

## Typical Performance Data

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

**Definitions:**

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 5.00V, Id = 132.12mA @ Temperature = 25degC

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Measure			
5.0	12.93	41.14	11.79	7.77	10.13	0.88	32.66	17.23	7.19
5.2	13.37	40.17	13.87	8.47	9.09	0.88	29.59	17.82	6.52
5.4	13.72	39.50	16.20	9.25	8.44	0.89	30.15	17.86	5.98
5.6	13.96	38.93	18.66	9.76	7.88	0.90	30.59	18.15	5.60
5.8	14.15	38.57	20.99	10.38	7.55	0.91	31.46	17.78	5.28
6.0	14.29	38.04	22.30	10.85	7.08	0.92	34.16	17.96	5.06
6.2	14.40	37.74	22.08	11.54	6.84	0.93	30.07	17.91	4.84
6.4	14.50	37.46	21.65	11.97	6.58	0.94	28.87	18.07	4.69
6.6	14.57	37.19	21.24	12.52	6.38	0.94	29.02	18.07	4.58
6.8	14.63	36.96	21.15	13.45	6.24	0.96	28.88	17.92	4.47
7.0	14.69	36.89	21.97	14.34	6.21	0.96	29.38	17.58	4.45
7.2	14.72	36.56	22.39	15.65	6.02	0.97	30.81	17.45	4.31
7.4	14.75	36.53	24.94	16.93	6.03	0.98	29.25	17.80	4.25
7.6	14.76	36.40	27.93	19.10	5.99	0.98	28.57	16.36	4.20
7.8	14.75	36.35	33.77	21.29	6.01	0.99	28.25	17.82	4.19
8.0	14.74	36.30	44.19	25.61	6.01	0.99	28.00	17.58	4.19
8.2	14.69	36.39	33.39	33.75	6.12	0.99	27.87	17.81	4.18
8.3	14.68	36.23	29.04	41.01	6.01	0.99	27.85	17.77	4.19
8.4	14.63	36.56	25.86	34.88	6.26	1.00	28.06	17.76	4.16
8.8	14.50	36.38	21.05	21.53	6.17	0.99	27.62	18.08	4.24
8.9	14.46	36.28	20.21	20.07	6.10	0.99	27.48	17.64	4.30
9.0	14.40	36.18	19.63	18.58	6.04	0.99	27.39	18.02	4.31
9.1	14.36	36.30	18.94	17.69	6.13	0.99	27.62	18.01	4.28
9.2	14.29	36.39	17.71	16.70	6.18	0.99	27.53	18.60	4.29
9.3	14.24	36.37	17.03	15.65	6.15	0.98	27.64	17.95	4.29
9.6	14.05	36.76	15.97	14.41	6.48	0.98	27.18	18.49	4.42
9.7	13.99	36.75	15.28	13.87	6.47	0.98	27.20	18.89	4.42
9.8	13.89	36.87	15.00	13.31	6.58	0.97	27.41	18.20	4.43
9.9	13.90	36.74	15.13	13.01	6.46	0.97	27.04	18.51	4.45
10.0	13.87	36.50	14.73	12.80	6.27	0.97	27.15	18.69	4.44
10.5	13.59	36.78	13.13	11.56	6.48	0.96	26.88	19.10	4.61
11.0	13.37	36.62	11.81	10.88	6.34	0.96	26.54	19.35	4.75
11.5	13.18	36.52	10.96	10.41	6.25	0.97	26.03	19.05	4.79
12.0	13.00	36.27	10.38	10.02	6.07	0.97	25.66	18.74	4.91
12.5	12.89	36.15	9.93	9.93	5.99	0.97	25.38	19.15	5.01
13.0	12.79	35.85	9.56	9.77	5.76	0.98	25.14	18.72	5.17
13.5	12.76	35.20	9.77	9.81	5.39	0.98	25.11	19.45	5.22
14.0	12.86	34.98	10.37	10.15	5.30	0.98	27.99	19.49	5.25
14.5	13.04	34.39	11.70	10.43	4.99	0.96	25.06	19.49	5.26
15.0	13.33	33.80	13.83	11.39	4.73	0.96	24.26	19.97	5.35
15.5	13.54	33.05	16.50	12.31	4.39	0.95	26.16	20.00	5.23
16.0	13.70	32.65	17.83	13.31	4.21	0.96	24.17	20.15	5.26
16.5	13.75	32.25	16.28	15.85	4.07	0.98	24.06	20.21	5.29
17.0	13.56	31.98	13.43	14.68	3.93	0.99	23.96	19.93	5.33
17.5	13.15	31.97	10.79	13.29	3.93	1.01	23.19	18.80	5.63
18.0	12.62	32.20	9.09	11.54	4.02	1.02	24.16	18.21	5.93

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 4.75V, Id = 131.25mA @ Temperature = 25degC

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Measure			
5.0	13.06	41.12	11.77	7.80	9.96	0.88	33.38	16.71	7.17
5.2	13.50	40.11	13.84	8.50	8.90	0.89	30.58	17.35	6.48
5.4	13.84	39.48	16.15	9.30	8.32	0.90	31.18	17.35	5.96
5.6	14.08	38.90	18.57	9.80	7.76	0.90	32.19	17.62	5.56
5.8	14.26	38.53	20.96	10.44	7.43	0.91	37.51	17.18	5.26
6.0	14.41	38.01	22.27	10.92	6.97	0.92	30.91	17.39	5.03
6.2	14.52	37.71	22.25	11.61	6.73	0.93	37.74	17.30	4.81
6.4	14.62	37.46	21.75	12.06	6.51	0.94	29.88	17.44	4.65
6.6	14.69	37.22	21.46	12.61	6.33	0.95	29.71	17.45	4.55
6.8	14.74	36.92	21.29	13.54	6.14	0.96	29.94	17.29	4.50
7.0	14.80	36.89	22.09	14.43	6.13	0.96	33.18	16.93	4.51
7.2	14.84	36.57	22.45	15.79	5.95	0.97	34.06	16.83	4.31
7.4	14.86	36.61	25.08	17.05	6.02	0.98	33.14	17.16	4.23
7.6	14.88	36.38	27.88	19.25	5.91	0.98	30.98	16.71	4.20
7.8	14.87	36.34	33.16	21.44	5.92	0.99	28.86	17.17	4.17
8.0	14.86	36.32	49.36	25.90	5.94	0.99	28.52	16.94	4.14
8.2	14.81	36.44	33.89	34.64	6.07	0.99	28.65	17.18	4.17
8.3	14.80	36.28	29.25	47.90	5.96	0.99	28.75	17.13	4.13
8.4	14.76	36.52	26.34	35.06	6.15	1.00	29.59	17.14	4.11
8.8	14.63	36.37	21.28	21.73	6.07	0.99	28.74	17.43	4.20
8.9	14.60	36.21	20.48	20.15	5.96	0.99	28.54	17.00	4.24
9.0	14.52	36.25	19.86	18.70	6.01	0.99	28.03	17.36	4.27
9.1	14.50	36.24	19.09	17.76	5.99	0.99	28.97	17.34	4.26
9.2	14.43	36.33	17.92	16.78	6.05	0.99	27.85	17.94	4.27
9.3	14.38	36.35	17.21	15.73	6.06	0.98	29.09	17.30	4.25
9.6	14.20	36.65	16.08	14.52	6.31	0.98	27.96	17.83	4.37
9.7	14.15	36.65	15.42	13.94	6.29	0.98	27.60	18.23	4.38
9.8	14.03	36.92	15.14	13.38	6.52	0.97	28.81	17.53	4.40
9.9	14.06	36.61	15.27	13.05	6.26	0.97	27.43	17.86	4.40
10.0	14.03	36.46	14.86	12.93	6.15	0.97	28.08	18.04	4.39
10.5	13.76	36.69	13.25	11.69	6.32	0.96	27.56	18.46	4.54
11.0	13.55	36.62	11.95	11.05	6.24	0.97	26.98	18.38	4.69
11.5	13.37	36.41	11.11	10.50	6.07	0.97	26.33	18.43	4.82
12.0	13.20	36.18	10.49	10.10	5.91	0.97	25.88	18.11	4.87
12.5	13.10	36.00	10.05	10.01	5.77	0.97	25.57	18.52	4.94
13.0	13.02	35.78	9.69	9.82	5.60	0.98	25.32	18.07	5.07
13.5	13.00	35.07	9.94	9.88	5.20	0.97	25.36	18.82	5.11
14.0	13.11	34.96	10.51	10.20	5.17	0.97	27.12	18.87	5.23
14.5	13.29	34.27	11.88	10.49	4.81	0.96	25.64	18.84	5.24
15.0	13.58	33.62	14.06	11.41	4.52	0.96	25.07	19.37	5.30
15.5	13.80	32.79	16.78	12.31	4.15	0.95	25.33	19.40	5.21
16.0	13.96	32.65	18.15	13.44	4.10	0.96	24.69	19.58	5.20
16.5	14.02	32.14	16.62	16.19	3.91	0.98	24.44	19.65	5.27
17.0	13.84	31.94	13.64	14.90	3.81	0.99	24.04	19.63	5.30
17.5	13.41	31.88	10.88	13.27	3.78	1.00	24.37	18.14	5.59
18.0	12.86	32.15	9.14	11.48	3.90	1.01	25.06	17.54	5.90

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 5.25V, Id = 132.75mA @ Temperature = 25degC

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Measure			
5.0	12.80	41.17	11.80	7.75	10.30	0.88	29.67	17.64	7.22
5.2	13.25	40.19	13.88	8.44	9.22	0.88	29.13	18.22	6.54
5.4	13.60	39.54	16.23	9.21	8.59	0.89	29.60	18.29	6.04
5.6	13.85	38.94	18.73	9.72	7.99	0.90	29.91	18.58	5.63
5.8	14.04	38.57	21.00	10.33	7.64	0.91	29.44	18.29	5.33
6.0	14.18	38.07	22.29	10.80	7.18	0.92	29.66	18.47	5.10
6.2	14.29	37.74	21.99	11.47	6.91	0.93	28.52	18.44	4.88
6.4	14.40	37.48	21.57	11.89	6.67	0.94	28.44	18.59	4.72
6.6	14.47	37.19	21.09	12.44	6.44	0.94	28.69	18.62	4.62
6.8	14.53	37.02	21.14	13.37	6.35	0.95	28.49	18.47	4.50
7.0	14.59	36.88	21.91	14.25	6.27	0.96	28.23	18.14	4.40
7.2	14.62	36.57	22.41	15.57	6.10	0.97	28.45	18.00	4.37
7.4	14.64	36.50	24.98	16.81	6.09	0.98	27.91	18.36	4.28
7.6	14.66	36.40	28.09	18.97	6.07	0.98	27.71	17.92	4.22
7.8	14.65	36.34	34.37	21.12	6.07	0.99	28.06	18.38	4.23
8.0	14.64	36.29	40.22	25.29	6.07	0.99	27.82	18.14	4.18
8.2	14.58	36.43	32.75	32.64	6.23	0.99	27.60	18.39	4.19
8.3	14.57	36.23	28.61	37.16	6.08	0.99	27.55	18.33	4.25
8.4	14.52	36.57	25.53	34.14	6.35	1.00	27.51	18.35	4.21
8.8	14.38	36.39	20.89	21.41	6.25	0.99	27.19	18.67	4.25
8.9	14.34	36.29	19.98	19.93	6.19	0.99	27.10	18.25	4.31
9.0	14.27	36.24	19.42	18.52	6.17	0.99	27.14	18.61	4.34
9.1	14.23	36.37	18.73	17.64	6.25	0.99	27.08	18.61	4.30
9.2	14.16	36.44	17.61	16.67	6.31	0.99	27.47	19.16	4.34
9.3	14.11	36.39	16.91	15.59	6.26	0.98	26.99	18.54	4.32
9.6	13.92	36.82	15.80	14.34	6.62	0.98	26.90	19.10	4.44
9.7	13.85	36.77	15.16	13.79	6.57	0.98	27.09	19.47	4.44
9.8	13.76	36.81	14.89	13.19	6.62	0.97	26.76	18.80	4.43
9.9	13.76	36.79	14.96	12.93	6.58	0.97	26.94	19.11	4.47
10.0	13.74	36.55	14.60	12.71	6.40	0.97	26.75	19.26	4.48
10.5	13.44	36.88	13.02	11.48	6.64	0.96	26.63	19.65	4.62
11.0	13.21	36.66	11.73	10.79	6.46	0.96	26.43	19.55	4.72
11.5	13.00	36.55	10.85	10.34	6.37	0.97	25.98	19.58	4.83
12.0	12.81	36.35	10.27	9.93	6.23	0.97	25.67	19.30	4.94
12.5	12.69	36.23	9.78	9.87	6.14	0.98	25.34	19.69	5.02
13.0	12.59	35.93	9.42	9.72	5.91	0.98	25.14	19.29	5.18
13.5	12.55	35.26	9.67	9.75	5.54	0.98	25.06	19.94	5.30
14.0	12.65	35.04	10.28	10.10	5.45	0.98	25.05	19.98	5.29
14.5	12.82	34.50	11.58	10.36	5.17	0.96	25.22	19.97	5.32
15.0	13.11	33.98	13.64	11.28	4.93	0.96	23.97	20.41	5.38
15.5	13.32	33.22	16.23	12.19	4.58	0.95	25.52	20.46	5.29
16.0	13.47	32.71	17.51	13.13	4.34	0.96	23.99	20.61	5.31
16.5	13.51	32.31	16.05	15.69	4.20	0.98	24.10	20.65	5.34
17.0	13.32	32.05	13.31	14.72	4.07	0.99	26.34	20.47	5.40
17.5	12.92	32.04	10.71	13.39	4.05	1.01	22.91	19.38	5.63
18.0	12.39	32.25	9.02	11.62	4.14	1.02	24.05	18.79	5.97

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 5.00V, Id = 126.94mA @ Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
5.0	14.34	40.89	11.10	7.50	8.19	0.87	31.49	17.17	6.20
5.2	14.74	39.99	13.00	8.29	7.51	0.88	32.40	17.73	5.54
5.4	15.06	39.39	15.07	9.14	7.09	0.89	31.80	17.84	5.04
5.6	15.28	38.82	17.47	9.78	6.67	0.90	31.17	18.09	4.67
5.8	15.44	38.51	19.60	10.34	6.46	0.91	32.07	17.76	4.35
6.0	15.57	38.00	21.32	10.93	6.09	0.92	32.51	17.98	4.19
6.2	15.67	37.69	21.61	11.51	5.88	0.93	35.90	17.97	3.94
6.4	15.78	37.48	21.78	12.01	5.72	0.93	34.66	18.11	3.77
6.6	15.84	37.22	21.25	12.64	5.55	0.94	34.06	18.18	3.70
6.8	15.90	36.94	21.49	13.26	5.39	0.95	34.38	18.00	3.57
7.0	15.96	36.87	21.73	14.40	5.37	0.96	34.92	17.70	3.49
7.2	16.00	36.58	22.33	15.24	5.22	0.97	35.85	17.61	3.41
7.4	16.03	36.55	23.85	16.85	5.23	0.97	38.98	17.95	3.39
7.6	16.06	36.44	26.18	18.42	5.19	0.98	39.82	17.41	3.33
7.8	16.07	36.36	29.73	20.90	5.17	0.98	36.44	17.88	3.32
8.0	16.07	36.35	34.06	24.39	5.19	0.99	35.88	17.63	3.25
8.2	16.04	36.39	35.75	29.89	5.25	0.99	36.09	17.89	3.27
8.3	16.04	36.16	34.25	33.36	5.12	0.99	38.38	17.81	3.26
8.4	16.00	36.50	29.31	31.11	5.33	0.99	36.85	17.68	3.25
8.8	15.89	36.47	23.35	22.03	5.34	0.99	38.02	17.95	3.34
8.9	15.87	36.23	21.96	20.51	5.18	0.99	35.69	17.42	3.36
9.0	15.81	36.20	21.00	19.17	5.18	0.99	36.26	18.01	3.37
9.1	15.81	36.16	20.57	18.13	5.14	0.98	37.28	18.09	3.34
9.2	15.73	36.17	19.25	17.11	5.15	0.98	35.74	18.58	3.35
9.3	15.70	36.32	18.29	16.30	5.23	0.98	37.51	17.96	3.38
9.6	15.55	36.53	17.01	14.87	5.38	0.97	36.49	18.39	3.45
9.7	15.49	36.69	16.22	14.51	5.47	0.98	35.65	18.79	3.44
9.8	15.42	36.64	15.56	13.85	5.44	0.97	36.01	18.25	3.45
9.9	15.42	36.47	15.54	13.37	5.31	0.97	35.35	18.74	3.51
10.0	15.42	36.36	15.44	13.12	5.23	0.96	36.47	18.87	3.50
10.5	15.15	36.53	13.43	11.82	5.32	0.96	35.28	19.24	3.61
11.0	15.04	36.47	12.04	11.25	5.23	0.96	33.78	18.97	3.70
11.5	14.88	36.13	10.98	10.51	4.97	0.96	32.70	19.03	3.74
12.0	14.77	36.02	10.29	10.15	4.86	0.96	31.75	18.65	3.87
12.5	14.72	35.78	9.84	10.04	4.70	0.97	30.79	19.18	3.94
13.0	14.70	35.51	9.59	10.02	4.53	0.98	30.35	18.64	4.04
13.5	14.76	34.71	10.08	10.01	4.15	0.96	30.15	19.36	4.10
14.0	14.88	34.50	11.22	10.15	4.09	0.95	30.12	19.38	4.13
14.5	15.10	33.90	13.00	10.30	3.83	0.93	29.52	19.30	4.18
15.0	15.42	33.27	15.43	11.05	3.56	0.93	28.43	20.01	4.24
15.5	15.66	32.48	19.32	11.69	3.26	0.92	28.50	20.07	4.13
16.0	15.93	31.86	21.69	13.19	3.05	0.93	27.90	20.08	4.08
16.5	16.06	31.54	19.20	14.22	2.92	0.94	27.76	20.33	4.17
17.0	16.01	31.20	15.37	13.16	2.78	0.94	26.95	19.43	4.23
17.5	15.69	31.14	11.90	11.76	2.73	0.94	27.01	18.70	4.36
18.0	15.19	31.39	9.22	9.74	2.72	0.95	26.95	18.28	4.71

## Typical Performance Data

### Definitions:

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

TEST CONDITIONS: Vd = 4.75V, Id = 124.70mA @ Temperature = -45degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
5.0	14.98	40.85	10.87	7.48	7.55	0.88	28.20	16.25	6.16
5.2	15.36	39.97	12.66	8.27	6.95	0.88	29.12	16.89	5.49
5.4	15.66	39.39	14.65	9.13	6.60	0.90	28.86	16.95	4.99
5.6	15.87	38.84	16.90	9.76	6.24	0.90	28.46	17.21	4.63
5.8	16.02	38.57	18.97	10.35	6.08	0.91	28.33	16.80	4.31
6.0	16.15	38.06	20.69	10.91	5.74	0.92	28.08	17.02	4.13
6.2	16.25	37.75	21.28	11.52	5.55	0.93	29.94	16.99	3.90
6.4	16.35	37.58	21.51	12.01	5.42	0.93	30.04	17.13	3.75
6.6	16.42	37.30	21.14	12.62	5.25	0.94	29.75	17.18	3.63
6.8	16.47	37.05	21.19	13.25	5.11	0.95	29.82	17.04	3.55
7.0	16.54	36.94	21.46	14.33	5.07	0.96	29.55	16.71	3.43
7.2	16.57	36.68	21.69	15.18	4.94	0.96	29.09	16.62	3.42
7.4	16.61	36.63	22.86	16.67	4.94	0.97	30.09	17.02	3.32
7.6	16.64	36.50	24.42	18.28	4.89	0.98	30.49	16.49	3.30
7.8	16.65	36.48	26.61	20.51	4.91	0.98	30.33	16.94	3.25
8.0	16.66	36.39	28.40	23.93	4.88	0.99	30.21	16.67	3.26
8.2	16.63	36.46	29.53	28.62	4.94	0.99	30.39	16.89	3.24
8.3	16.64	36.20	29.78	31.90	4.80	0.99	30.43	16.82	3.22
8.4	16.61	36.55	27.65	30.74	5.00	0.99	30.70	16.70	3.20
8.8	16.50	36.56	23.16	22.52	5.03	0.99	30.34	16.88	3.25
8.9	16.50	36.22	22.29	20.84	4.83	0.99	30.86	16.39	3.31
9.0	16.44	36.26	21.54	19.40	4.86	0.98	30.13	16.88	3.35
9.1	16.43	36.19	20.96	18.45	4.81	0.98	30.78	17.01	3.31
9.2	16.36	36.26	19.50	17.22	4.85	0.98	30.55	17.50	3.33
9.3	16.34	36.29	18.69	16.47	4.86	0.98	30.69	16.88	3.32
9.6	16.19	36.51	17.40	15.09	5.00	0.97	31.10	17.28	3.41
9.7	16.13	36.65	16.59	14.68	5.08	0.97	30.50	17.65	3.44
9.8	16.08	36.66	16.00	14.01	5.08	0.97	30.34	17.18	3.44
9.9	16.08	36.46	15.96	13.51	4.94	0.96	30.44	17.71	3.45
10.0	16.07	36.31	15.89	13.28	4.85	0.96	30.50	17.86	3.43
10.5	15.83	36.49	13.76	11.98	4.93	0.96	30.76	18.26	3.57
11.0	15.74	36.37	12.42	11.34	4.81	0.96	31.59	17.97	3.66
11.5	15.60	36.04	11.37	10.56	4.58	0.95	30.91	18.01	3.72
12.0	15.53	35.92	10.72	10.17	4.46	0.95	30.62	17.64	3.83
12.5	15.51	35.59	10.30	10.04	4.26	0.96	29.42	18.14	3.89
13.0	15.52	35.31	10.12	9.95	4.10	0.96	29.79	17.58	4.00
13.5	15.60	34.51	10.79	9.94	3.76	0.94	29.91	18.17	4.06
14.0	15.73	34.16	12.14	10.11	3.65	0.93	30.26	18.17	4.05
14.5	15.97	33.79	14.36	10.17	3.47	0.91	30.05	17.98	4.10
15.0	16.31	33.05	17.57	10.88	3.18	0.91	29.88	18.61	4.17
15.5	16.59	32.21	23.45	11.47	2.88	0.91	30.66	18.72	4.12
16.0	16.92	31.63	28.99	12.80	2.67	0.91	30.51	18.64	4.06
16.5	17.13	31.20	24.16	13.75	2.52	0.92	30.56	18.81	4.12
17.0	17.16	30.77	18.52	12.53	2.36	0.90	30.37	17.82	4.10
17.5	16.93	30.70	13.94	11.02	2.31	0.89	30.78	17.22	4.34
18.0	16.48	30.92	10.49	9.00	2.29	0.88	31.00	16.97	4.61

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 5.25V, Id = 128.59mA @ Temperature = -45degC

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Measure			
5.0	13.97	40.93	11.22	7.48	8.60	0.87	40.30	17.72	6.22
5.2	14.38	39.95	13.16	8.29	7.80	0.88	39.05	18.23	5.59
5.4	14.70	39.38	15.31	9.12	7.38	0.89	40.26	18.38	5.05
5.6	14.93	38.84	17.76	9.76	6.97	0.90	37.28	18.65	4.68
5.8	15.09	38.50	19.95	10.31	6.71	0.91	37.69	18.42	4.37
6.0	15.23	38.00	21.60	10.90	6.33	0.92	36.72	18.62	4.19
6.2	15.33	37.69	21.74	11.49	6.10	0.93	33.92	18.64	3.94
6.4	15.44	37.48	21.87	11.98	5.94	0.93	35.60	18.81	3.80
6.6	15.51	37.21	21.15	12.62	5.76	0.94	36.94	18.88	3.69
6.8	15.56	36.92	21.56	13.24	5.58	0.95	35.10	18.70	3.63
7.0	15.63	36.83	21.79	14.39	5.55	0.96	33.32	17.32	3.50
7.2	15.66	36.54	22.58	15.21	5.40	0.97	32.74	18.34	3.44
7.4	15.69	36.51	24.24	16.88	5.41	0.97	32.22	18.67	3.41
7.6	15.72	36.40	27.11	18.42	5.37	0.98	32.34	18.13	3.33
7.8	15.73	36.30	31.54	21.02	5.34	0.98	33.92	18.59	3.30
8.0	15.73	36.31	40.14	24.58	5.37	0.99	33.01	17.40	3.31
8.2	15.68	36.39	38.83	30.85	5.47	0.99	32.29	18.62	3.30
8.3	15.69	36.16	34.92	35.32	5.32	0.99	32.68	18.58	3.33
8.4	15.65	36.48	29.15	32.03	5.53	0.99	31.39	18.43	3.31
8.8	15.52	36.51	22.86	21.99	5.59	0.99	31.93	18.73	3.36
8.9	15.51	36.24	21.43	20.41	5.40	0.99	30.67	18.21	3.39
9.0	15.45	36.20	20.56	19.05	5.39	0.99	32.15	18.80	3.40
9.1	15.44	36.19	20.19	18.00	5.37	0.98	30.91	18.87	3.38
9.2	15.38	36.17	18.98	16.99	5.36	0.98	32.04	19.33	3.37
9.3	15.33	36.33	17.92	16.23	5.45	0.98	30.71	18.74	3.38
9.6	15.16	36.52	16.69	14.74	5.60	0.98	30.74	19.17	3.50
9.7	15.09	36.66	15.84	14.43	5.70	0.98	31.55	19.54	3.52
9.8	15.05	36.64	15.32	13.76	5.66	0.97	30.13	19.02	3.47
9.9	15.03	36.52	15.21	13.27	5.56	0.97	31.39	19.48	3.50
10.0	15.03	36.42	15.18	13.01	5.49	0.97	30.98	19.60	3.49
10.5	14.74	36.54	13.16	11.71	5.56	0.96	30.69	19.90	3.67
11.0	14.61	36.54	11.76	11.16	5.50	0.97	29.80	19.67	3.76
11.5	14.44	36.21	10.73	10.44	5.23	0.97	29.45	19.72	3.80
12.0	14.31	36.11	10.01	10.11	5.13	0.97	29.02	19.41	3.94
12.5	14.24	35.84	9.56	10.02	4.95	0.98	28.81	20.16	3.97
13.0	14.20	35.62	9.27	10.02	4.80	0.99	28.23	19.42	4.15
13.5	14.25	34.84	9.71	10.02	4.42	0.98	28.05	20.12	4.17
14.0	14.35	34.60	10.74	10.17	4.35	0.96	27.75	20.14	4.13
14.5	14.56	34.02	12.38	10.31	4.08	0.94	28.66	20.11	4.25
15.0	14.86	33.49	14.54	11.08	3.86	0.94	27.74	20.68	4.30
15.5	15.08	32.54	17.88	11.72	3.49	0.93	26.47	20.97	4.22
16.0	15.33	32.11	19.37	13.31	3.33	0.94	25.94	20.83	4.16
16.5	15.42	31.78	17.27	14.37	3.20	0.95	26.68	21.20	4.22
17.0	15.32	31.42	14.06	13.43	3.04	0.96	25.09	20.34	4.27
17.5	14.98	31.39	11.08	12.15	3.01	0.97	24.98	19.50	4.50
18.0	14.46	31.62	8.67	10.12	2.98	0.98	24.97	19.02	4.77

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 5.00V, Id = 132.70mA @ Temperature = 85degC

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Measure			
5.0	12.16	41.14	12.16	7.93	11.19	0.88	39.08	16.96	8.05
5.2	12.60	40.27	14.22	8.54	10.09	0.89	30.45	17.56	7.37
5.4	12.97	39.51	16.56	9.31	9.24	0.90	31.00	17.60	6.82
5.6	13.22	38.98	18.71	9.70	8.61	0.90	31.76	17.86	6.46
5.8	13.43	38.47	21.15	10.38	8.10	0.91	33.95	17.53	6.08
6.0	13.58	38.01	22.16	10.81	7.64	0.92	52.90	17.71	5.87
6.2	13.70	37.72	22.14	11.63	7.39	0.93	32.24	17.64	5.64
6.4	13.80	37.38	21.25	11.99	7.06	0.94	29.73	17.80	5.49
6.6	13.87	37.06	21.40	12.58	6.81	0.95	29.74	17.82	5.37
6.8	13.95	36.95	21.02	13.73	6.75	0.96	29.70	17.68	5.29
7.0	13.99	36.76	22.11	14.49	6.63	0.96	30.44	17.39	5.70
7.2	14.02	36.45	22.64	16.18	6.46	0.97	32.56	17.26	5.10
7.4	14.03	36.42	25.55	17.24	6.48	0.98	30.75	17.58	5.10
7.6	14.04	36.29	29.03	19.73	6.44	0.98	29.85	17.20	5.02
7.8	14.03	36.21	36.88	21.93	6.43	0.99	28.97	17.65	5.00
8.0	13.99	36.22	35.34	26.00	6.48	0.99	28.68	17.44	4.99
8.2	13.93	36.42	30.38	31.34	6.69	0.99	28.56	17.66	5.01
8.3	13.92	36.23	27.38	32.16	6.55	1.00	28.62	17.61	5.04
8.4	13.88	36.33	24.10	28.58	6.64	1.00	28.80	17.69	5.01
8.8	13.71	36.42	20.58	20.57	6.75	0.99	28.40	17.98	5.08
8.9	13.66	36.19	19.40	18.84	6.58	0.99	28.14	17.59	5.12
9.0	13.59	36.28	19.11	17.58	6.66	0.99	28.04	17.84	5.19
9.1	13.54	36.34	18.46	16.73	6.71	0.98	28.32	17.77	5.11
9.2	13.47	36.55	17.54	16.08	6.88	0.98	28.07	18.36	5.15
9.3	13.42	36.43	16.79	14.97	6.77	0.98	28.35	17.80	5.17
9.6	13.24	36.60	15.95	13.75	6.94	0.97	27.81	18.32	5.31
9.7	13.16	36.74	15.27	13.34	7.05	0.97	27.76	18.72	5.30
9.8	13.10	36.77	15.26	12.67	7.08	0.96	28.02	18.04	5.31
9.9	13.07	36.77	15.41	12.44	7.08	0.96	27.59	18.26	5.34
10.0	13.04	36.60	14.97	12.46	6.95	0.96	27.82	18.36	5.30
10.5	12.72	36.70	13.39	11.22	7.06	0.96	27.50	18.79	5.50
11.0	12.47	36.73	12.23	10.79	7.13	0.96	27.11	18.77	5.63
11.5	12.25	36.62	11.47	10.46	7.08	0.96	26.56	18.76	5.76
12.0	12.05	36.49	10.86	10.04	6.99	0.96	26.16	18.51	5.85
12.5	11.89	36.25	10.33	10.01	6.84	0.97	25.83	18.82	5.99
13.0	11.75	36.20	9.92	9.69	6.78	0.97	25.60	18.51	6.09
13.5	11.71	35.54	10.03	9.79	6.33	0.97	25.64	19.03	6.19
14.0	11.79	35.06	10.46	10.33	6.06	0.98	24.80	19.10	6.26
14.5	11.97	34.77	11.55	10.54	5.88	0.97	25.09	19.01	6.28
15.0	12.25	34.11	13.39	11.42	5.51	0.97	25.40	19.35	6.35
15.5	12.45	33.37	15.62	12.30	5.12	0.96	24.82	19.34	6.31
16.0	12.56	33.09	17.23	12.48	4.96	0.95	25.30	19.54	6.23
16.5	12.62	32.60	16.15	16.04	4.80	0.99	24.08	19.48	6.32
17.0	12.41	32.37	13.68	15.85	4.72	1.00	23.76	19.44	6.37
17.5	11.93	32.39	11.09	14.85	4.79	1.03	24.56	18.33	6.66
18.0	11.38	32.70	9.68	13.61	5.07	1.04	25.81	17.74	6.97

## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 4.75V, Id = 132.35mA @ Temperature = 85degC

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output	1dB Comp. Output	Noise Figure
					K	Measure			
(GHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dB)
5.0	12.30	40.91	12.16	7.97	10.74	0.88	31.09	16.46	8.00
5.2	12.74	40.11	14.22	8.63	9.79	0.89	31.26	17.09	7.32
5.4	13.10	39.32	16.48	9.38	8.92	0.90	31.79	17.09	6.78
5.6	13.36	38.75	18.73	9.87	8.29	0.90	33.34	17.37	6.36
5.8	13.55	38.32	20.99	10.49	7.88	0.91	34.86	16.95	6.07
6.0	13.70	37.86	22.23	11.03	7.43	0.92	29.67	17.14	5.84
6.2	13.82	37.56	22.19	11.78	7.18	0.93	36.26	17.07	5.61
6.4	13.92	37.23	21.69	12.22	6.87	0.94	30.90	17.22	5.40
6.6	13.99	36.95	21.72	12.86	6.66	0.95	30.41	17.25	5.32
6.8	14.07	36.92	21.61	14.02	6.66	0.96	30.70	17.07	5.20
7.0	14.11	36.68	22.48	14.89	6.51	0.97	34.56	16.79	5.12
7.2	14.14	36.46	23.35	16.53	6.40	0.98	32.59	16.65	5.09
7.4	14.15	36.37	26.04	17.91	6.38	0.98	33.60	16.99	5.01
7.6	14.16	36.23	29.78	20.32	6.32	0.99	32.47	16.59	4.95
7.8	14.15	36.05	37.53	23.17	6.23	0.99	29.59	17.07	4.96
8.0	14.12	36.24	37.23	28.13	6.41	0.99	29.22	16.84	4.92
8.2	14.07	36.29	30.35	41.19	6.49	0.99	29.33	17.05	4.94
8.3	14.07	36.09	27.63	36.35	6.34	1.00	29.60	17.02	4.99
8.4	14.05	35.91	25.03	28.82	6.21	0.99	30.21	17.06	4.95
8.8	13.88	36.17	20.83	20.23	6.43	0.99	29.61	17.32	4.99
8.9	13.84	36.08	19.87	18.96	6.37	0.99	29.21	16.93	5.05
9.0	13.77	36.19	19.44	17.74	6.47	0.99	28.81	17.18	5.12
9.1	13.72	36.26	18.73	16.72	6.52	0.98	29.68	17.13	5.06
9.2	13.67	36.32	17.96	15.94	6.56	0.98	28.44	17.72	5.09
9.3	13.62	36.18	17.22	14.95	6.44	0.98	29.86	17.14	5.07
9.6	13.46	36.34	16.31	13.73	6.58	0.97	28.67	17.66	5.22
9.7	13.37	36.44	15.59	13.33	6.67	0.97	28.26	18.03	5.20
9.8	13.34	36.37	15.52	12.81	6.60	0.96	29.44	17.34	5.25
9.9	13.30	36.50	15.55	12.66	6.71	0.96	28.09	17.58	5.26
10.0	13.27	36.51	15.29	12.59	6.73	0.96	28.87	17.71	5.25
10.5	13.00	36.46	13.80	11.21	6.68	0.95	28.28	18.12	5.41
11.0	12.79	36.51	12.61	10.80	6.75	0.95	27.70	18.13	5.55
11.5	12.61	36.34	11.74	10.51	6.63	0.96	26.99	18.10	5.63
12.0	12.42	36.19	10.98	10.20	6.52	0.96	26.51	17.86	5.78
12.5	12.29	36.01	10.40	10.18	6.40	0.97	26.12	18.16	5.86
13.0	12.18	35.81	9.95	9.93	6.23	0.98	25.90	17.83	6.06
13.5	12.18	35.23	10.12	10.05	5.85	0.98	25.99	18.39	6.09
14.0	12.29	34.98	10.52	10.56	5.72	0.98	25.12	18.44	6.14
14.5	12.47	34.31	11.60	10.94	5.32	0.98	25.98	18.31	6.18
15.0	12.77	33.61	13.29	12.16	4.96	0.98	25.99	18.70	6.27
15.5	12.97	33.05	15.27	13.13	4.69	0.97	26.38	18.68	6.20
16.0	13.09	32.64	16.99	13.40	4.49	0.96	25.65	18.92	6.14
16.5	13.09	32.54	16.38	16.32	4.54	0.99	24.46	18.86	6.18
17.0	12.82	32.25	14.01	14.73	4.43	0.99	23.96	18.75	6.26
17.5	12.28	32.36	11.04	14.16	4.56	1.02	25.22	17.66	6.53
18.0	11.61	32.73	9.41	13.02	4.89	1.04	26.41	17.33	6.87



## Typical Performance Data

### Definitions:

Input Return Loss = -S11 (dB)

Gain(Power Gain) = S21 (dB)

Reverse Isolation = -S12 (dB)

Output Return Loss = -S22 (dB)

TEST CONDITIONS: Vd = 5.25V, Id = 133.22mA @ Temperature = 85degC

FREQ (GHz)	Gain (dB)	Isolation (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stability		IP-3 Output (dBm)	1dB Comp. Output (dBm)	Noise Figure (dB)
					K	Measure			
5.0	11.97	41.23	12.19	7.87	11.53	0.88	31.84	17.38	8.11
5.2	12.42	40.37	14.31	8.48	10.41	0.88	30.09	17.98	7.41
5.4	12.80	39.60	16.60	9.19	9.49	0.89	30.63	18.04	6.89
5.6	13.06	39.02	18.79	9.62	8.80	0.90	31.14	18.32	6.43
5.8	13.27	38.50	21.06	10.22	8.25	0.91	31.06	18.05	6.17
6.0	13.42	38.02	21.92	10.68	7.76	0.91	31.74	18.21	5.92
6.2	13.55	37.74	21.83	11.44	7.52	0.93	29.88	18.16	5.70
6.4	13.65	37.39	21.14	11.80	7.17	0.94	29.29	18.33	5.53
6.6	13.72	37.05	21.22	12.42	6.90	0.94	29.50	18.36	5.43
6.8	13.79	36.98	21.03	13.51	6.88	0.96	29.31	18.24	5.31
7.0	13.84	36.79	22.06	14.32	6.76	0.96	29.22	17.93	5.78
7.2	13.86	36.48	22.80	15.88	6.59	0.97	29.69	17.83	5.21
7.4	13.88	36.43	25.77	17.04	6.60	0.98	29.03	18.15	5.13
7.6	13.88	36.34	29.22	19.32	6.59	0.98	28.70	17.77	5.06
7.8	13.87	36.17	37.10	21.46	6.50	0.99	28.73	18.22	5.05
8.0	13.83	36.29	33.03	25.09	6.65	0.99	28.49	18.01	5.05
8.2	13.77	36.34	28.98	29.10	6.74	0.99	28.30	18.22	5.08
8.3	13.75	36.26	26.20	29.48	6.69	1.00	28.25	18.17	5.07
8.4	13.72	36.24	23.50	26.92	6.69	1.00	28.22	18.25	5.06
8.8	13.53	36.48	20.08	19.92	6.93	0.99	27.90	18.54	5.17
8.9	13.48	36.27	19.10	18.55	6.76	0.99	27.74	18.19	5.22
9.0	13.42	36.34	18.79	17.43	6.83	0.99	27.72	18.42	5.24
9.1	13.36	36.42	18.20	16.46	6.90	0.98	27.74	18.39	5.21
9.2	13.29	36.43	17.29	15.63	6.91	0.98	27.97	18.94	5.20
9.3	13.23	36.41	16.56	14.69	6.87	0.98	27.72	18.42	5.26
9.6	13.04	36.65	15.73	13.47	7.11	0.97	27.48	18.93	5.36
9.7	12.96	36.78	15.12	13.06	7.22	0.97	27.58	19.27	5.38
9.8	12.90	36.74	15.02	12.50	7.18	0.96	27.34	18.65	5.43
9.9	12.86	36.79	15.10	12.32	7.24	0.96	27.40	18.84	5.37
10.0	12.83	36.77	14.78	12.28	7.23	0.96	27.33	18.98	5.38
10.5	12.50	36.75	13.33	10.95	7.23	0.95	27.17	19.32	5.57
11.0	12.23	36.83	12.16	10.50	7.35	0.96	26.87	19.34	5.68
11.5	12.00	36.67	11.36	10.21	7.28	0.96	26.41	19.31	5.79
12.0	11.78	36.59	10.70	9.89	7.24	0.96	26.05	19.09	5.93
12.5	11.61	36.45	10.14	9.90	7.16	0.97	25.71	19.36	6.04
13.0	11.46	36.26	9.72	9.63	7.01	0.98	25.51	19.07	6.21
13.5	11.41	35.65	9.83	9.73	6.59	0.98	25.50	19.55	6.31
14.0	11.48	35.36	10.25	10.21	6.45	0.98	24.82	19.61	6.36
14.5	11.65	34.84	11.34	10.50	6.12	0.97	24.77	19.54	6.42
15.0	11.94	34.28	13.06	11.46	5.79	0.97	25.24	19.86	6.47
15.5	12.14	33.40	15.23	12.33	5.31	0.97	24.56	19.84	6.38
16.0	12.25	33.22	16.76	12.55	5.21	0.96	24.48	20.07	6.36
16.5	12.30	32.74	16.09	15.57	5.04	0.99	24.06	20.00	6.40
17.0	12.09	32.50	13.78	15.06	4.93	1.00	23.88	20.00	6.52
17.5	11.63	32.50	11.12	14.36	4.99	1.02	24.48	18.92	6.79
18.0	11.10	32.68	9.69	13.35	5.21	1.04	25.73	18.35	7.11