

Typical Performance Data

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

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=15mA			NF vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=4V, IDS=15mA		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
0.25	0.26	0.38	0.60	0.31	0.39	0.48
0.30	0.24	0.31	0.17	0.18	0.31	0.49
0.40	0.40	0.53	0.62	0.39	0.51	0.39
0.50	0.27	0.40	0.52	0.25	0.40	0.52
0.60	0.31	0.48	0.57	0.33	0.46	0.48
0.70	0.41	0.53	0.54	0.38	0.51	0.55
0.80	0.29	0.45	0.56	0.30	0.43	0.51
0.90	0.32	0.54	0.60	0.36	0.53	0.53
1.00	0.29	0.47	0.61	0.33	0.47	0.53
1.25	0.33	0.55	0.67	0.28	0.50	0.62
1.50	0.35	0.58	0.70	0.35	0.58	0.67
1.75	0.37	0.59	0.77	0.37	0.58	0.72
2.00	0.36	0.55	0.75	0.31	0.56	0.70
2.25	0.29	0.55	0.77	0.28	0.56	0.79
2.50	0.36	0.66	0.87	0.37	0.68	0.81
2.75	0.64	1.01	1.05	0.69	0.97	1.03
3.00	0.40	0.65	0.97	0.29	0.62	0.78
3.25	0.42	0.91	1.02	0.45	0.63	1.04
3.50	0.48	0.94	1.10	0.48	0.77	1.09
3.75	0.68	1.01	1.20	0.52	0.99	1.17
4.00	0.69	1.11	1.31	0.62	0.98	1.25
4.25	0.67	1.05	1.39	0.55	0.92	1.48
4.50	0.55	1.22	1.51	0.64	0.94	1.58
4.75	0.75	1.06	1.49	0.70	1.07	1.71
5.00	0.80	1.22	1.78	0.52	1.06	1.89
5.25	0.65	1.11	1.92	0.77	1.28	1.98
5.50	1.08	1.47	2.06	0.78	1.56	2.29
5.75	0.92	1.44	2.19	0.79	1.55	2.40
6.00	1.08	1.53	2.37	0.70	1.58	2.57

(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=15mA			OIP3 vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=3V, IDS=15mA			P1dB vs FREQ & TEMPERATURE ^(1,2) @ VDS=3V, IDS=15mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	24.16	23.73	23.13	21.62	21.74	21.84	15.67	16.58	14.82
0.50	23.77	23.11	22.56	21.77	21.88	21.98	15.76	16.67	15.02
0.60	23.29	22.67	22.13	21.90	22.02	22.12	15.86	16.75	15.22
0.70	22.71	22.14	21.60	22.04	22.15	22.26	15.95	16.84	15.41
0.80	22.18	21.61	21.10	22.18	22.29	22.40	16.04	16.92	15.59
0.90	21.60	21.04	20.56	22.31	22.42	22.53	16.12	17.00	15.77
1.00	21.12	20.46	20.01	22.44	22.55	22.66	16.21	17.08	15.95
1.10	20.54	19.99	19.56	22.56	22.68	22.79	16.29	17.15	16.12
1.20	19.97	19.43	18.95	22.69	22.80	22.92	16.37	17.23	16.28
1.30	19.44	18.95	18.51	22.81	22.93	23.05	16.45	17.30	16.44
1.40	18.96	18.43	18.02	22.93	23.05	23.17	16.53	17.37	16.60
1.50	18.47	17.96	17.55	23.05	23.17	23.29	16.61	17.44	16.75
1.60	17.97	17.50	17.07	23.17	23.28	23.41	16.68	17.51	16.90
1.70	17.58	17.08	16.67	23.28	23.40	23.53	16.76	17.58	17.04
1.80	17.17	16.68	16.31	23.39	23.51	23.65	16.83	17.65	17.18
1.90	16.73	16.25	15.87	23.50	23.62	23.76	16.89	17.71	17.31
2.00	16.41	15.91	15.54	23.61	23.73	23.87	16.96	17.77	17.44
2.10	16.03	15.50	15.20	23.72	23.84	23.98	17.03	17.83	17.56
2.20	15.64	15.16	14.77	23.82	23.94	24.09	17.09	17.89	17.68
2.30	15.30	14.84	14.48	23.92	24.05	24.19	17.15	17.95	17.79
2.40	15.00	14.48	14.16	24.02	24.15	24.30	17.21	18.01	17.90
2.50	14.68	14.17	13.83	24.11	24.25	24.40	17.27	18.06	18.00
2.60	14.31	13.85	13.51	24.21	24.34	24.50	17.32	18.12	18.10
2.70	14.03	13.55	13.20	24.30	24.44	24.60	17.38	18.17	18.20
2.80	13.75	13.28	12.88	24.39	24.53	24.69	17.43	18.22	18.29
2.90	13.52	13.05	12.69	24.47	24.62	24.78	17.48	18.27	18.37
3.00	13.24	12.78	12.43	24.56	24.71	24.88	17.53	18.31	18.45
3.10	12.99	12.48	12.17	24.64	24.79	24.97	17.58	18.36	18.53
3.20	12.75	12.26	11.92	24.72	24.88	25.05	17.62	18.40	18.60
3.30	12.52	12.01	11.70	24.80	24.96	25.14	17.66	18.44	18.66
3.40	12.31	11.78	11.43	24.88	25.04	25.22	17.71	18.49	18.72
3.50	12.09	11.56	11.25	24.95	25.11	25.30	17.75	18.52	18.78
3.60	11.89	11.36	11.00	25.02	25.19	25.38	17.78	18.56	18.83
3.70	11.67	11.19	10.82	25.09	25.26	25.46	17.82	18.60	18.88
3.80	11.51	10.97	10.64	25.16	25.33	25.53	17.85	18.63	18.92
3.90	11.30	10.82	10.35	25.22	25.40	25.60	17.88	18.67	18.96
4.00	11.14	10.66	10.26	25.28	25.47	25.68	17.91	18.70	18.99
4.10	11.04	10.48	10.07	25.34	25.53	25.74	17.94	18.73	19.02
4.20	10.88	10.32	9.95	25.40	25.60	25.81	17.97	18.76	19.04
4.30	10.70	10.18	9.77	25.46	25.66	25.88	17.99	18.78	19.06
4.40	10.56	9.99	9.66	25.51	25.71	25.94	18.02	18.81	19.07
4.50	10.38	9.82	9.48	25.56	25.77	26.00	18.04	18.83	19.08
4.60	10.18	9.68	9.25	25.61	25.83	26.06	18.06	18.85	19.08
4.70	10.03	9.54	9.13	25.66	25.88	26.11	18.07	18.87	19.08
4.80	9.80	9.32	9.01	25.70	25.93	26.17	18.09	18.89	19.08
4.90	9.79	9.19	8.83	25.74	25.98	26.22	18.10	18.91	19.07
5.00	9.63	9.05	8.63	25.78	26.02	26.27	18.11	18.93	19.05
5.10	9.47	8.85	8.51	25.82	26.06	26.32	18.12	18.94	19.03
5.20	9.23	8.72	8.19	25.86	26.11	26.36	18.13	18.95	19.01
5.30	9.11	8.56	8.22	25.89	26.15	26.41	18.14	18.96	18.98
5.40	8.96	8.43	8.06	25.92	26.18	26.45	18.14	18.97	18.94
5.50	8.76	8.30	7.78	25.95	26.22	26.49	18.14	18.98	18.90
5.60	8.70	8.12	7.73	25.97	26.25	26.53	18.14	18.99	18.86
5.70	8.45	8.00	7.60	26.00	26.28	26.56	18.14	18.99	18.81
5.80	8.40	7.87	7.38	26.02	26.31	26.60	18.14	19.00	18.76
5.90	8.26	7.77	7.50	26.04	26.34	26.63	18.14	19.00	18.70
6.00	8.01	7.52	7.17	26.06	26.36	26.66	18.13	19.00	18.64

(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=4V, IDS=15mA			OIP3 vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=4V, IDS=15mA			P1dB vs FREQ & TEMPERATURE ^(1,2) @ VDS=4V, IDS=15mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	24.49	23.68	23.26	21.57	21.95	22.13	16.49	18.97	19.07
0.50	23.79	23.21	22.71	21.71	22.09	22.27	16.71	19.05	19.15
0.60	23.28	22.75	22.20	21.86	22.23	22.40	16.92	19.12	19.22
0.70	22.72	22.18	21.62	22.00	22.37	22.54	17.13	19.20	19.30
0.80	22.25	21.64	21.12	22.14	22.50	22.67	17.33	19.28	19.38
0.90	21.63	21.13	20.65	22.27	22.64	22.80	17.53	19.35	19.45
1.00	21.13	20.53	20.13	22.40	22.77	22.92	17.72	19.43	19.52
1.10	20.59	20.02	19.61	22.54	22.89	23.05	17.91	19.50	19.59
1.20	20.02	19.48	19.02	22.66	23.02	23.17	18.09	19.57	19.66
1.30	19.52	19.03	18.53	22.79	23.14	23.30	18.27	19.64	19.73
1.40	19.02	18.47	18.09	22.91	23.27	23.42	18.44	19.71	19.80
1.50	18.55	18.03	17.60	23.04	23.39	23.53	18.61	19.78	19.87
1.60	18.03	17.60	17.15	23.16	23.50	23.65	18.77	19.84	19.93
1.70	17.67	17.15	16.76	23.27	23.62	23.76	18.93	19.91	20.00
1.80	17.22	16.72	16.36	23.39	23.73	23.88	19.08	19.97	20.06
1.90	16.79	16.34	15.95	23.50	23.84	23.99	19.22	20.04	20.12
2.00	16.48	15.99	15.64	23.61	23.95	24.10	19.37	20.10	20.18
2.10	16.08	15.59	15.23	23.71	24.06	24.20	19.50	20.16	20.24
2.20	15.70	15.23	14.88	23.82	24.16	24.31	19.63	20.22	20.30
2.30	15.41	14.89	14.54	23.92	24.26	24.41	19.76	20.28	20.35
2.40	15.06	14.59	14.24	24.02	24.36	24.51	19.88	20.34	20.41
2.50	14.73	14.28	13.91	24.12	24.46	24.61	20.00	20.39	20.46
2.60	14.39	13.92	13.60	24.21	24.56	24.71	20.11	20.45	20.51
2.70	14.10	13.61	13.29	24.30	24.65	24.80	20.21	20.50	20.56
2.80	13.78	13.30	12.96	24.39	24.74	24.90	20.31	20.55	20.61
2.90	13.57	13.12	12.75	24.48	24.83	24.99	20.41	20.60	20.66
3.00	13.30	12.80	12.48	24.57	24.92	25.08	20.50	20.65	20.71
3.10	13.08	12.58	12.27	24.65	25.00	25.17	20.58	20.70	20.76
3.20	12.83	12.33	12.00	24.73	25.09	25.25	20.66	20.75	20.80
3.30	12.58	12.06	11.81	24.81	25.17	25.34	20.74	20.80	20.84
3.40	12.38	11.88	11.52	24.88	25.25	25.42	20.81	20.84	20.89
3.50	12.14	11.66	11.30	24.96	25.32	25.50	20.87	20.89	20.93
3.60	11.95	11.45	11.08	25.03	25.40	25.58	20.93	20.93	20.97
3.70	11.72	11.22	10.90	25.10	25.47	25.66	20.99	20.97	21.01
3.80	11.57	11.05	10.70	25.16	25.54	25.73	21.04	21.01	21.04
3.90	11.34	10.85	10.45	25.22	25.61	25.80	21.08	21.05	21.08
4.00	11.22	10.66	10.34	25.29	25.67	25.87	21.12	21.09	21.11
4.10	11.12	10.56	10.16	25.34	25.73	25.94	21.16	21.13	21.15
4.20	10.94	10.41	10.02	25.40	25.80	26.01	21.18	21.16	21.18
4.30	10.74	10.21	9.87	25.45	25.85	26.08	21.21	21.20	21.21
4.40	10.65	10.06	9.73	25.51	25.91	26.14	21.23	21.23	21.24
4.50	10.48	9.93	9.57	25.55	25.97	26.20	21.24	21.27	21.27
4.60	10.24	9.67	9.36	25.60	26.02	26.26	21.25	21.30	21.29
4.70	10.12	9.55	9.17	25.64	26.07	26.32	21.25	21.33	21.32
4.80	9.91	9.40	9.05	25.69	26.12	26.37	21.25	21.36	21.34
4.90	9.85	9.31	8.92	25.73	26.16	26.43	21.24	21.38	21.37
5.00	9.68	9.15	8.74	25.76	26.21	26.48	21.23	21.41	21.39
5.10	9.55	8.99	8.56	25.80	26.25	26.53	21.22	21.43	21.41
5.20	9.27	8.79	8.35	25.83	26.29	26.58	21.19	21.46	21.43
5.30	9.16	8.62	8.30	25.86	26.33	26.62	21.17	21.48	21.45
5.40	9.00	8.42	8.16	25.89	26.36	26.67	21.13	21.50	21.46
5.50	8.85	8.34	7.94	25.91	26.39	26.71	21.10	21.52	21.48
5.60	8.75	8.26	7.87	25.93	26.42	26.75	21.05	21.54	21.49
5.70	8.52	7.94	7.65	25.95	26.45	26.79	21.01	21.56	21.51
5.80	8.45	7.95	7.50	25.97	26.48	26.83	20.95	21.58	21.52
5.90	8.33	7.85	7.55	25.98	26.50	26.86	20.90	21.60	21.53
6.00	8.10	7.58	7.25	26.00	26.53	26.89	20.83	21.61	21.54

(1) Includes test board loss

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

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		
15.00	0.160	0.362	0.152	0.340	0.148	0.334
20.00	0.165	0.365	0.144	0.341		
30.00	0.169	0.372	0.159	0.356	0.157	0.352
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

FREQUENCY (GHz)	F _{MIN} (dB) (1)		
	VDS=3V		
	10 mA	15 mA	20 mA
0.50	0.09	0.08	0.07
0.70	0.13	0.12	0.11
0.90	0.17	0.15	0.14
1.00	0.19	0.17	0.16
1.90	0.36	0.32	0.32
2.00	0.38	0.34	0.34
2.40	0.46	0.41	0.41
3.00	0.57	0.51	0.52
3.90	0.75	0.67	0.68
5.00	0.96	0.85	0.88
5.80	1.11	0.99	1.02
6.00	1.15	1.03	1.06

(1) F_{MIN} is minimum Noise Figure