.65
1000	-14.79	-95.79	18.77	-12.39	-22.56	-145.15	-19.13	104.09	1.08	0.67	29.36	13.59	2.52
1100	-13.95	-118.44	18.60	-33.22	-22.68	-160.88	-18.12	88.07	1.09	0.65	29.79	13.76	2.58
1200	-13.50	-140.72	18.39	-53.73	-22.76	-177.14	-17.40	70.47	1.10	0.63	29.89	13.69	2.56
1300	-13.02	-164.43	18.28	-74.30	-23.01	166.63	-16.56	54.31	1.12	0.61	29.72	13.59	2.59
1400	-12.14	174.64	18.04	-94.83	-23.10	150.12	-15.80	38.38	1.13	0.60	29.42	13.66	2.57
1500	-11.99	152.26	17.86	-114.89	-23.42	135.03	-15.30	23.11	1.16	0.57	29.40	13.41	2.60
1600	-11.47	129.88	17.73	-135.24	-23.42	119.03	-15.02	7.78	1.17	0.56	29.79	13.60	2.63
1700	-11.20	110.83	17.49	-155.23	-23.68	102.93	-15.11	-11.72	1.20	0.53	30.33	13.23	2.48
1800	-10.83	88.88	17.48	-174.88	-23.82	86.97	-14.69	-28.85	1.21	0.53	30.11	13.56	2.56
1900	-10.48	69.06	17.37	164.97	-24.05	72.36	-14.36	-47.45	1.22	0.51	29.63	13.52	2.54
2000	-10.26	51.73	17.24	145.35	-24.19	55.57	-14.37	-68.17	1.24	0.50	29.31	13.42	2.59
2100	-10.38	31.97	17.19	125.13	-24.44	39.57	-14.46	-91.22	1.27	0.48	29.05	13.23	2.54
2200	-10.00	14.25	17.13	105.37	-24.60	22.99	-14.50	-112.27	1.28	0.47	28.71	12.90	2.51
2300	-10.09	-4.57	17.13	85.29	-24.74	7.96	-13.80	-134.99	1.28	0.46	28.60	12.73	2.50
2400	-10.22	-20.79	17.02	65.59	-24.76	-10.22	-13.91	-159.73	1.30	0.45	28.30	12.74	2.51
2500	-10.20	-57.63	17.06	25.13	-25.16	-41.76	-12.98	155.84	1.32	0.43	27.97	12.91	2.53
2600	-11.39	-105.47	17.02	-26.90	-24.99	-82.79	-10.90	98.36	1.28	0.42	27.83	12.75	2.63
2700	-12.43	-151.16	17.18	-78.91	-24.80	-125.91	-9.31	40.62	1.21	0.43	27.50	12.76	2.52
2800	-13.69	159.63	17.68	-133.78	-24.79	-171.70	-7.57	-15.67	1.11	0.45	27.29	12.82	2.63
2900	-20.01	97.01	17.70	166.39	-24.65	140.91	-5.48	-75.65	1.00	0.44	27.01	12.78	2.54
3000	-39.18	-136.47	17.21	104.04	-24.22	89.37	-4.32	-137.81	0.93	0.45	26.64	12.64	2.63
3100	-18.49	-177.60	15.57	42.04	-24.25	38.01	-4.13	164.94	1.01	0.38	26.29	12.21	2.53
3200	-13.87	81.64	11.25	-68.83	-23.94	-47.74	-5.52	64.23	1.62	0.27	25.85	12.48	2.62
3300	-10.18	-0.12	7.64	-163.46	-20.99	-145.70	-5.77	-9.08	1.57	0.19	25.45	12.44	2.67
3400	-7.66	-82.59	5.05	100.59	-18.92	123.12	-5.62	-91.63	1.41	0.14	24.98	12.45	2.68
3500	-7.02	-153.50	3.07	9.03	-16.91	36.69	-6.14	-166.37	1.38	0.03	24.80	12.10	2.61
3600	-7.26	139.75	1.93	-85.46	-12.72	-49.32	-6.95	118.50	1.10	0.16	24.62	11.99	2.68
3700	-9.11	49.58	1.64	176.86	-7.94	-145.65	-7.48	24.61	0.88	0.39	24.35	12.13	2.55
3800	-9.64	-117.48	1.51	66.32	-3.21	96.94	-8.79	-128.69	0.80	0.75	24.20	11.82	2.59
4000	-4.22	88.24	-2.25	-37.92	-4.02	-19.90	-3.65	81.34	0.88	0.82	23.59	11.63	2.58

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 32mA, Vd = 4.43V @ 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	-25.73	46.26	19.54	173.86	-21.83	-2.45	-22.59	-17.20	1.03	0.77	25.01	11.44	2.72
100	-32.18	6.45	19.49	168.66	-21.50	-7.53	-23.52	-10.45	1.03	0.79	24.75	11.04	2.75
200	-26.64	20.72	19.48	158.12	-21.74	-17.28	-22.64	-21.36	1.03	0.77	25.35	11.18	2.60
300	-25.57	21.58	19.40	147.06	-21.60	-25.24	-23.08	-43.53	1.03	0.78	25.07	11.20	2.58
400	-24.88	16.29	19.41	136.27	-21.79	-33.17	-22.99	-57.68	1.04	0.76	25.07	11.21	2.57
500	-24.11	12.87	19.36	125.69	-21.67	-40.73	-22.66	-71.26	1.03	0.77	24.86	11.28	2.59
600	-21.68	7.64	19.36	115.05	-21.84	-49.03	-23.10	-86.68	1.04	0.76	24.86	11.12	2.59
700	-21.74	2.65	19.25	104.28	-21.75	-56.38	-22.88	-101.58	1.04	0.75	25.11	11.06	2.67
800	-20.22	-8.80	19.25	93.51	-21.83	-64.96	-23.00	-119.20	1.04	0.75	25.55	10.82	2.58
900	-20.04	-15.38	19.15	82.80	-21.90	-72.78	-23.00	-134.50	1.05	0.74	25.36	10.78	2.59
1000	-18.70	-24.09	19.10	72.19	-22.00	-80.70	-22.85	-149.15	1.05	0.72	25.01	10.67	2.50
1100	-18.32	-32.56	19.04	61.61	-21.92	-88.81	-22.60	-163.47	1.05	0.73	25.32	10.90	2.58
1200	-17.59	-43.30	18.97	51.09	-21.98	-97.23	-21.53	-177.18	1.05	0.72	25.41	10.92	2.54
1300	-17.13	-51.41	18.88	40.58	-22.15	-105.72	-21.05	-170.44	1.06	0.70	25.20	10.78	2.57
1400	-16.44	-60.47	18.82	29.93	-22.17	-113.86	-20.46	-157.53	1.07	0.69	25.13	10.86	2.55
1500	-16.25	-70.26	18.77	19.30	-22.18	-121.52	-19.96	-145.44	1.07	0.69	25.16	10.53	2.59
1600	-15.75	-82.01	18.68	8.88	-22.27	-129.33	-19.59	-133.66	1.08	0.68	25.55	10.82	2.60
1700	-15.12	-92.82	18.62	-1.62	-22.38	-137.43	-18.81	-123.50	1.08	0.67	25.90	10.52	2.48
1800	-14.78	-103.76	18.53	-12.11	-22.30	-145.35	-18.05	-115.20	1.08	0.67	25.81	10.89	2.53
1900	-14.21	-114.36	18.42	-22.31	-22.57	-153.31	-17.52	-105.66	1.10	0.65	25.51	10.74	2.54
2000	-13.90	-125.54	18.36	-32.70	-22.51	-161.67	-17.12	-96.46	1.10	0.65	25.38	10.69	2.54
2100	-13.74	-135.86	18.25	-43.02	-22.54	-168.80	-16.62	-86.58	1.10	0.64	25.29	10.53	2.55
2200	-13.44	-146.81	18.18	-53.42	-22.74	-177.65	-16.30	-77.84	1.11	0.62	25.08	10.12	2.46
2300	-13.32	-158.02	18.09	-63.50	-22.73	-174.03	-16.06	-68.82	1.12	0.62	25.09	10.00	2.48
2400	-12.92	-169.74	18.02	-73.85	-22.80	-166.32	-15.70	-60.12	1.12	0.61	24.96	9.95	2.51
2500	-12.42	-178.62	17.89	-83.95	-22.83	-157.75	-15.33	-52.99	1.13	0.60	24.77	10.16	2.52
2600	-12.07	-169.34	17.83	-94.25	-23.05	-149.50	-14.92	-42.62	1.14	0.59	24.91	10.17	2.60
2700	-11.91	157.96	17.74	-104.16	-23.11	-142.16	-14.44	-36.51	1.15	0.58	24.83	10.25	2.51
2800	-11.89	147.77	17.63	-114.55	-23.19	-134.66	-14.44	-27.45	1.16	0.57	24.85	10.28	2.60
2900	-11.58	135.72	17.58	-124.42	-23.31	-126.65	-14.18	-20.07	1.17	0.56	24.61	10.18	2.53
3000	-11.37	125.87	17.50	-134.69	-23.28	-118.70	-14.06	-11.65	1.17	0.56	24.42	10.19	2.60
3100	-11.17	116.01	17.43	-144.65	-23.45	-109.84	-13.99	-1.23	1.19	0.55	24.18	9.85	2.53
3200	-11.08	107.12	17.29	-154.87	-23.53	-102.08	-14.14	-8.33	1.20	0.54	23.87	10.22	2.60
3300	-10.84	95.54	17.33	-164.70	-23.46	-94.88	-13.80	-16.49	1.19	0.54	23.62	10.14	2.65
3400	-10.66	85.03	17.27	-174.39	-23.68	-86.34	-13.77	-25.99	1.20	0.53	23.31	10.43	2.67
3500	-10.64	74.79	17.25	-174.94	-23.52	-78.64	-13.47	-37.05	1.19	0.54	23.29	10.17	2.59
3600	-10.32	65.53	17.17	-165.45	-23.82	-70.47	-13.51	-44.73	1.22	0.52	23.13	10.11	2.65
3700	-10.28	57.28	17.10	-155.28	-24.02	-61.68	-13.64	-56.22	1.24	0.50	22.93	10.05	2.52
3800	-10.11	47.90	17.05	-145.73	-24.12	-54.82	-13.51	-64.96	1.25	0.50	22.84	9.95	2.59
4000	-10.26	28.46	16.99	-125.52	-24.19	-38.13	-13.54	-87.97	1.26	0.49	22.37	10.06	2.57

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 48mA, Vd = 4.52V @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	-29.93	118.25	20.07	173.90	-22.19	-2.87	-29.04	-25.49	1.03	0.78	32.03	16.55	2.77
100	-32.01	141.70	20.02	168.59	-21.92	-10.53	-33.74	-2.99	1.02	0.80	31.89	16.19	2.86
200	-28.84	85.82	20.01	157.99	-22.09	-16.44	-32.16	-25.84	1.03	0.79	33.45	16.39	2.62
300	-25.64	62.51	19.94	135.99	-22.16	-32.24	-32.06	-82.76	1.03	0.78	33.11	16.35	2.68
400	-21.91	39.67	19.88	114.59	-22.16	-48.01	-30.28	-118.81	1.03	0.77	33.12	16.37	2.57
500	-20.24	17.67	19.73	93.01	-22.20	-64.95	-27.98	-153.73	1.04	0.76	33.05	16.36	2.68
600	-18.55	-1.91	19.58	71.60	-22.36	-80.66	-26.47	174.30	1.05	0.73	33.13	16.21	2.61
700	-17.36	-24.86	19.44	50.43	-22.40	-96.45	-24.26	151.17	1.05	0.72	33.76	16.12	2.75
800	-16.29	-45.19	19.26	29.39	-22.51	-111.94	-22.61	128.91	1.06	0.70	34.70	15.89	2.62
900	-15.57	-67.97	19.11	8.38	-22.66	-128.08	-21.22	109.65	1.07	0.68	34.45	15.74	2.67
1000	-14.71	-91.60	18.96	-12.63	-22.74	-144.63	-19.72	97.06	1.08	0.67	33.42	15.70	2.54
1100	-13.94	-114.26	18.76	-33.25	-22.91	-159.73	-18.66	81.51	1.10	0.64	34.31	15.83	2.62
1200	-13.47	-136.74	18.56	-53.77	-22.98	-176.36	-17.92	65.33	1.11	0.63	34.18	15.80	2.58
1300	-13.14	-160.22	18.42	-74.47	-23.08	167.56	-17.16	49.50	1.12	0.61	34.17	15.69	2.63
1400	-12.23	177.89	18.19	-94.73	-23.27	151.92	-16.38	34.31	1.14	0.59	33.36	15.74	2.61
1500	-12.14	155.72	18.03	-115.16	-23.28	135.46	-16.02	19.67	1.15	0.58	33.18	15.49	2.63
1600	-11.69	132.97	17.88	-135.32	-23.58	119.06	-15.69	5.17	1.17	0.56	33.45	15.57	2.67
1700	-11.34	113.80	17.65	-155.30	-23.83	102.75	-15.70	-13.81	1.20	0.53	34.44	15.26	2.51
1800	-10.95	91.56	17.62	-175.02	-24.10	88.10	-15.28	-31.26	1.22	0.52	34.16	15.52	2.60
1900	-10.62	71.52	17.51	164.96	-24.13	72.43	-14.95	-49.23	1.22	0.51	33.17	15.48	2.57
2000	-10.39	53.94	17.38	145.24	-24.40	56.32	-14.89	-69.69	1.25	0.49	32.60	15.30	2.64
2100	-10.54	34.59	17.31	125.05	-24.33	41.09	-15.00	-93.08	1.25	0.48	32.06	15.11	2.58
2200	-10.10	16.54	17.25	105.44	-24.69	23.76	-15.07	-114.51	1.28	0.46	31.45	14.82	2.55
2300	-10.17	-1.92	17.25	85.37	-24.90	8.89	-14.34	-137.03	1.29	0.45	31.26	14.68	2.54
2400	-10.27	-18.06	17.14	65.69	-24.93	-10.29	-14.41	-161.96	1.31	0.44	30.72	14.57	2.59
2500	-10.24	-54.93	17.16	25.47	-25.22	-41.99	-13.40	153.55	1.32	0.43	30.08	14.59	2.57
2600	-11.45	-102.06	17.12	-26.67	-25.09	-82.70	-11.24	96.54	1.29	0.42	29.66	14.43	2.67
2700	-12.31	-146.67	17.30	-78.32	-25.04	-125.37	-9.56	39.16	1.23	0.43	29.16	14.39	2.57
2800	-13.61	164.74	17.82	-133.06	-25.03	-172.05	-7.72	-16.63	1.13	0.45	28.81	14.33	2.68
2900	-19.64	106.62	17.85	167.06	-24.94	141.73	-5.60	-76.27	1.02	0.44	28.31	14.15	2.57
3000	-35.02	152.96	17.39	104.69	-24.47	90.87	-4.37	-138.14	0.95	0.45	27.91	13.95	2.68
3100	-19.01	177.15	15.83	42.58	-24.49	38.22	-4.18	164.60	1.02	0.39	27.44	13.29	2.58
3200	-14.11	79.65	11.50	-68.72	-24.07	-45.97	-5.55	63.09	1.61	0.28	26.92	13.64	2.67
3300	-10.34	-0.35	7.82	-163.36	-20.94	-145.07	-5.79	-9.20	1.55	0.20	26.39	13.52	2.72
3400	-7.76	-82.59	5.26	100.70	-18.96	122.83	-5.63	-91.92	1.40	0.14	25.90	13.43	2.73
3500	-7.04	-153.52	3.28	9.03	-17.00	36.88	-6.21	-166.51	1.37	0.02	25.69	13.11	2.65
3600	-7.33	140.38	2.07	-85.47	-12.76	-49.26	-7.01	118.54	1.10	0.17	25.41	12.87	2.72
3700	-9.10	50.73	1.77	176.84	-7.95	-145.41	-7.47	25.28	0.87	0.40	25.11	13.14	2.57
3800	-9.61	-116.01	1.64	66.36	-3.23	97.24	-8.74	-127.36	0.80	0.76	24.92	12.74	2.62
4000	-4.19	88.47	-2.16	-38.25	-4.02	-19.99	-3.65	81.23	0.88	0.82	24.27	12.41	2.62

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 40mA, Vd = 4.07V @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	-29.01	78.05	19.75	173.95	-21.99	-7.56	-24.71	-20.64	1.03	0.77	28.09	14.57	3.46
100	-37.55	44.35	19.71	168.61	-22.08	-10.66	-26.13	-7.88	1.04	0.76	27.79	14.23	3.63
200	-28.57	50.88	19.70	158.10	-21.70	-15.22	-25.90	-20.13	1.02	0.80	28.60	14.53	3.44
300	-25.48	31.13	19.60	136.57	-21.92	-31.25	-25.21	-59.05	1.03	0.77	28.03	14.42	3.57
400	-21.82	16.81	19.53	115.28	-21.99	-47.74	-24.76	-89.69	1.04	0.76	27.85	14.48	3.47
500	-20.04	-0.80	19.39	94.14	-22.29	-62.75	-23.98	-122.15	1.05	0.72	27.42	14.46	3.59
600	-18.48	-18.67	19.25	73.05	-22.19	-77.75	-23.36	-149.41	1.05	0.72	27.32	14.35	3.54
700	-17.35	-41.48	19.11	52.12	-22.28	-93.02	-22.06	-174.35	1.06	0.70	27.52	14.19	3.68
800	-16.24	-60.59	18.95	31.21	-22.42	-108.50	-20.84	161.85	1.07	0.68	28.00	13.88	3.55
900	-15.26	-82.78	18.76	10.57	-22.51	-123.63	-19.75	140.62	1.08	0.67	27.83	13.85	3.61
1000	-14.55	-103.13	18.60	-10.13	-22.70	-139.09	-18.55	122.09	1.10	0.65	27.24	13.74	3.49
1100	-13.78	-124.93	18.45	-30.61	-22.88	-153.88	-17.64	105.08	1.11	0.63	27.58	13.86	3.56
1200	-13.13	-147.13	18.23	-51.12	-22.97	-170.08	-16.67	85.98	1.12	0.61	27.60	13.69	3.54
1300	-12.59	-168.96	18.07	-71.31	-23.16	174.84	-15.85	68.62	1.14	0.59	27.26	13.63	3.56
1400	-11.87	-170.35	17.87	-91.28	-23.38	160.33	-15.32	53.12	1.16	0.57	26.99	13.69	3.60
1500	-11.69	148.70	17.67	-111.42	-23.53	144.72	-14.79	36.47	1.18	0.55	26.78	13.48	3.60
1600	-11.27	126.65	17.57	-131.42	-23.65	129.48	-14.38	19.66	1.19	0.54	27.13	13.57	3.64
1700	-10.86	107.88	17.31	-151.20	-24.00	113.62	-14.42	1.99	1.23	0.51	27.53	13.24	3.52
1800	-10.58	86.13	17.27	-170.71	-23.86	99.21	-14.06	-16.14	1.22	0.52	27.24	13.51	3.56
1900	-10.26	66.12	17.17	169.18	-24.17	84.47	-13.76	-33.49	1.24	0.50	26.62	13.34	3.59
2000	-10.12	46.77	17.04	149.19	-24.31	69.08	-13.64	-53.80	1.26	0.48	26.31	13.26	3.60
2100	-10.00	27.03	16.97	129.65	-24.32	54.04	-13.74	-73.16	1.26	0.47	26.01	13.05	3.57
2200	-9.90	8.79	16.90	109.72	-24.54	38.25	-13.87	-94.41	1.28	0.46	25.69	12.66	3.54
2300	-10.01	-10.16	16.87	89.68	-24.57	22.74	-13.62	-116.56	1.29	0.45	25.53	12.57	3.52
2400	-10.10	-28.30	16.84	70.30	-24.85	6.67	-13.70	-139.36	1.31	0.43	25.17	12.44	3.60
2500	-10.89	-66.16	16.81	29.40	-24.84	-24.52	-12.81	171.26	1.31	0.41	24.67	12.61	3.58
2600	-12.86	-116.42	16.74	-22.90	-24.64	-65.70	-10.80	111.34	1.27	0.40	24.46	12.30	3.67
2700	-15.71	-175.65	16.69	-76.53	-24.36	-109.45	-9.08	53.87	1.21	0.39	24.03	12.21	3.58
2800	-18.52	98.23	16.56	-133.41	-24.25	-154.59	-7.64	-1.46	1.15	0.37	23.76	12.20	3.65
2900	-21.15	-9.21	16.28	169.11	-23.67	158.27	-6.72	-65.01	1.10	0.40	23.39	12.03	3.61
3000	-15.53	-90.79	14.65	107.91	-23.85	104.79	-6.51	-121.86	1.23	0.32	23.17	11.89	3.64
3100	-12.85	-161.57	12.59	51.00	-24.37	57.59	-6.20	-177.30	1.52	0.28	22.83	11.19	3.63
3200	-9.94	103.89	8.14	-48.56	-23.44	-32.71	-6.12	96.79	2.03	0.21	22.54	11.65	3.72
3300	-8.48	27.26	4.79	-138.25	-21.91	-115.32	-5.99	25.59	2.26	0.15	22.26	11.39	3.70
3400	-7.94	-46.05	2.45	132.44	-19.14	161.95	-6.79	-46.92	2.18	0.09	21.94	11.34	3.79
3500	-7.73	-122.85	1.02	42.12	-16.20	74.74	-7.43	-129.56	1.87	0.03	21.93	10.93	3.69
3600	-8.76	163.39	-0.03	-50.52	-12.30	-12.30	-7.54	151.19	1.45	0.11	21.80	10.56	3.78
3700	-11.60	76.48	-0.29	-144.67	-7.48	-106.72	-9.35	65.19	1.14	0.34	21.60	10.57	3.65
3800	-9.81	-103.93	-0.91	108.82	-4.12	135.73	-9.01	-104.78	0.99	0.58	21.52	10.02	3.67
4000	-4.74	134.34	-4.09	17.67	-5.15	31.14	-4.48	132.21	1.07	0.65	20.90	9.61	3.66

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 32mA, Vd = 4.02V @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 (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-25.22	24.58	19.34	173.94	-21.89	-1.94	-19.29	-12.39	1.04	0.75	24.64	11.87	3.45
100	-27.89	7.82	19.31	168.74	-21.84	-7.44	-21.38	-7.97	1.04	0.75	24.38	11.39	3.56
200	-25.23	15.77	19.30	158.30	-21.72	-16.31	-21.20	-22.10	1.04	0.76	24.95	11.64	3.46
300	-22.97	2.80	19.19	136.72	-21.84	-31.95	-21.05	-54.11	1.04	0.74	24.48	11.61	3.50
400	-20.72	-4.66	19.11	115.65	-21.78	-47.96	-21.01	-80.92	1.04	0.74	24.37	11.59	3.49
500	-19.38	-18.94	19.00	94.49	-21.79	-63.10	-20.34	-108.58	1.05	0.73	24.00	11.68	3.55
600	-18.12	-33.36	18.90	73.43	-21.83	-78.56	-20.38	-135.48	1.05	0.72	23.94	11.42	3.52
700	-17.07	-52.94	18.76	52.63	-22.03	-94.10	-19.53	-161.16	1.06	0.70	24.12	11.44	3.64
800	-16.02	-71.99	18.58	31.87	-22.22	-109.78	-18.69	174.30	1.08	0.68	24.58	10.99	3.53
900	-15.02	-92.32	18.42	11.16	-22.23	-124.51	-17.68	152.38	1.08	0.67	24.38	11.10	3.56
1000	-14.32	-111.55	18.29	-9.36	-22.43	-140.30	-16.71	132.53	1.10	0.65	23.91	10.95	3.46
1100	-13.56	-132.80	18.11	-29.89	-22.54	-155.39	-15.99	112.96	1.11	0.63	24.23	11.19	3.52
1200	-13.00	-153.96	17.93	-50.31	-22.58	-170.43	-15.25	93.90	1.12	0.62	24.28	11.04	3.53
1300	-12.36	-174.63	17.78	-70.71	-22.78	173.56	-14.59	74.08	1.13	0.60	24.04	10.95	3.54
1400	-11.65	165.17	17.57	-90.63	-23.26	159.17	-14.12	57.46	1.17	0.57	23.85	11.06	3.56
1500	-11.42	144.12	17.40	-110.68	-23.20	143.84	-13.55	40.53	1.17	0.56	23.83	10.71	3.57
1600	-10.98	121.99	17.26	-130.72	-23.52	128.47	-13.23	22.96	1.20	0.54	24.14	10.93	3.59
1700	-10.62	103.53	17.07	-150.47	-23.62	112.44	-13.21	5.39	1.21	0.53	24.51	10.62	3.50
1800	-10.29	82.36	17.02	-170.06	-23.68	97.74	-12.91	-13.43	1.21	0.52	24.31	10.99	3.50
1900	-10.00	62.03	16.94	169.90	-23.95	83.59	-12.55	-31.55	1.23	0.50	23.92	10.88	3.57
2000	-9.88	42.90	16.80	149.99	-24.03	67.39	-12.45	-51.94	1.24	0.49	23.69	10.81	3.56
2100	-9.76	23.78	16.74	130.26	-24.14	53.13	-12.68	-71.40	1.25	0.48	23.49	10.58	3.54
2200	-9.65	5.45	16.68	110.27	-24.29	37.55	-12.75	-92.44	1.27	0.46	23.24	10.05	3.49
2300	-9.68	-13.79	16.66	90.38	-24.35	22.63	-12.60	-114.69	1.26	0.45	23.20	10.16	3.51
2400	-9.81	-32.31	16.64	70.90	-24.62	6.46	-12.57	-136.83	1.29	0.44	22.94	10.00	3.55
2500	-10.59	-70.32	16.64	29.74	-24.49	-25.05	-11.84	174.01	1.27	0.42	22.61	10.31	3.56
2600	-12.55	-121.44	16.58	-22.76	-24.43	-67.16	-10.15	113.71	1.25	0.40	22.60	10.08	3.61
2700	-15.12	177.03	16.51	-76.60	-23.95	-110.09	-8.54	55.95	1.16	0.40	22.32	10.16	3.54
2800	-17.32	92.70	16.40	-133.53	-23.78	-156.98	-7.18	0.05	1.09	0.37	22.16	10.24	3.62
2900	-19.26	-6.23	16.07	168.92	-23.36	156.18	-6.40	-63.59	1.05	0.39	21.83	10.16	3.55
3000	-14.84	-87.63	14.41	107.75	-23.46	102.72	-6.27	-120.83	1.18	0.32	21.68	10.08	3.55
3100	-12.53	-159.12	12.37	50.98	-23.97	55.11	-6.03	-176.67	1.46	0.27	21.36	9.48	3.61
3200	-9.82	105.15	7.91	-48.54	-23.23	-34.62	-5.98	97.09	2.00	0.20	21.14	10.04	3.68
3300	-8.36	28.05	4.55	-138.29	-21.76	-117.00	-5.90	25.68	2.25	0.15	20.93	10.00	3.67
3400	-7.87	-45.85	2.25	132.40	-19.13	160.79	-6.70	-47.28	2.20	0.09	20.66	10.05	3.74
3500	-7.64	-122.77	0.84	42.23	-16.16	74.18	-7.32	-129.81	1.88	0.03	20.66	9.63	3.66
3600	-8.69	162.95	-0.20	-50.42	-12.25	-12.79	-7.48	150.42	1.46	0.10	20.54	9.42	3.74
3700	-11.63	75.56	-0.42	-144.58	-7.47	-107.09	-9.43	63.91	1.15	0.33	20.33	9.45	3.59
3800	-9.85	-104.59	-1.03	109.00	-4.12	135.59	-9.02	-105.62	1.00	0.57	20.23	8.97	3.64
4000	-4.75	134.38	-4.16	17.95	-5.15	31.06	-4.50	131.98	1.07	0.65	19.64	8.70	3.63

TYPE: MMIC Amplifier  
 MODEL: GALI-33 Reference Data: RDF-1079A  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 48mA, Vd = 4.11V @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	-30	108.8	19.99	173.87	-22.61	-6.87	-29.06	-30.85	1.04	0.74	30.88	16.64	3.48
100	-33.33	128.69	19.97	168.6	-22.16	-10.96	-31.62	0.44	1.03	0.78	30.7	16.35	3.67
200	-28.66	86.57	19.97	158.06	-22.24	-15.15	-30.83	-16.38	1.03	0.77	31.62	16.52	3.48
300	-25.74	56.04	19.87	136.5	-22.41	-31.45	-29.41	-70.23	1.04	0.75	31.01	16.44	3.6
400	-21.91	33.14	19.78	115.26	-22.22	-46.92	-28.29	-102.62	1.04	0.76	30.72	16.45	3.48
500	-20.11	11.24	19.62	93.85	-22.31	-62.21	-26.53	-138.92	1.04	0.74	30.23	16.42	3.64
600	-18.45	-8.71	19.48	72.93	-22.42	-77.54	-25.51	-164.78	1.05	0.72	30.10	16.30	3.53
700	-17.41	-32.11	19.32	51.94	-22.42	-92.63	-23.80	172.66	1.06	0.71	30.27	16.17	3.73
800	-16.28	-53.18	19.18	31.05	-22.67	-108.32	-22.23	151.08	1.07	0.68	30.81	15.95	3.57
900	-15.31	-76.69	18.97	10.31	-22.69	-123.59	-20.84	130.91	1.08	0.67	30.60	15.90	3.62
1000	-14.63	-97.73	18.83	-10.36	-22.79	-138.88	-19.58	114.53	1.09	0.65	29.80	15.80	3.48
1100	-13.93	-120.24	18.63	-30.66	-22.93	-153.98	-18.56	98.04	1.10	0.63	30.27	15.79	3.58
1200	-13.34	-142.84	18.42	-51.22	-23.20	-170.18	-17.63	81.02	1.13	0.60	30.18	15.70	3.58
1300	-12.84	-164.38	18.26	-71.39	-23.28	174.45	-16.71	64.17	1.14	0.59	29.75	15.56	3.60
1400	-12.06	-174.73	18.04	-91.48	-23.43	159.61	-16.14	49.10	1.16	0.57	29.26	15.58	3.60
1500	-11.87	152.49	17.85	-111.62	-23.60	144.22	-15.52	33.98	1.18	0.55	29.00	15.30	3.59
1600	-11.44	130.48	17.75	-131.68	-23.78	129.70	-15.16	17.52	1.19	0.54	29.34	15.35	3.66
1700	-11.04	111.11	17.49	-151.33	-23.94	114.08	-15.14	0.08	1.22	0.52	29.83	15.01	3.52
1800	-10.74	89.29	17.45	-170.96	-24.01	99.94	-14.78	-17.48	1.22	0.51	29.31	15.18	3.59
1900	-10.46	68.51	17.33	169.23	-24.38	84.88	-14.43	-34.82	1.25	0.49	28.57	15.02	3.59
2000	-10.29	49.77	17.20	149.25	-24.37	69.44	-14.32	-55.20	1.26	0.48	28.17	14.91	3.64
2100	-10.21	30.29	17.12	129.63	-24.40	54.61	-14.39	-74.54	1.26	0.47	27.74	14.72	3.60
2200	-10.11	11.95	17.07	109.82	-24.73	38.77	-14.57	-95.47	1.29	0.45	27.34	14.45	3.59
2300	-10.18	-7.09	17.01	89.88	-24.73	23.87	-14.32	-117.91	1.30	0.45	27.12	14.21	3.54
2400	-10.24	-25.15	16.99	70.35	-24.84	8.26	-14.30	-140.54	1.30	0.43	26.62	13.88	3.65
2500	-11.01	-62.59	16.94	29.52	-25.21	-23.91	-13.35	170.01	1.34	0.40	26.12	13.98	3.59
2600	-13.08	-111.73	16.88	-22.41	-24.97	-65.58	-11.23	109.99	1.31	0.40	25.71	13.53	3.71
2700	-16.01	-169.41	16.84	-76.04	-24.71	-108.01	-9.36	52.97	1.25	0.39	25.22	13.31	3.61
2800	-19.48	104.74	16.75	-132.76	-24.50	-153.14	-7.79	-1.92	1.17	0.37	24.86	13.23	3.70
2900	-22.98	-10.22	16.52	169.74	-23.82	160.51	-6.85	-65.74	1.11	0.41	24.50	13.02	3.63
3000	-16.19	-92.71	14.87	108.31	-24.18	105.44	-6.61	-122.25	1.26	0.32	24.23	12.81	3.66
3100	-13.08	-163.48	12.81	51.28	-24.56	58.73	-6.20	-177.72	1.53	0.28	23.90	12.06	3.65
3200	-10.01	103.27	8.36	-48.44	-23.62	-31.52	-6.09	96.47	2.02	0.21	23.57	12.41	3.73
3300	-8.58	26.98	5.00	-138.09	-21.98	-114.33	-6.05	25.55	2.25	0.16	23.27	12.18	3.75
3400	-8.04	-45.94	2.66	132.43	-19.10	162.25	-6.84	-47.07	2.13	0.08	22.97	12.07	3.79
3500	-7.82	-122.63	1.23	42.22	-16.17	75.69	-7.52	-129.57	1.84	0.03	22.96	11.64	3.72
3600	-8.79	163.82	0.13	-50.73	-12.31	-12.06	-7.53	151.70	1.43	0.11	22.84	11.34	3.81
3700	-11.57	77.37	-0.17	-144.67	-7.50	-106.63	-9.33	65.99	1.13	0.34	22.66	11.32	3.68
3800	-9.77	-102.96	-0.77	108.77	-4.10	136.08	-8.98	-103.74	0.97	0.59	22.66	10.70	3.69
4000	-4.72	134.63	-4.03	17.42	-5.13	31.11	-4.44	132.47	1.06	0.66	21.99	10.14	3.67