

## GALI-39 Performance Data

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

TYPE: MMIC Amplifier

MODEL: GALI-39 Reference Data: RDF-1232

S PARAMETERS are presented in dB/deg Format

TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 35mA, Vd = 3.61V @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	-34.83	172.75	23.37	173.18	-25.47	-3.95	-26.79	175.15	1.03	0.79	25.44	12.34	2.10
100	-34.38	177.28	23.39	167.15	-25.50	-6.94	-26.25	174.12	1.03	0.79	25.39	12.09	2.30
200	-33.11	175.40	23.29	155.11	-25.46	-13.35	-25.57	168.64	1.03	0.78	25.42	12.17	2.16
300	-31.75	171.71	23.17	142.96	-25.47	-19.90	-25.11	163.30	1.03	0.77	25.44	12.08	2.38
400	-31.39	165.55	23.03	131.07	-25.42	-26.54	-24.15	154.63	1.04	0.76	25.00	12.15	2.20
500	-29.97	159.35	22.86	119.39	-25.40	-33.21	-23.72	145.71	1.04	0.75	24.87	11.98	2.34
600	-29.35	151.02	22.69	107.91	-25.33	-40.07	-23.12	135.56	1.04	0.74	24.76	12.06	2.21
700	-28.81	141.73	22.51	96.44	-25.32	-46.79	-22.85	126.49	1.05	0.73	25.10	12.19	2.22
800	-28.51	131.40	22.31	85.20	-25.28	-53.64	-22.49	116.18	1.06	0.71	25.31	12.14	2.23
1000	-28.11	117.78	22.91	63.01	-25.19	-67.48	-22.07	96.71	1.07	0.69	25.34	11.98	2.24
1200	-28.00	104.83	21.51	41.19	-25.12	-81.33	-21.81	77.28	1.08	0.66	25.07	11.64	2.32
1400	-27.49	96.34	21.11	19.83	-25.02	-95.50	-21.80	59.77	1.10	0.64	24.75	11.89	2.38
1600	-27.18	91.14	20.70	-1.15	-24.94	-109.65	-22.13	42.99	1.12	0.62	24.96	11.59	2.43
1800	-26.21	83.45	20.29	-21.88	-24.87	-124.03	-22.55	28.24	1.14	0.59	25.45	11.52	2.35
2000	-25.06	76.78	19.89	-42.26	-24.77	-138.55	-23.11	14.48	1.15	0.57	25.50	11.68	2.32
2200	-24.17	67.16	19.52	-62.47	-24.71	-153.27	-23.94	0.11	1.18	0.55	25.44	11.94	2.39
2400	-23.04	57.94	19.12	-82.41	-24.64	-168.10	-25.04	-10.52	1.20	0.53	25.35	11.97	2.40
2600	-22.03	49.22	18.78	-102.09	-24.61	-177.11	-26.52	-19.29	1.22	0.51	25.24	11.59	2.36
2800	-20.61	38.68	18.46	-121.67	-24.56	162.18	-27.98	-22.50	1.24	0.49	25.30	11.63	2.41
3000	-19.32	24.38	18.16	-141.25	-24.48	146.64	-28.80	-23.22	1.26	0.48	25.48	11.64	2.43
3200	-18.24	13.26	17.88	-160.33	-24.48	131.38	-29.80	-13.51	1.28	0.46	25.44	11.47	2.44
3400	-17.32	-2.31	17.61	-179.81	-24.41	115.50	-29.02	-11.94	1.30	0.45	25.38	11.72	2.54
3600	-16.57	-16.57	17.37	161.03	-24.38	99.78	-27.52	-10.33	1.32	0.44	25.02	11.62	2.69
3800	-15.95	-30.16	17.13	142.03	-24.45	83.83	-26.07	-9.96	1.35	0.43	24.73	11.67	2.70
4000	-15.59	-45.26	16.91	122.96	-24.48	67.60	-24.69	-16.07	1.37	0.42	24.70	11.94	2.70
4200	-15.43	-60.74	16.71	103.89	-24.50	50.96	-23.83	-25.14	1.39	0.41	24.80	11.79	2.62
4400	-14.98	-78.80	16.56	84.58	-24.48	34.35	-23.08	-37.07	1.41	0.41	24.78	11.68	2.67
4600	-15.08	-96.83	16.42	65.45	-24.50	17.16	-22.74	-44.94	1.43	0.40	24.49	11.56	2.68
4800	-15.07	-114.48	16.29	46.48	-24.58	-0.39	-22.11	-55.99	1.45	0.40	24.15	11.63	2.81
5000	-15.08	-133.69	16.25	27.03	-24.62	-17.38	-21.88	-69.29	1.46	0.39	23.82	11.93	2.77
5200	-15.07	-153.97	16.19	7.57	-24.71	-35.30	-21.68	-80.26	1.48	0.39	23.81	11.69	2.64
5400	-15.22	-174.08	16.17	-12.02	-24.80	-53.20	-21.42	-92.81	1.50	0.38	23.57	11.41	2.66
5600	-15.81	165.42	16.13	-31.36	-24.78	-72.94	-21.06	-99.40	1.51	0.38	23.45	11.41	2.75
5800	-16.18	142.42	16.14	-51.45	-24.82	-91.87	-20.94	-111.18	1.51	0.38	23.03	10.72	2.84
6000	-16.25	118.82	16.19	-72.01	-24.89	-110.88	-20.98	-122.54	1.52	0.38	22.40	10.46	2.87
6200	-16.75	90.53	16.18	-92.88	-24.83	-130.13	-21.20	-131.56	1.51	0.38	22.22	10.55	2.92
6400	-17.01	63.04	16.22	-114.37	-24.93	-150.15	-21.15	-144.27	1.52	0.38	21.97	10.34	2.94
6600	-17.10	29.03	16.14	-136.19	-24.95	-169.57	-21.70	-148.41	1.54	0.37	21.69	10.41	2.95
6800	-18.41	-6.72	16.28	-157.95	-24.42	-168.17	-18.94	-160.12	1.45	0.41	21.31	10.23	3.02
7000	-16.76	-44.08	16.07	179.37	-24.63	148.82	-18.74	-163.53	1.50	0.39	20.98	10.09	3.10

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 28mA, Vd = 3.59V @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	-26.23	-5.22	22.68	173.26	-24.88	-3.92	-33.35	-9.09	1.03	0.78	22.13	9.02	2.11
100	-26.64	-15.39	22.69	167.36	-24.85	-7.06	-32.85	-23.46	1.03	0.78	22.11	8.97	2.23
200	-26.34	-34.46	22.61	155.46	-24.83	-13.64	-33.97	-53.14	1.03	0.77	22.11	9.19	2.19
300	-27.36	-52.13	22.49	143.45	-24.84	-20.31	-32.65	-76.59	1.04	0.76	22.12	8.82	2.31
400	-27.18	-67.93	22.36	131.64	-24.78	-27.14	-33.30	-113.56	1.04	0.76	21.70	8.90	2.26
500	-27.71	-88.76	22.24	120.08	-24.76	-34.02	-32.23	-126.52	1.04	0.75	21.61	8.98	2.29
600	-27.01	-101.40	22.08	108.63	-24.70	-40.97	-31.91	-157.75	1.04	0.74	21.55	8.89	2.27
700	-27.54	-119.79	21.88	97.31	-24.68	-47.92	-31.10	-164.03	1.05	0.72	21.91	9.11	2.16
800	-27.59	-133.72	21.72	86.05	-24.66	-54.97	-30.66	176.03	1.05	0.71	22.16	9.09	2.26
1000	-26.74	-158.96	21.38	63.89	-24.59	-69.07	-29.58	147.76	1.07	0.69	22.22	8.89	2.22
1200	-25.78	-178.49	21.00	42.10	-24.53	-83.23	-28.62	118.86	1.08	0.66	21.94	8.69	2.31
1400	-24.43	-157.35	20.62	20.78	-24.46	-97.69	-27.96	98.93	1.09	0.64	21.69	8.78	2.36
1600	-23.26	139.69	20.20	-0.19	-24.42	-112.07	-27.64	80.87	1.11	0.61	21.92	8.67	2.39
1800	-22.11	121.26	19.83	-20.97	-24.39	-126.62	-27.24	65.51	1.13	0.59	22.60	8.58	2.30
2000	-20.89	104.85	19.46	-41.49	-24.32	-141.31	-27.07	54.03	1.15	0.57	22.69	8.87	2.27
2200	-20.13	88.60	19.09	-61.72	-24.28	-156.25	-27.38	43.91	1.17	0.55	22.85	8.97	2.35
2400	-19.19	73.06	18.71	-81.75	-24.25	-171.26	-27.25	39.14	1.19	0.52	22.97	8.98	2.33
2600	-18.48	58.99	18.38	-101.51	-24.25	173.71	-27.05	36.49	1.22	0.50	23.03	9.16	2.32
2800	-17.46	44.35	18.07	-121.11	-24.21	158.57	-26.15	33.32	1.24	0.49	23.28	8.85	2.37
3000	-16.56	27.77	17.79	-140.76	-24.16	142.95	-25.25	24.99	1.25	0.47	23.57	8.79	2.39
3200	-15.66	14.06	17.49	-159.89	-24.19	127.58	-24.58	20.27	1.28	0.46	23.55	8.69	2.42
3400	-15.03	-2.55	17.23	-179.42	-24.15	111.61	-23.63	10.16	1.29	0.45	23.52	8.81	2.53
3600	-14.44	-18.21	17.00	161.30	-24.16	95.89	-22.53	1.02	1.31	0.44	23.29	8.73	2.66
3800	-14.01	-33.08	16.76	142.26	-24.25	79.82	-21.63	-6.87	1.34	0.42	23.18	8.60	2.71
4000	-13.71	-49.17	16.56	123.09	-24.30	63.39	-20.90	-17.18	1.37	0.42	23.28	9.02	2.69
4200	-13.66	-65.40	16.38	103.99	-24.34	46.67	-20.28	-29.00	1.39	0.41	23.42	9.13	2.61
4400	-13.30	-83.76	16.23	84.68	-24.34	30.11	-20.03	-41.78	1.41	0.40	23.28	9.06	2.66
4600	-13.42	-102.11	16.09	65.42	-24.37	12.75	-19.86	-52.36	1.43	0.40	23.02	8.95	2.70
4800	-13.41	-120.56	15.97	46.39	-24.46	-4.76	-19.63	-63.86	1.46	0.39	22.78	9.14	2.77
5000	-13.48	-139.82	15.92	26.81	-24.52	-21.96	-19.49	-78.01	1.47	0.39	22.61	9.61	2.70
5200	-13.50	-160.18	15.87	7.32	-24.62	-39.84	-19.55	-89.56	1.49	0.38	22.85	9.26	2.61
5400	-13.56	-179.33	15.83	-12.41	-24.71	-58.18	-19.38	-102.94	1.51	0.38	22.81	9.22	2.62
5600	-14.07	158.37	15.81	-31.81	-24.70	-77.80	-19.36	-111.09	1.52	0.38	22.88	8.71	2.70
5800	-14.35	135.27	15.82	-51.96	-24.74	-96.63	-19.46	-123.08	1.53	0.38	22.59	8.86	2.77
6000	-14.28	111.50	15.85	-72.64	-24.80	-116.03	-19.53	-135.95	1.53	0.38	22.05	8.80	2.80
6200	-14.65	84.33	15.86	-93.56	-24.74	-135.12	-19.99	-145.87	1.53	0.38	21.99	8.99	2.85
6400	-14.72	57.37	15.90	-115.09	-24.81	-155.33	-20.05	-159.32	1.53	0.38	21.75	9.26	2.86
6600	-14.84	25.94	15.80	-136.98	-24.83	-174.83	-20.95	-165.59	1.55	0.37	21.46	9.33	2.86
6800	-15.66	-6.92	15.91	-158.88	-24.29	162.95	-18.66	-174.90	1.47	0.40	21.19	9.39	2.94
7000	-14.59	-41.27	15.70	178.36	-24.50	143.68	-18.95	-178.34	1.51	0.38	20.84	9.17	3.03

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 42mA, Vd = 3.63V @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	-24.23	172.54	23.78	173.14	-25.91	-4.02	-20.89	174.51	1.03	0.79	28.15	14.41	2.12
100	-24.65	170.15	23.79	167.07	-25.91	-6.87	-20.82	171.33	1.03	0.79	28.11	14.24	2.34
200	-24.29	162.97	23.67	154.92	-25.9	-13.21	-20.6	163.56	1.03	0.78	28.14	14.2	2.13
300	-24.32	155.07	23.55	142.72	-25.87	-19.53	-20.25	155.75	1.03	0.77	28.1	14.14	2.43
400	-23.70	145.54	23.40	130.73	-25.85	-26.04	-19.93	146.92	1.04	0.76	27.59	14.25	2.20
500	-23.89	138.52	23.22	119.02	-25.77	-32.67	-19.64	137.44	1.04	0.75	27.29	14.02	2.41
600	-23.38	128.04	23.05	107.45	-25.75	-39.35	-19.47	127.86	1.04	0.74	27.08	14.09	2.24
700	-23.60	119.99	22.85	95.96	-25.70	-46.03	-19.14	118.16	1.05	0.73	27.26	14.05	2.26
800	-23.60	110.18	22.64	84.73	-25.66	-52.77	-19.00	108.22	1.06	0.71	27.34	14.11	2.23
1000	-23.80	93.03	22.23	62.49	-25.55	-66.40	-18.90	88.96	1.07	0.69	27.23	13.98	2.24
1200	-24.15	76.77	21.81	40.70	-25.44	-80.13	-18.95	70.13	1.08	0.67	26.94	13.73	2.33
1400	-24.79	65.28	21.39	19.40	-25.35	-94.06	-19.21	52.68	1.10	0.64	26.54	13.76	2.42
1600	-25.44	54.56	20.97	-1.58	-25.26	-107.98	-19.35	34.76	1.12	0.62	26.64	13.64	2.45
1800	-25.91	47.32	20.55	-22.23	-25.17	-122.23	-19.81	18.81	1.14	0.59	26.68	13.62	2.39
2000	-26.19	44.81	20.15	-42.58	-25.05	-136.64	-20.43	3.81	1.16	0.57	26.67	13.80	2.37
2200	-26.18	40.65	19.75	-62.73	-24.97	-151.23	-21.32	-11.69	1.18	0.55	26.54	13.94	2.44
2400	-25.51	38.52	19.37	-82.64	-24.88	-165.93	-22.41	-24.81	1.20	0.53	26.24	13.88	2.43
2600	-24.73	36.91	19.01	-102.22	-24.83	179.34	-23.88	-37.44	1.22	0.51	25.95	13.89	2.41
2800	-23.17	31.55	18.68	-121.72	-24.75	164.39	-25.58	-46.78	1.24	0.50	25.84	13.67	2.44
3000	-21.60	20.45	18.39	-141.27	-24.65	148.91	-27.16	-53.51	1.26	0.48	25.83	13.55	2.47
3200	-20.34	12.07	18.10	-160.28	-24.62	133.82	-30.17	-50.87	1.28	0.47	25.71	13.71	2.49
3400	-19.26	-2.24	17.82	-179.70	-24.56	118.09	-31.36	-45.90	1.30	0.46	25.60	13.65	2.57
3600	-18.25	-15.26	17.58	161.12	-24.51	102.36	-31.41	-33.18	1.32	0.45	25.15	13.62	2.70
3800	-17.50	-27.83	17.33	142.17	-24.55	86.48	-30.12	-18.77	1.34	0.43	24.85	13.53	2.72
4000	-17.07	-41.92	17.12	123.16	-24.56	70.10	-27.91	-17.76	1.37	0.43	24.72	13.61	2.73
4200	-16.70	-56.91	16.91	104.18	-24.57	53.50	-26.71	-23.90	1.39	0.42	24.77	13.62	2.64
4400	-16.23	-74.53	16.76	84.94	-24.54	37.09	-25.62	-34.65	1.40	0.41	24.63	13.49	2.66
4600	-16.24	-92.48	16.61	65.87	-24.55	19.74	-25.00	-40.17	1.42	0.41	24.38	13.28	2.73
4800	-16.29	-109.49	16.48	46.93	-24.62	2.64	-24.00	-50.93	1.45	0.40	23.97	13.26	2.82
5000	-16.23	-128.64	16.44	27.57	-24.66	-14.71	-23.72	-63.65	1.45	0.40	23.60	13.17	2.80
5200	-16.22	-148.66	16.39	8.19	-24.73	-32.36	-23.42	-73.64	1.47	0.39	23.55	12.78	2.71
5400	-16.46	-168.01	16.36	-11.38	-24.82	-50.30	-22.86	-86.78	1.49	0.39	23.30	12.55	2.71
5600	-17.08	171.67	16.32	-30.64	-24.80	-70.07	-22.38	-91.66	1.49	0.39	23.04	12.14	2.83
5800	-17.57	149.00	16.34	-50.67	-24.85	-88.74	-22.19	-102.59	1.50	0.39	22.64	11.94	2.90
6000	-17.77	125.90	16.38	-71.13	-24.91	-107.77	-22.04	-114.16	1.50	0.38	21.98	11.49	2.93
6200	-18.46	96.91	16.39	-91.94	-24.85	-126.74	-22.15	-121.99	1.50	0.39	21.83	11.21	2.99
6400	-18.87	68.96	16.44	-113.33	-24.96	-147.03	-22.01	-134.33	1.50	0.38	21.61	11.05	3.02
6600	-19.02	31.97	16.36	-135.10	-24.99	-166.04	-22.28	-136.38	1.52	0.38	21.29	11.05	3.04
6800	-21.04	-6.93	16.52	-156.80	-24.47	171.29	-19.23	-151.09	1.43	0.41	20.95	10.86	3.12
7000	-18.56	-46.99	16.32	-179.45	-24.68	152.22	-18.70	-153.22	1.48	0.40	20.57	10.52	3.20

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 35mA, Vd = 3.80V @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	-29.87	172.22	23.66	173.1	-25.69	-3.91	-24.24	175.3	1.03	0.79	25.83	12.27	1.67
100	-31.44	173.15	23.66	166.99	-25.71	-7.09	-24.67	173.98	1.03	0.79	25.73	11.86	1.92
200	-31.83	172.69	23.56	154.69	-25.67	-13.9	-25.22	165.24	1.03	0.79	25.75	11.95	1.72
300	-29.33	161.92	23.46	142.28	-25.65	-20.66	-23.15	156.35	1.03	0.78	25.9	11.72	1.97
400	-26.54	151.55	23.30	130.18	-25.62	-27.55	-21.93	147.66	1.03	0.77	25.55	12.21	1.82
500	-26.15	147.74	23.16	118.24	-25.57	-34.51	-21.15	136.85	1.04	0.76	25.45	11.91	1.92
600	-25.22	136.75	22.98	106.48	-25.53	-41.56	-21.12	127.39	1.04	0.75	25.39	12.17	1.81
700	-25.70	130.32	22.81	94.79	-25.47	-48.66	-20.59	118.09	1.04	0.74	25.72	12.09	1.76
800	-25.83	120.57	22.63	83.30	-25.43	-55.79	-20.68	107.65	1.05	0.73	25.95	12.09	1.79
1000	-26.02	103.43	22.23	60.49	-25.34	-70.15	-20.53	86.75	1.06	0.70	26.03	11.84	1.76
1200	-25.68	84.32	21.83	38.20	-25.25	-84.58	-20.22	67.26	1.07	0.68	25.82	11.59	1.83
1400	-25.47	69.73	21.42	16.37	-25.15	-99.33	-20.18	50.37	1.09	0.66	25.53	11.82	1.89
1600	-25.83	60.74	21.04	-5.20	-25.08	-113.95	-20.65	31.20	1.11	0.63	25.76	11.58	1.92
1800	-25.80	50.85	20.63	-26.46	-25.00	-128.89	-21.21	13.78	1.12	0.61	26.27	11.31	1.85
2000	-25.29	47.63	20.25	-47.41	-24.88	-144.02	-21.87	-4.50	1.14	0.59	26.39	11.53	1.81
2200	-25.09	36.24	19.88	-68.13	-24.81	-159.32	-22.34	-20.00	1.16	0.57	26.30	11.88	1.88
2400	-24.40	30.62	19.48	-88.63	-24.74	-174.80	-23.43	-35.89	1.18	0.55	26.26	11.98	1.84
2600	-23.62	26.52	19.15	-108.77	-24.68	169.93	-25.03	-47.45	1.20	0.53	26.14	11.77	1.82
2800	-22.27	20.02	18.83	-128.85	-24.59	154.23	-26.97	-55.08	1.22	0.51	26.27	11.56	1.87
3000	-21.09	8.48	18.55	-148.94	-24.52	138.20	-28.48	-57.97	1.23	0.50	26.47	11.54	1.87
3200	-20.07	0.68	18.27	-168.61	-24.49	122.57	-31.50	-40.34	1.25	0.49	26.53	11.72	1.92
3400	-19.13	-15.07	18.01	171.49	-24.42	106.05	-31.74	-36.63	1.27	0.48	26.51	11.88	1.95
3600	-18.11	-29.10	17.78	151.66	-24.39	89.74	-30.34	-24.50	1.28	0.47	26.13	11.48	2.10
3800	-17.32	-42.03	17.54	132.04	-24.42	73.13	-28.47	-19.39	1.31	0.45	25.87	11.68	2.11
4000	-16.90	-56.01	17.34	112.41	-24.41	56.40	-26.27	-27.00	1.33	0.45	25.81	11.84	2.12
4200	-16.62	-71.87	17.16	92.82	-24.41	39.08	-25.42	-36.77	1.34	0.44	26.02	12.01	2.05
4400	-16.40	-89.92	17.02	72.99	-24.36	22.02	-24.57	-52.56	1.35	0.43	26.01	11.85	2.03
4600	-16.45	-108.02	16.86	53.26	-24.38	4.03	-24.22	-61.34	1.37	0.43	25.75	11.64	2.06
4800	-16.48	-125.12	16.75	33.73	-24.44	-13.80	-22.86	-73.44	1.39	0.42	25.37	11.75	2.11
5000	-16.19	-145.89	16.70	13.70	-24.47	-31.50	-22.61	-85.12	1.40	0.42	25.03	12.25	2.12
5200	-16.31	-165.12	16.62	-6.04	-24.52	-50.20	-22.05	-96.43	1.42	0.41	25.05	12.08	2.05
5400	-16.45	175.39	16.60	-26.09	-24.63	-68.87	-21.13	-107.20	1.43	0.41	24.97	11.95	2.06
5600	-16.56	152.74	16.54	-45.99	-24.56	-88.73	-20.56	-113.30	1.43	0.41	24.72	11.91	2.09
5800	-16.97	132.17	16.62	-66.23	-24.69	-108.09	-19.95	-124.62	1.44	0.41	24.37	11.46	2.15
6000	-17.64	109.87	16.67	-86.95	-24.71	-128.22	-20.09	-135.81	1.44	0.41	23.76	11.39	2.17
6200	-18.54	81.31	16.73	-108.12	-24.65	-147.58	-20.33	-147.45	1.43	0.41	23.59	11.26	2.28
6400	-19.25	50.67	16.82	-129.91	-24.71	-168.38	-20.14	-159.27	1.43	0.41	23.39	11.31	2.29
6600	-19.22	13.71	16.82	-152.35	-24.79	171.91	-21.00	-165.79	1.44	0.41	23.00	11.42	2.28
6800	-20.63	-29.62	16.97	-174.38	-24.33	149.53	-18.84	-177.03	1.37	0.44	22.76	11.27	2.29
7000	-18.37	-65.40	16.85	161.97	-24.53	128.72	-19.01	175.67	1.40	0.43	22.08	11.21	2.39

TYPE: MMIC Amplifier

MODEL: GALI-39 Reference Data: RDF-1232

S PARAMETERS are presented in dB/deg Format

TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 28mA, Vd = 3.77V @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	-32.05	-3.52	23.06	173.12	-25.11	-4.04	-55.56	-107.54	1.03	0.79	22.36	9.09	1.68
100	-29.26	-16.03	23.01	167.16	-25.12	-7.27	-41.07	-53.39	1.03	0.78	22.28	8.62	1.86
200	-29.33	-36.71	22.95	155	-25.08	-14.16	-37.76	-62.37	1.03	0.78	22.26	8.95	1.77
300	-30.42	-58.85	22.85	142.75	-25.08	-20.99	-36.59	-152.39	1.03	0.77	22.37	8.87	1.89
400	-33.76	-100.59	22.71	130.70	-25.00	-28.17	-32.56	-173.38	1.03	0.77	22.06	8.79	1.85
500	-31.45	-120.83	22.60	118.83	-25.00	-35.21	-29.89	163.84	1.04	0.76	22.00	9.10	1.87
600	-31.08	-145.77	22.42	107.18	-24.95	-42.44	-29.49	155.55	1.04	0.75	21.98	9.02	1.83
700	-29.92	-148.80	22.26	95.54	-24.90	-49.69	-27.78	142.69	1.04	0.74	22.35	9.17	1.73
800	-29.53	-161.06	22.10	84.07	-24.88	-56.99	-27.74	132.22	1.05	0.73	22.59	8.74	1.82
1000	-28.62	177.94	21.74	61.39	-24.81	-71.58	-26.92	108.16	1.06	0.70	22.67	8.58	1.77
1200	-28.10	150.88	21.38	39.06	-24.73	-86.30	-25.84	86.74	1.07	0.68	22.41	8.51	1.81
1400	-26.87	128.14	20.99	17.20	-24.67	-101.26	-25.24	70.63	1.09	0.65	22.23	8.71	1.86
1600	-25.45	114.38	20.61	-4.35	-24.58	-116.34	-25.59	51.86	1.10	0.63	22.47	8.65	1.91
1800	-24.40	97.49	20.24	-25.66	-24.54	-131.47	-25.82	34.80	1.12	0.61	23.13	8.75	1.83
2000	-22.79	84.37	19.88	-46.67	-24.46	-146.66	-26.52	18.19	1.13	0.59	23.29	8.71	1.79
2200	-22.24	67.86	19.51	-67.46	-24.42	-162.16	-26.75	5.52	1.16	0.57	23.24	9.11	1.83
2400	-21.10	54.53	19.13	-88.01	-24.39	-177.81	-27.82	-5.51	1.18	0.54	23.39	8.98	1.81
2600	-20.13	42.94	18.80	-108.24	-24.35	166.75	-28.89	-5.72	1.20	0.52	23.48	8.81	1.78
2800	-18.92	30.20	18.49	-128.38	-24.30	151.07	-29.07	-1.86	1.21	0.51	23.75	8.99	1.83
3000	-18.03	14.89	18.21	-148.51	-24.25	134.91	-28.14	-3.80	1.23	0.49	24.07	8.97	1.84
3200	-17.25	2.86	17.94	-168.18	-24.25	119.08	-26.53	5.24	1.25	0.48	24.18	8.77	1.89
3400	-16.54	-14.23	17.68	171.74	-24.21	102.45	-25.70	-4.07	1.27	0.47	24.17	8.80	1.95
3600	-15.79	-29.67	17.46	151.94	-24.20	86.16	-24.37	-10.34	1.28	0.46	23.91	8.66	2.07
3800	-15.23	-44.37	17.22	132.30	-24.26	69.42	-23.28	-17.27	1.31	0.45	23.73	8.76	2.09
4000	-14.97	-59.69	17.03	112.64	-24.27	52.87	-22.12	-28.99	1.33	0.44	23.87	8.96	2.10
4200	-14.76	-76.50	16.87	92.96	-24.29	35.47	-21.73	-41.20	1.35	0.43	24.17	9.13	2.03
4400	-14.58	-94.76	16.73	73.03	-24.26	18.17	-21.27	-57.10	1.36	0.43	24.06	9.10	2.04
4600	-14.64	-113.49	16.58	53.29	-24.29	0.29	-21.22	-68.09	1.38	0.42	23.80	8.77	2.03
4800	-14.72	-131.36	16.47	33.66	-24.36	-17.81	-20.35	-80.83	1.40	0.42	23.39	9.09	2.10
5000	-14.47	-152.19	16.41	13.58	-24.42	-35.39	-20.30	-93.29	1.41	0.41	23.30	9.79	2.10
5200	-14.61	-171.62	16.33	-6.25	-24.46	-54.49	-20.01	-105.53	1.43	0.41	23.56	9.66	2.01
5400	-14.75	168.18	16.31	-26.32	-24.59	-72.95	-19.34	-117.06	1.45	0.40	23.71	9.62	1.99
5600	-14.76	145.57	16.25	-46.30	-24.53	-92.79	-19.22	-123.84	1.45	0.40	23.79	8.95	2.02
5800	-15.14	124.41	16.34	-66.63	-24.64	-112.52	-18.87	-135.20	1.46	0.40	23.58	9.01	2.08
6000	-15.61	101.60	16.39	-87.41	-24.67	-132.44	-19.09	-147.87	1.46	0.40	23.10	9.23	2.10
6200	-16.20	73.58	16.45	-108.67	-24.61	-151.96	-19.50	-159.94	1.45	0.41	23.00	9.43	2.21
6400	-16.56	44.19	16.54	-130.56	-24.65	-172.59	-19.46	-171.83	1.44	0.41	22.84	9.77	2.22
6600	-16.47	10.62	16.54	-153.06	-24.71	167.30	-20.57	179.10	1.45	0.40	22.52	9.91	2.20
6800	-17.32	-26.62	16.67	-175.21	-24.25	145.38	-18.74	169.85	1.38	0.43	22.27	9.96	2.23
7000	-15.89	-60.46	16.53	161.12	-24.43	124.24	-19.21	162.48	1.41	0.42	21.70	9.86	2.33

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 42mA, Vd = 3.82V @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	-23.21	172.89	24.01	173.1	-26.06	-3.85	-19.91	174.74	1.03	0.8	28.66	14.46	1.71
100	-23.79	169.46	24.02	166.91	-26.09	-6.98	-20.15	171.57	1.03	0.79	28.58	14.43	1.96
200	-24.44	162.69	23.92	154.48	-26.05	-13.67	-20.57	161.63	1.03	0.79	28.64	14.24	1.73
300	-23.09	152.04	23.81	142.01	-26.03	-20.44	-19.34	152.31	1.03	0.78	28.76	14.27	2.01
400	-21.81	142.38	23.64	129.85	-25.99	-27.13	-18.61	143.21	1.03	0.77	28.34	14.37	1.80
500	-21.72	135.66	23.49	117.88	-25.95	-33.99	-18.17	132.67	1.04	0.76	28.10	14.14	1.95
600	-21.40	125.92	23.29	106.12	-25.91	-40.92	-18.05	122.65	1.04	0.75	27.94	14.34	1.79
700	-21.59	116.33	23.12	94.40	-25.84	-47.88	-17.88	113.46	1.04	0.74	28.17	14.38	1.80
800	-21.90	106.33	22.93	82.89	-25.79	-54.96	-18.00	102.95	1.05	0.73	28.28	14.14	1.80
1000	-22.28	87.02	22.52	60.07	-25.68	-69.13	-17.98	82.19	1.06	0.70	28.25	13.99	1.78
1200	-22.37	67.95	22.11	37.78	-25.58	-83.42	-17.90	62.76	1.07	0.68	28.03	13.87	1.84
1400	-22.54	51.47	21.70	15.94	-25.46	-98.01	-17.96	45.42	1.09	0.66	27.68	13.87	1.91
1600	-23.29	38.47	21.27	-5.55	-25.36	-112.52	-18.47	26.28	1.11	0.63	27.79	13.80	1.97
1800	-23.97	26.46	20.86	-26.75	-25.26	-127.33	-19.01	8.31	1.12	0.61	27.93	13.64	1.89
2000	-24.63	22.08	20.47	-47.63	-25.12	-142.35	-19.59	-10.24	1.14	0.59	28.02	13.97	1.87
2200	-25.10	10.31	20.09	-68.32	-25.04	-157.54	-20.10	-26.41	1.16	0.57	27.91	14.14	1.91
2400	-25.40	5.91	19.69	-88.79	-24.95	-172.92	-21.10	-43.10	1.18	0.55	27.63	14.01	1.88
2600	-25.75	5.71	19.36	-108.91	-24.87	171.83	-22.54	-57.08	1.20	0.53	27.33	13.86	1.83
2800	-25.01	5.30	19.05	-128.94	-24.75	156.27	-24.33	-68.77	1.22	0.52	27.29	13.82	1.90
3000	-23.72	-1.11	18.75	-148.95	-24.67	140.24	-25.91	-77.57	1.23	0.50	27.36	13.71	1.90
3200	-22.50	-3.06	18.47	-168.56	-24.62	124.62	-29.97	-78.04	1.25	0.49	27.29	13.74	1.93
3400	-21.36	-16.60	18.20	171.47	-24.54	108.13	-32.12	-80.99	1.27	0.48	27.14	13.79	1.97
3600	-20.00	-28.74	17.97	151.75	-24.49	91.83	-34.48	-58.52	1.28	0.47	26.77	13.73	2.10
3800	-19.07	-40.15	17.72	132.19	-24.51	75.23	-33.62	-30.85	1.31	0.46	26.50	13.56	2.12
4000	-18.45	-53.03	17.53	112.59	-24.48	58.61	-30.07	-29.55	1.32	0.45	26.26	13.83	2.14
4200	-18.12	-67.93	17.35	93.02	-24.47	41.36	-28.45	-35.82	1.34	0.44	26.38	13.82	2.06
4400	-17.73	-85.82	17.19	73.24	-24.42	24.24	-27.29	-51.64	1.35	0.44	26.36	13.65	2.07
4600	-17.82	-103.24	17.06	53.63	-24.43	6.29	-26.63	-58.23	1.37	0.43	26.17	13.58	2.09
4800	-17.77	-119.90	16.92	34.11	-24.46	-11.48	-24.88	-69.79	1.38	0.43	25.81	13.75	2.16
5000	-17.56	-140.01	16.89	14.18	-24.49	-29.10	-24.41	-81.04	1.39	0.42	25.41	13.83	2.15
5200	-17.65	-158.85	16.81	-5.50	-24.52	-47.81	-23.69	-91.38	1.40	0.42	25.34	13.70	2.09
5400	-17.79	-177.94	16.79	-25.50	-24.64	-66.40	-22.47	-102.03	1.42	0.41	25.11	13.37	2.12
5600	-18.01	159.79	16.73	-45.31	-24.56	-86.18	-21.69	-107.05	1.42	0.42	24.79	12.97	2.16
5800	-18.48	140.08	16.80	-65.51	-24.69	-105.50	-20.88	-118.18	1.42	0.41	24.36	12.92	2.19
6000	-19.27	118.71	16.86	-86.15	-24.71	-125.60	-20.96	-128.61	1.42	0.41	23.72	12.47	2.26
6200	-20.42	89.50	16.91	-107.27	-24.66	-144.84	-21.15	-139.04	1.41	0.42	23.46	12.35	2.35
6400	-21.67	58.53	17.02	-128.96	-24.72	-165.65	-20.89	-150.42	1.41	0.42	23.27	12.20	2.35
6600	-21.80	16.94	17.03	-151.27	-24.80	174.73	-21.55	-155.12	1.42	0.42	22.91	12.11	2.34
6800	-23.93	-34.61	17.19	-173.21	-24.33	152.26	-19.13	-167.75	1.35	0.45	22.62	11.92	2.34
7000	-20.69	-72.01	17.10	163.24	-24.56	131.59	-19.08	-174.34	1.38	0.43	21.94	11.70	2.45

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 35mA, Vd = 3.46V @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	-49.73	42.76	23.1	173.29	-25.23	-3.85	-32.29	174.21	1.03	0.78	25.54	12.1	2.47
100	-45.45	-176.75	23.1	167.32	-25.25	-6.75	-30.34	174.92	1.03	0.78	25.58	12.11	2.68
200	-36.56	-172.84	22.98	155.44	-25.22	-13.02	-27.6	173.66	1.03	0.77	25.66	12.08	2.47
300	-35.54	-165.07	22.84	143.61	-25.22	-19.28	-27.08	172.52	1.04	0.76	25.6	12.18	2.73
400	-36.12	-153.98	22.71	131.92	-25.16	-25.66	-27.52	169.64	1.04	0.75	25.02	11.98	2.63
500	-34.80	-151.10	22.55	120.49	-25.16	-32.04	-27.03	160.61	1.04	0.74	24.80	11.91	2.75
600	-33.85	-164.53	22.38	109.16	-25.10	-38.63	-26.66	151.91	1.05	0.73	24.63	12.27	2.65
700	-33.20	-170.11	22.18	98.03	-25.06	-45.21	-25.96	142.65	1.05	0.72	24.91	12.09	2.61
800	-33.00	-177.47	21.99	86.99	-25.03	-51.84	-25.60	132.61	1.06	0.70	25.05	11.99	2.62
1000	-31.75	172.26	21.60	65.22	-24.97	-65.13	-25.31	113.22	1.07	0.68	25.02	11.67	2.64
1200	-30.22	160.53	21.20	43.90	-24.90	-78.51	-25.10	93.75	1.09	0.65	24.75	11.60	2.72
1400	-28.21	145.40	20.79	22.96	-24.81	-92.18	-24.97	75.82	1.10	0.63	24.41	11.67	2.80
1600	-26.77	131.84	20.36	2.41	-24.75	-105.84	-24.98	57.88	1.13	0.60	24.65	11.25	2.87
1800	-24.95	117.62	19.96	-17.75	-24.68	-119.72	-24.86	43.13	1.14	0.58	25.03	11.27	2.76
2000	-23.22	104.79	19.55	-37.77	-24.61	-133.70	-24.93	31.01	1.16	0.56	25.03	11.60	2.74
2200	-22.13	91.59	19.17	-57.42	-24.57	-147.75	-25.68	21.55	1.19	0.53	24.96	11.88	2.86
2400	-20.75	78.21	18.77	-76.90	-24.50	-162.14	-26.21	14.96	1.21	0.51	24.79	11.82	2.86
2600	-19.74	66.27	18.41	-96.13	-24.49	-176.49	-27.18	12.27	1.24	0.49	24.60	11.77	2.85
2800	-18.50	53.06	18.09	-115.22	-24.45	-169.04	-27.55	13.65	1.26	0.48	24.61	11.40	2.87
3000	-17.36	38.07	17.78	-134.34	-24.39	154.02	-27.26	13.98	1.28	0.46	24.71	11.48	2.91
3200	-16.35	25.63	17.49	-152.94	-24.42	139.52	-26.40	19.96	1.30	0.45	24.51	11.51	2.95
3400	-15.55	10.20	17.21	-171.92	-24.37	124.05	-25.24	16.41	1.32	0.44	24.38	11.65	3.06
3600	-14.85	-4.20	16.96	-169.37	-24.37	108.86	-23.88	11.88	1.34	0.43	24.01	11.40	3.24
3800	-14.28	-19.05	16.71	-150.76	-24.43	93.45	-22.76	6.36	1.37	0.41	23.67	11.40	3.25
4000	-13.90	-34.42	16.50	-132.13	-24.46	77.97	-21.76	-2.14	1.40	0.41	23.68	11.55	3.24
4200	-13.73	-50.30	16.30	-113.62	-24.52	61.97	-21.20	-11.40	1.43	0.40	23.68	11.76	3.14
4400	-13.46	-69.00	16.15	-94.74	-24.48	45.95	-21.06	-23.72	1.44	0.39	23.43	11.33	3.20
4600	-13.67	-87.43	15.98	-76.04	-24.53	29.11	-21.24	-31.67	1.47	0.39	23.18	11.25	3.31
4800	-13.72	-106.38	15.85	-57.37	-24.57	12.21	-21.38	-44.14	1.49	0.38	22.83	11.36	3.41
5000	-13.75	-126.68	15.78	-38.16	-24.60	-4.11	-21.74	-58.38	1.51	0.38	22.50	11.33	3.34
5200	-13.87	-147.20	15.69	-19.17	-24.67	-21.72	-22.23	-69.26	1.53	0.37	22.47	10.94	3.20
5400	-14.10	-166.80	15.65	0.09	-24.80	-39.61	-22.02	-81.05	1.56	0.36	22.15	10.69	3.24
5600	-14.57	171.67	15.58	-18.98	-24.76	-58.65	-22.12	-87.90	1.57	0.36	21.90	10.27	3.35
5800	-14.65	149.93	15.57	-38.63	-24.87	-77.30	-21.58	-101.72	1.58	0.36	21.48	10.12	3.46
6000	-14.78	127.16	15.59	-58.70	-24.89	-96.08	-21.17	-111.69	1.59	0.36	21.01	9.86	3.46
6200	-14.97	100.76	15.55	-79.09	-24.83	-114.51	-21.37	-120.44	1.59	0.36	20.78	9.55	3.51
6400	-15.30	75.54	15.55	-100.22	-24.94	-134.05	-21.14	-134.82	1.60	0.35	20.59	9.44	3.52
6600	-15.34	43.75	15.42	-121.49	-24.91	-152.90	-21.26	-138.71	1.62	0.35	20.24	9.64	3.56
6800	-16.20	11.73	15.46	-143.07	-24.49	-174.08	-18.92	-148.72	1.56	0.37	20.00	9.45	3.65
7000	-15.49	-22.44	15.21	-165.41	-24.66	166.02	-18.79	-153.84	1.61	0.36	19.72	9.24	3.76

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 28mA, 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 (dBm)	1 dB Compression Output (dBm)	Noise Figure (dB)
	(MHz)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	(dB)	(deg)	K			
50	-23.41	-5.55	22.34	173.41	-24.56	-3.84	-26.55	-6.02	1.03	0.78	22.51	9.15	2.43
100	-23.81	-14.11	22.36	167.54	-24.6	-6.83	-27.27	-15.5	1.03	0.77	22.52	9.2	2.59
200	-25.26	-31.35	22.27	155.81	-24.57	-13.25	-29.02	-40.49	1.03	0.77	22.6	9.12	2.52
300	-24.76	-47.56	22.13	144.03	-24.56	-19.74	-28.81	-63.88	1.04	0.76	22.54	8.97	2.66
400	-24.29	-61.17	22.01	132.45	-24.55	-26.28	-27.70	-76.94	1.04	0.75	22.02	9.02	2.67
500	-23.16	-73.70	21.88	121.14	-24.49	-32.94	-27.48	-90.20	1.04	0.74	21.85	9.06	2.68
600	-23.63	-87.06	21.73	109.95	-24.46	-39.63	-27.50	-104.20	1.05	0.73	21.76	9.04	2.67
700	-23.49	-100.18	21.52	98.90	-24.42	-46.32	-28.06	-123.85	1.05	0.72	22.09	9.22	2.56
800	-23.33	-110.83	21.37	87.86	-24.40	-53.12	-28.23	-138.60	1.06	0.70	22.28	8.84	2.65
1000	-22.63	-133.38	21.02	66.17	-24.33	-66.80	-28.17	-162.45	1.07	0.68	22.30	8.79	2.63
1200	-22.25	-156.29	20.65	44.86	-24.28	-80.49	-28.36	-173.26	1.08	0.66	22.01	8.32	2.71
1400	-21.52	-179.34	20.26	23.99	-24.22	-94.50	-28.08	152.66	1.10	0.63	21.74	8.78	2.79
1600	-21.16	158.65	19.83	3.46	-24.23	-108.25	-28.60	121.45	1.12	0.60	22.02	8.61	2.81
1800	-20.15	138.51	19.46	-16.82	-24.17	-122.39	-27.84	104.03	1.14	0.58	22.68	8.38	2.72
2000	-19.13	119.71	19.09	-36.89	-24.11	-136.71	-26.97	87.15	1.15	0.56	22.74	8.80	2.70
2200	-18.44	102.65	18.72	-56.66	-24.09	-151.16	-26.36	77.38	1.18	0.53	22.86	9.12	2.80
2400	-17.50	85.89	18.33	-76.19	-24.06	-165.65	-25.39	67.82	1.20	0.51	22.95	9.11	2.82
2600	-16.78	71.06	18.00	-95.53	-24.08	179.81	-24.69	60.01	1.22	0.49	22.97	9.03	2.79
2800	-15.82	55.48	17.67	-114.69	-24.08	165.19	-23.85	51.69	1.25	0.47	23.17	8.65	2.84
3000	-15.01	38.97	17.38	-133.88	-24.05	150.08	-22.94	42.34	1.27	0.46	23.42	8.72	2.86
3200	-14.29	24.95	17.08	-152.55	-24.12	135.53	-21.63	36.79	1.29	0.44	23.36	8.71	2.94
3400	-13.63	8.74	16.81	-171.57	-24.11	120.13	-20.93	25.92	1.31	0.43	23.25	9.01	3.04
3600	-13.13	-6.50	16.56	169.66	-24.14	104.88	-20.14	15.88	1.34	0.42	23.07	8.93	3.22
3800	-12.73	-22.01	16.32	150.96	-24.22	89.39	-19.43	6.34	1.37	0.41	22.94	8.97	3.24
4000	-12.41	-38.19	16.13	132.30	-24.26	73.70	-18.78	-4.63	1.39	0.40	23.07	9.15	3.21
4200	-12.22	-54.80	15.95	113.66	-24.33	57.40	-18.58	-15.52	1.42	0.40	23.06	9.21	3.13
4400	-12.10	-73.33	15.79	94.74	-24.33	41.66	-18.55	-28.72	1.44	0.39	22.92	8.96	3.17
4600	-12.25	-92.17	15.64	75.97	-24.37	24.38	-18.85	-38.79	1.47	0.38	22.71	8.86	3.26
4800	-12.36	-111.16	15.51	57.23	-24.43	7.70	-19.02	-52.20	1.50	0.38	22.42	9.20	3.35
5000	-12.33	-131.75	15.45	37.93	-24.46	-9.07	-19.42	-66.73	1.51	0.37	22.27	9.48	3.27
5200	-12.52	-152.13	15.36	18.86	-24.55	-26.48	-19.92	-79.03	1.54	0.36	22.32	9.25	3.14
5400	-12.71	-171.95	15.31	-0.36	-24.69	-44.52	-19.80	-91.99	1.57	0.36	22.23	9.06	3.14
5600	-12.96	166.15	15.25	-19.49	-24.63	-63.94	-20.17	-100.59	1.57	0.36	22.09	8.60	3.26
5800	-13.13	144.57	15.24	-39.19	-24.74	-82.47	-19.85	-113.96	1.59	0.35	21.76	8.71	3.37
6000	-13.20	121.83	15.25	-59.35	-24.77	-101.31	-19.62	-125.38	1.60	0.36	21.32	8.42	3.37
6200	-13.33	96.12	15.22	-79.82	-24.71	-119.94	-19.99	-135.84	1.60	0.36	21.22	8.46	3.41
6400	-13.47	70.99	15.21	-101.03	-24.78	-139.93	-19.84	-150.12	1.61	0.35	20.92	8.60	3.41
6600	-13.60	40.95	15.08	-122.33	-24.74	-158.57	-20.38	-155.90	1.63	0.35	20.63	8.77	3.46
6800	-14.25	10.38	15.10	-143.99	-24.31	-179.68	-18.58	-163.17	1.57	0.37	20.46	8.59	3.56
7000	-13.63	-21.73	14.86	-166.37	-24.46	160.24	-18.81	-168.40	1.61	0.35	20.17	8.62	3.65

TYPE: MMIC Amplifier  
 MODEL: GALI-39 Reference Data: RDF-1232  
 S PARAMETERS are presented in dB/deg Format  
 TEST CONDITIONS: INPUT POWER = -25dBm, Icc = 42mA, Vd = 3.48V @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	-27.48	171.84	23.53	173.18	-25.66	-3.87	-23.11	173.77	1.03	0.79	28.17	13.92	2.48
100	-26.56	168.69	23.51	167.17	-25.68	-6.69	-22.36	170.9	1.03	0.78	28.25	13.8	2.74
200	-24.91	164.46	23.38	155.28	-25.67	-12.7	-21.16	165	1.03	0.77	28.27	13.96	2.45
300	-25.48	158.07	23.27	143.3	-25.64	-18.85	-21.37	159.6	1.04	0.77	28.09	13.65	2.79
400	-26.29	150.34	23.11	131.60	-25.60	-25.12	-21.57	152.02	1.04	0.75	27.45	13.58	2.62
500	-26.97	145.04	22.96	120.05	-25.56	-31.47	-21.71	143.42	1.04	0.74	27.02	13.64	2.78
600	-26.70	135.51	22.74	108.71	-25.51	-37.86	-21.31	133.70	1.05	0.73	26.74	13.69	2.64
700	-27.25	128.39	22.58	97.46	-25.47	-44.36	-21.36	125.68	1.05	0.72	26.84	13.55	2.66
800	-27.43	118.20	22.38	86.44	-25.43	-50.88	-21.25	116.26	1.06	0.71	26.82	13.57	2.66
1000	-28.40	105.35	21.95	64.60	-25.33	-63.99	-21.23	97.15	1.07	0.68	26.62	13.59	2.65
1200	-29.05	92.90	21.53	43.27	-25.25	-77.19	-21.25	78.26	1.09	0.65	26.29	13.20	2.76
1400	-29.12	89.35	21.09	22.35	-25.16	-90.68	-21.30	60.33	1.11	0.63	25.88	13.39	2.86
1600	-29.14	89.54	20.66	1.82	-25.08	-104.11	-21.57	42.75	1.13	0.60	25.99	13.21	2.90
1800	-27.89	86.02	20.23	-18.34	-24.99	-117.81	-21.85	27.94	1.15	0.58	25.91	13.19	2.82
2000	-26.45	82.51	19.82	-38.28	-24.88	-131.78	-22.20	14.33	1.17	0.56	25.85	13.42	2.79
2200	-25.32	76.15	19.43	-57.86	-24.83	-145.72	-23.02	1.29	1.19	0.54	25.68	13.47	2.91
2400	-23.59	68.47	19.03	-77.35	-24.75	-159.91	-24.02	-8.58	1.21	0.52	25.31	13.39	2.91
2600	-22.23	60.86	18.67	-96.53	-24.71	-174.20	-25.59	-16.71	1.24	0.50	25.00	13.25	2.88
2800	-20.63	50.43	18.34	-115.54	-24.64	-171.41	-27.29	-19.59	1.26	0.48	24.85	13.16	2.92
3000	-19.23	37.03	18.02	-134.60	-24.57	156.50	-28.60	-18.84	1.28	0.47	24.84	13.00	2.95
3200	-17.94	26.21	17.71	-153.16	-24.57	142.04	-29.88	-5.25	1.31	0.45	24.55	13.05	3.02
3400	-16.89	11.51	17.42	-172.09	-24.52	126.71	-29.09	2.35	1.33	0.44	24.39	12.99	3.10
3600	-16.07	-2.19	17.18	169.22	-24.50	111.59	-27.26	6.87	1.35	0.43	23.99	12.95	3.28
3800	-15.38	-16.45	16.92	150.65	-24.54	96.25	-25.65	6.70	1.37	0.42	23.72	12.87	3.29
4000	-14.98	-31.37	16.70	132.09	-24.56	80.68	-24.11	0.80	1.40	0.41	23.57	12.94	3.27
4200	-14.74	-46.86	16.51	113.61	-24.60	64.67	-23.16	-7.18	1.43	0.40	23.50	12.87	3.20
4400	-14.44	-65.66	16.35	94.75	-24.56	48.85	-22.89	-18.66	1.44	0.40	23.33	12.69	3.23
4600	-14.67	-83.64	16.18	76.15	-24.59	31.95	-22.84	-25.33	1.47	0.39	23.01	12.36	3.35
4800	-14.69	-102.52	16.04	57.50	-24.64	15.28	-22.95	-36.72	1.49	0.38	22.57	12.28	3.46
5000	-14.68	-122.85	15.97	38.34	-24.65	-1.18	-23.22	-51.12	1.50	0.38	22.23	12.16	3.42
5200	-14.88	-143.23	15.89	19.42	-24.73	-18.62	-23.66	-60.61	1.52	0.37	22.17	11.67	3.27
5400	-15.09	-162.89	15.83	0.41	-24.85	-36.47	-23.31	-72.21	1.55	0.37	21.89	11.50	3.29
5600	-15.60	175.76	15.77	-18.58	-24.81	-55.54	-23.14	-78.44	1.56	0.36	21.61	11.01	3.43
5800	-15.76	154.37	15.78	-38.18	-24.92	-74.06	-22.49	-92.62	1.57	0.36	21.15	10.84	3.54
6000	-15.94	131.58	15.77	-58.24	-24.95	-92.73	-21.93	-102.31	1.58	0.36	20.58	10.30	3.57
6200	-16.25	104.73	15.74	-78.61	-24.89	-111.25	-21.94	-110.30	1.58	0.36	20.42	10.16	3.59
6400	-16.57	79.19	15.73	-99.70	-25.01	-130.95	-21.65	-125.57	1.60	0.36	20.24	9.88	3.60
6600	-16.70	45.81	15.62	-120.83	-24.98	-149.44	-21.50	-128.46	1.61	0.35	19.94	9.91	3.65
6800	-17.77	12.35	15.66	-142.39	-24.56	-170.88	-18.97	-140.64	1.55	0.37	19.70	9.76	3.77
7000	-16.81	-23.36	15.42	-164.69	-24.75	169.30	-18.66	-146.22	1.60	0.36	19.30	9.60	3.86