

Typical Performance Data

VDS (V)	IDS (mA)				
	@ VGS=				
	0.20V	0.30V	0.40V	0.50V	0.60V
0.00	0.01	0.04	0.08	0.08	0.10
0.10	0.27	3.65	12.61	18.97	21.95
0.20	0.29	4.15	18.82	34.57	42.39
0.30	0.30	4.34	20.58	45.11	60.56
0.40	0.33	4.50	21.37	50.24	75.24
0.50	0.34	4.65	21.90	52.30	85.18
0.60	0.34	4.85	22.33	53.38	90.38
0.70	0.36	4.99	22.76	54.18	92.66
0.80	0.38	5.13	23.24	54.89	93.88
0.90	0.40	5.25	23.62	55.49	94.80
1.00	0.42	5.38	23.97	56.03	95.53
1.10	0.43	5.51	24.29	56.51	96.14
1.20	0.45	5.63	24.61	56.97	96.68
1.30	0.45	5.75	24.91	57.39	97.18
1.40	0.47	5.86	25.22	57.82	97.65
1.50	0.48	5.98	25.50	58.21	98.08
1.60	0.52	6.10	25.77	58.60	98.49
1.70	0.53	6.21	26.04	58.97	98.89
1.80	0.55	6.32	26.32	59.33	99.30
1.90	0.57	6.45	26.58	59.70	99.68
2.00	0.55	6.55	26.87	60.08	100.07
2.10	0.58	6.69	27.17	60.50	100.48
2.20	0.60	6.82	27.51	60.97	100.97
2.30	0.63	6.99	27.89	61.47	101.50
2.40	0.64	7.17	28.29	62.05	102.12
2.50	0.67	7.34	28.74	62.68	102.78
2.60	0.70	7.52	29.19	63.32	103.50
2.70	0.71	7.69	29.65	63.99	104.22
2.80	0.73	7.90	30.15	64.64	104.94
2.90	0.76	8.10	30.62	65.31	105.64
3.00	0.82	8.34	31.13	65.99	106.33
3.10	0.84	8.56	31.63	66.65	107.02
3.20	0.87	8.79	32.17	67.32	107.70
3.30	0.90	9.03	32.72	68.02	108.37
3.40	0.92	9.30	33.28	68.69	109.02
3.50	0.95	9.58	33.87	69.41	109.67
3.60	1.01	9.89	34.46	70.12	110.34
3.70	1.06	10.20	35.06	70.81	111.00
3.80	1.10	10.53	35.67	71.53	111.64
3.90	1.14	10.86	36.29	72.24	112.30
4.00	1.14	11.21	36.89	72.93	112.96
4.10	1.30	11.55	37.51	73.65	113.60
4.20	1.37	11.90	38.13	74.35	114.25
4.30	1.45	12.26	38.74	75.03	114.88
4.40	1.54	12.63	39.36	75.76	115.53
4.50	1.62	13.00	39.99	76.47	116.18
4.60	1.69	13.38	40.62	77.15	116.80
4.70	1.78	13.76	41.23	77.86	117.44
4.80	1.90	14.14	41.86	78.56	118.06
4.90	1.98	14.53	42.50	79.26	118.67
5.00	2.07	14.94	43.13	79.96	119.30

Typical Performance Data

IDS (mA)	GAIN (dB) ⁽¹⁾				OIP3 (dBm) ⁽¹⁾			
	VDS=+3V		VDS=+4V		VDS=+3V		VDS=+4V	
	0.9 GHz	2 GHz	0.9 GHz	2 GHz	0.9 GHz	2 GHz	0.9 GHz	2 GHz
10.00	19.89	15.13	19.92	15.18	19.77	22.07	19.85	22.07
15.00	21.04	15.91	21.13	15.99	22.05	23.50	22.28	24.00
30.00	22.48	16.88	22.47	16.95	28.30	30.30	27.81	30.00
60.00	23.38	17.50	23.35	17.52	32.86	33.60	33.57	35.90

IDS (mA)	Pout @ 1dB Compression ^(1,2) (dBm)				NOISE FIGURE ⁽¹⁾ (dB)			
	VDS=+3V		VDS=+4V		VDS=+3V		VDS=+4V	
	0.9 GHz	2 GHz	0.9 GHz	2 GHz	0.9 GHz	2 GHz	0.9 GHz	2 GHz
10.00	17.92	17.35	20.48	19.97	0.38	0.52	0.41	0.52
15.00	17.00	17.50	19.85	20.10	0.33	0.49	0.34	0.41
30.00	17.80	17.83	19.62	20.20	0.26	0.38	0.30	0.36
60.00	18.90	19.10	21.20	20.92	0.27	0.36	0.30	0.37

FREQ (GHz)	NF vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=3V, IDS=30mA			NF vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=4V, IDS=30mA		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
0.25	0.22	0.32	0.49	0.20	0.35	0.55
0.30	0.20	0.28	0.46	0.22	0.30	0.55
0.40	0.31	0.47	0.42	0.37	0.44	0.48
0.50	0.29	0.38	0.41	0.27	0.40	0.61
0.60	0.27	0.43	0.5	0.29	0.41	0.61
0.70	0.34	0.48	0.49	0.37	0.48	0.62
0.80	0.28	0.40	0.48	0.25	0.41	0.56
0.90	0.31	0.49	0.53	0.28	0.46	0.60
1.00	0.23	0.41	0.51	0.27	0.42	0.56
1.25	0.27	0.43	0.58	0.30	0.45	0.67
1.50	0.31	0.46	0.63	0.33	0.48	0.72
1.75	0.34	0.56	0.72	0.35	0.52	0.72
2.00	0.32	0.53	0.67	0.28	0.51	0.73
2.25	0.21	0.49	0.76	0.27	0.52	0.79
2.50	0.30	0.56	0.79	0.30	0.55	0.82
2.75	0.48	0.88	0.97	0.50	0.85	1.17
3.00	0.34	0.61	0.87	0.26	0.56	0.95
3.25	0.32	0.60	0.91	0.34	0.58	1.07
3.50	0.43	0.80	0.97	0.48	0.84	1.16
3.75	0.65	0.87	1.07	0.60	0.92	1.23
4.00	0.58	1.01	1.13	0.53	0.95	1.32
4.25	0.58	0.92	1.25	0.47	0.89	1.47
4.50	0.67	0.99	1.34	0.61	1.12	1.65
4.75	0.60	0.99	1.36	0.62	1.03	1.72
5.00	0.80	1.03	1.62	0.80	1.30	1.92
5.25	0.80	1.20	1.76	0.68	1.16	2.02
5.50	1.08	1.36	1.93	0.86	1.43	2.26
5.75	0.89	1.37	1.95	0.57	1.32	2.34
6.00	0.77	1.42	2.17	1.03	1.33	2.52

(1) Includes test board loss

(2) Drain current was allowed to increase during compression measurement

Typical Performance Data

FREQ (GHz)	GAIN vs FREQ & TEMPERATURE @ VDS=3V, IDS=30mA			OIP3 vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=3V, IDS=30mA			P1dB vs FREQ & TEMPERATURE ^(1,2) @ VDS=3V, IDS=30mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	26.15	25.77	25.29	27.29	27.22	26.85	17.05	17.63	17.33
0.50	25.52	25.12	24.47	27.52	27.43	27.09	17.10	17.67	17.39
0.60	24.89	24.39	23.91	27.74	27.64	27.32	17.14	17.71	17.46
0.70	24.18	23.74	23.33	27.96	27.84	27.55	17.18	17.75	17.52
0.80	23.60	23.09	22.73	28.18	28.05	27.78	17.22	17.79	17.58
0.90	22.95	22.48	22.01	28.39	28.25	28.00	17.27	17.83	17.63
1.00	22.30	21.84	21.43	28.60	28.44	28.22	17.31	17.86	17.69
1.10	21.71	21.23	20.85	28.81	28.64	28.44	17.35	17.90	17.75
1.20	21.08	20.63	20.24	29.02	28.83	28.65	17.39	17.94	17.80
1.30	20.53	20.09	19.69	29.22	29.02	28.85	17.42	17.98	17.86
1.40	20.00	19.58	19.17	29.41	29.21	29.06	17.46	18.01	17.91
1.50	19.49	19.07	18.70	29.61	29.39	29.26	17.50	18.05	17.96
1.60	18.99	18.61	18.16	29.80	29.57	29.46	17.54	18.08	18.01
1.70	18.57	18.14	17.78	29.98	29.75	29.65	17.57	18.12	18.06
1.80	18.11	17.66	17.34	30.17	29.92	29.84	17.61	18.15	18.11
1.90	17.68	17.26	16.91	30.35	30.09	30.02	17.64	18.19	18.16
2.00	17.34	16.88	16.55	30.52	30.26	30.20	17.68	18.22	18.20
2.10	16.91	16.49	16.15	30.70	30.43	30.38	17.71	18.25	18.25
2.20	16.50	16.12	15.77	30.87	30.60	30.55	17.75	18.28	18.29
2.30	16.21	15.76	15.41	31.04	30.76	30.72	17.78	18.32	18.33
2.40	15.88	15.41	15.11	31.20	30.92	30.89	17.81	18.35	18.38
2.50	15.55	15.10	14.76	31.36	31.07	31.05	17.84	18.38	18.42
2.60	15.20	14.74	14.43	31.52	31.22	31.21	17.87	18.41	18.45
2.70	14.90	14.44	14.11	31.67	31.37	31.36	17.90	18.44	18.49
2.80	14.57	14.17	13.79	31.82	31.52	31.52	17.93	18.46	18.53
2.90	14.34	13.92	13.54	31.97	31.67	31.66	17.96	18.49	18.56
3.00	14.07	13.65	13.32	32.11	31.81	31.81	17.99	18.52	18.60
3.10	13.84	13.35	13.08	32.25	31.95	31.95	18.01	18.55	18.63
3.20	13.60	13.10	12.81	32.38	32.08	32.08	18.04	18.57	18.66
3.30	13.33	12.88	12.58	32.52	32.22	32.21	18.07	18.60	18.70
3.40	13.14	12.63	12.29	32.65	32.35	32.34	18.09	18.63	18.73
3.50	12.90	12.41	12.10	32.77	32.48	32.47	18.12	18.65	18.75
3.60	12.71	12.23	11.85	32.90	32.60	32.59	18.14	18.68	18.78
3.70	12.47	12.05	11.68	33.02	32.72	32.70	18.16	18.70	18.81
3.80	12.33	11.85	11.48	33.13	32.84	32.82	18.19	18.72	18.83
3.90	12.10	11.64	11.20	33.25	32.96	32.92	18.21	18.75	18.86
4.00	11.97	11.49	11.10	33.36	33.08	33.03	18.23	18.77	18.88
4.10	11.83	11.30	10.95	33.46	33.19	33.13	18.25	18.79	18.90
4.20	11.65	11.14	10.81	33.56	33.30	33.23	18.27	18.81	18.92
4.30	11.49	11.01	10.61	33.66	33.40	33.32	18.29	18.83	18.94
4.40	11.37	10.84	10.49	33.76	33.50	33.41	18.31	18.85	18.96
4.50	11.20	10.69	10.33	33.85	33.61	33.50	18.33	18.87	18.98
4.60	10.97	10.48	10.09	33.94	33.70	33.58	18.34	18.89	18.99
4.70	10.82	10.35	9.94	34.03	33.80	33.66	18.36	18.91	19.01
4.80	10.59	10.15	9.81	34.11	33.89	33.74	18.38	18.93	19.02
4.90	10.54	9.99	9.63	34.19	33.98	33.81	18.39	18.95	19.03
5.00	10.42	9.82	9.44	34.27	34.07	33.88	18.41	18.96	19.04
5.10	10.23	9.64	9.29	34.34	34.15	33.94	18.42	18.98	19.05
5.20	9.97	9.50	8.99	34.41	34.23	34.00	18.43	19.00	19.06
5.30	9.84	9.33	9.00	34.47	34.31	34.06	18.45	19.01	19.07
5.40	9.71	9.23	8.87	34.54	34.38	34.11	18.46	19.03	19.08
5.50	9.54	9.05	8.57	34.60	34.46	34.16	18.47	19.04	19.08
5.60	9.44	8.88	8.53	34.65	34.53	34.20	18.48	19.06	19.09
5.70	9.14	8.75	8.35	34.70	34.59	34.24	18.49	19.07	19.09
5.80	9.11	8.65	8.15	34.75	34.66	34.28	18.50	19.08	19.09
5.90	9.00	8.51	8.25	34.80	34.72	34.31	18.51	19.10	19.09
6.00	8.74	8.24	7.91	34.84	34.78	34.34	18.52	19.11	19.09

(1) Includes test board loss
 (2) Drain current was allowed

Typical Performance Data

FREQ (GHz)	GAIN vs FREQ & TEMPERATURE @ VDS=4V, IDS=30mA			OIP3 vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=4V, IDS=30mA			P1dB vs FREQ & TEMPERATURE ^(1,2) @ VDS=4V, IDS=30mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	26.19	25.67	25.36	26.79	27.06	27.05	18.11	19.05	19.11
0.50	25.59	25.10	24.65	27.00	27.27	27.26	18.23	19.14	19.18
0.60	24.83	24.44	23.99	27.21	27.47	27.47	18.35	19.22	19.26
0.70	24.24	23.78	23.44	27.41	27.67	27.67	18.47	19.30	19.33
0.80	23.62	23.09	22.77	27.60	27.87	27.87	18.58	19.38	19.40
0.90	22.98	22.47	22.09	27.80	28.06	28.07	18.70	19.46	19.47
1.00	22.35	21.86	21.51	27.98	28.25	28.27	18.81	19.53	19.54
1.10	21.73	21.28	20.92	28.17	28.44	28.46	18.91	19.61	19.61
1.20	21.12	20.67	20.28	28.35	28.62	28.64	19.02	19.68	19.68
1.30	20.55	20.14	19.76	28.53	28.80	28.82	19.12	19.75	19.74
1.40	20.05	19.56	19.24	28.70	28.98	29.00	19.22	19.82	19.81
1.50	19.55	19.10	18.72	28.87	29.15	29.18	19.32	19.89	19.87
1.60	19.05	18.62	18.26	29.04	29.32	29.35	19.41	19.96	19.93
1.70	18.61	18.17	17.80	29.20	29.48	29.52	19.50	20.02	19.99
1.80	18.16	17.71	17.37	29.36	29.64	29.68	19.59	20.09	20.05
1.90	17.68	17.30	16.96	29.52	29.80	29.85	19.68	20.15	20.10
2.00	17.37	16.95	16.62	29.67	29.96	30.00	19.76	20.21	20.16
2.10	16.96	16.53	16.20	29.82	30.11	30.16	19.84	20.27	20.21
2.20	16.58	16.17	15.83	29.96	30.25	30.31	19.92	20.33	20.27
2.30	16.24	15.81	15.47	30.10	30.40	30.45	20.00	20.38	20.32
2.40	15.91	15.47	15.15	30.24	30.54	30.60	20.07	20.44	20.37
2.50	15.59	15.13	14.84	30.37	30.67	30.74	20.14	20.49	20.42
2.60	15.23	14.79	14.49	30.50	30.81	30.87	20.21	20.54	20.47
2.70	14.94	14.48	14.18	30.63	30.94	31.00	20.27	20.59	20.51
2.80	14.61	14.16	13.85	30.75	31.06	31.13	20.34	20.64	20.56
2.90	14.39	13.98	13.63	30.87	31.18	31.26	20.40	20.69	20.60
3.00	14.11	13.62	13.35	30.98	31.30	31.38	20.45	20.73	20.64
3.10	13.89	13.42	13.14	31.09	31.42	31.49	20.51	20.77	20.68
3.20	13.63	13.17	12.88	31.20	31.53	31.61	20.56	20.82	20.72
3.30	13.39	12.91	12.67	31.30	31.64	31.72	20.61	20.86	20.76
3.40	13.19	12.68	12.39	31.40	31.74	31.82	20.66	20.90	20.80
3.50	12.94	12.48	12.16	31.50	31.84	31.93	20.70	20.93	20.84
3.60	12.75	12.27	11.94	31.59	31.94	32.03	20.74	20.97	20.87
3.70	12.53	12.04	11.73	31.68	32.03	32.12	20.78	21.00	20.90
3.80	12.36	11.88	11.54	31.76	32.13	32.21	20.82	21.04	20.93
3.90	12.14	11.64	11.27	31.84	32.21	32.30	20.85	21.07	20.96
4.00	12.00	11.49	11.17	31.92	32.30	32.38	20.88	21.10	20.99
4.10	11.88	11.35	10.98	31.99	32.37	32.47	20.91	21.12	21.02
4.20	11.70	11.20	10.85	32.06	32.45	32.54	20.94	21.15	21.05
4.30	11.51	11.00	10.68	32.13	32.52	32.62	20.96	21.17	21.07
4.40	11.41	10.87	10.53	32.19	32.59	32.69	20.98	21.20	21.10
4.50	11.23	10.72	10.38	32.25	32.66	32.75	21.00	21.22	21.12
4.60	11.00	10.47	10.17	32.30	32.72	32.81	21.02	21.24	21.14
4.70	10.83	10.34	9.98	32.35	32.78	32.87	21.03	21.26	21.16
4.80	10.68	10.16	9.87	32.40	32.83	32.93	21.04	21.27	21.18
4.90	10.57	10.05	9.73	32.45	32.88	32.98	21.05	21.29	21.19
5.00	10.42	9.91	9.54	32.49	32.93	33.03	21.05	21.30	21.21
5.10	10.26	9.72	9.36	32.52	32.98	33.07	21.05	21.32	21.22
5.20	9.97	9.55	9.17	32.55	33.02	33.11	21.05	21.33	21.23
5.30	9.88	9.34	9.04	32.58	33.05	33.15	21.05	21.34	21.25
5.40	9.71	9.20	8.93	32.61	33.09	33.18	21.04	21.34	21.26
5.50	9.56	9.04	8.69	32.63	33.12	33.21	21.04	21.35	21.27
5.60	9.45	8.98	8.63	32.64	33.14	33.24	21.02	21.35	21.27
5.70	9.23	8.67	8.36	32.66	33.17	33.26	21.01	21.36	21.28
5.80	9.13	8.69	8.26	32.67	33.18	33.28	20.99	21.36	21.28
5.90	9.05	8.56	8.31	32.67	33.20	33.29	20.98	21.36	21.29
6.00	8.73	8.27	8.00	32.68	33.21	33.31	20.95	21.36	21.29

(1) Includes test board loss

(2) Drain current was allowed

Typical Performance Data

IDS (mA)	F _{MIN} (dB) (1)					
	VDS=+2V		VDS=+3V		VDS=+4V	
	0.9 GHz	2 GHz	0.9 GHz	2 GHz	0.9 GHz	2 GHz
10.00	0.170	0.381	0.171	0.381	0.148	0.334
15.00	0.160	0.362	0.152	0.340		
20.00	0.165	0.365	0.144	0.341	0.157	0.352
30.00	0.169	0.372	0.159	0.356		
40.00	0.147	0.331	0.144	0.322	0.149	0.333
60.00	0.150	0.341	0.152	0.341	0.165	0.369
80.00	0.157	0.356	0.168	0.379		

FREQUENCY (GHz)	F _{MIN} (dB) (1)		
	VDS=3V		
	20 mA	30 mA	40 mA
0.50	0.07	0.09	0.08
0.70	0.11	0.12	0.11
0.90	0.14	0.16	0.14
1.00	0.16	0.18	0.16
1.90	0.32	0.34	0.31
2.00	0.34	0.36	0.32
2.40	0.41	0.43	0.39
3.00	0.52	0.54	0.48
3.90	0.68	0.70	0.63
5.00	0.88	0.89	0.81
5.80	1.02	1.04	0.94
6.00	1.06	1.07	0.97

(1) F MIN is minimum Noise Figure