

Typical Performance Data

VDS (V)	IDS (mA) @ VGS=					
	0.20V	0.30V	0.40V	0.50V	0.60V	0.70V
0.00	0.01	0.04	0.08	0.08	0.10	0.09
0.10	0.27	3.65	12.61	18.97	21.95	23.61
0.20	0.29	4.15	18.82	34.57	42.39	46.35
0.30	0.30	4.34	20.58	45.11	60.56	68.02
0.40	0.33	4.50	21.37	50.24	75.24	88.05
0.50	0.34	4.65	21.90	52.30	85.18	105.70
0.60	0.34	4.85	22.33	53.38	90.38	120.00
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=60mA			NF vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=4V, IDS=60mA		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
	0.25	0.20	0.32	0.40	0.20	0.32
0.30	0.16	0.28	0.45	0.18	0.29	0.51
0.40	0.34	0.45	0.40	0.31	0.46	0.44
0.50	0.24	0.37	0.46	0.28	0.36	0.48
0.60	0.25	0.39	0.46	0.27	0.43	0.53
0.70	0.32	0.46	0.49	0.33	0.48	0.55
0.80	0.26	0.40	0.44	0.27	0.38	0.51
0.90	0.31	0.45	0.50	0.33	0.45	0.56
1.00	0.29	0.44	0.52	0.24	0.42	0.56
1.25	0.29	0.45	0.58	0.28	0.45	0.62
1.50	0.29	0.50	0.65	0.29	0.50	0.72
1.75	0.31	0.51	0.65	0.35	0.54	0.71
2.00	0.30	0.53	0.65	0.30	0.51	0.69
2.25	0.26	0.49	0.76	0.28	0.50	0.78
2.50	0.26	0.54	0.85	0.27	0.56	0.85
2.75	0.53	0.89	1.05	0.53	0.88	1.05
3.00	0.29	0.56	0.94	0.26	0.58	1.01
3.25	0.26	0.68	1.09	0.47	0.61	1.23
3.50	0.39	0.78	1.15	0.40	0.82	1.33
3.75	0.50	1.00	1.27	0.55	0.96	1.41
4.00	0.52	0.89	1.42	0.52	0.89	1.50
4.25	0.49	0.97	1.51	0.50	0.87	1.69
4.50	0.63	1.00	1.65	0.64	0.94	1.85
4.75	0.58	1.12	1.83	0.51	0.98	2.02
5.00	0.58	1.13	1.95	0.59	1.11	2.16
5.25	0.69	1.11	2.13	0.71	1.23	2.34
5.50	0.84	1.40	2.45	0.75	1.09	2.49
5.75	0.98	1.31	2.44	0.95	1.26	2.65
6.00	1.00	1.45	2.67	0.92	1.47	2.79

(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=60mA			OIP3 vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=3V, IDS=60mA			P1dB vs FREQ & TEMPERATURE ^(1,2) @ VDS=3V, IDS=60mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	27.35	27.16	26.63	32.50	31.73	31.06	18.30	18.80	18.83
0.50	26.73	26.24	25.83	32.65	31.89	31.21	18.32	18.82	18.85
0.60	25.92	25.48	25.09	32.80	32.04	31.36	18.33	18.83	18.87
0.70	25.17	24.80	24.37	32.95	32.18	31.50	18.35	18.85	18.89
0.80	24.48	24.02	23.62	33.09	32.33	31.64	18.37	18.87	18.91
0.90	23.76	23.38	22.95	33.22	32.46	31.77	18.39	18.89	18.93
1.00	23.12	22.65	22.30	33.35	32.59	31.90	18.41	18.91	18.95
1.10	22.50	22.01	21.66	33.48	32.72	32.02	18.43	18.92	18.97
1.20	21.87	21.41	21.05	33.60	32.84	32.14	18.45	18.94	18.99
1.30	21.27	20.81	20.48	33.71	32.95	32.25	18.47	18.96	19.01
1.40	20.73	20.29	19.93	33.82	33.06	32.36	18.49	18.98	19.03
1.50	20.19	19.76	19.39	33.92	33.17	32.46	18.51	18.99	19.05
1.60	19.69	19.24	18.90	34.02	33.27	32.56	18.52	19.01	19.07
1.70	19.25	18.79	18.48	34.12	33.36	32.65	18.54	19.03	19.09
1.80	18.79	18.32	18.04	34.21	33.45	32.74	18.56	19.04	19.11
1.90	18.34	17.89	17.54	34.29	33.53	32.83	18.58	19.06	19.13
2.00	18.01	17.50	17.21	34.37	33.61	32.91	18.60	19.08	19.15
2.10	17.54	17.10	16.77	34.44	33.69	32.98	18.61	19.09	19.17
2.20	17.15	16.70	16.41	34.51	33.76	33.05	18.63	19.11	19.19
2.30	16.84	16.36	16.05	34.57	33.82	33.12	18.65	19.13	19.20
2.40	16.49	15.99	15.69	34.63	33.88	33.18	18.67	19.14	19.22
2.50	16.16	15.73	15.37	34.68	33.94	33.23	18.68	19.16	19.24
2.60	15.81	15.33	15.03	34.72	33.99	33.28	18.70	19.17	19.26
2.70	15.50	15.03	14.73	34.77	34.03	33.33	18.72	19.19	19.27
2.80	15.18	14.73	14.38	34.80	34.07	33.37	18.73	19.21	19.29
2.90	14.94	14.49	14.17	34.83	34.11	33.41	18.75	19.22	19.31
3.00	14.67	14.20	13.87	34.86	34.14	33.44	18.76	19.24	19.33
3.10	14.43	13.93	13.65	34.88	34.16	33.47	18.78	19.25	19.34
3.20	14.19	13.65	13.39	34.90	34.18	33.49	18.80	19.27	19.36
3.30	13.91	13.45	13.17	34.91	34.19	33.51	18.81	19.28	19.37
3.40	13.74	13.17	12.90	34.91	34.20	33.52	18.83	19.30	19.39
3.50	13.48	12.97	12.68	34.91	34.21	33.53	18.84	19.31	19.41
3.60	13.30	12.76	12.45	34.91	34.21	33.53	18.86	19.33	19.42
3.70	13.09	12.58	12.25	34.90	34.20	33.53	18.87	19.34	19.44
3.80	12.90	12.38	12.03	34.88	34.19	33.52	18.89	19.36	19.45
3.90	12.68	12.18	11.78	34.86	34.17	33.51	18.90	19.37	19.47
4.00	12.53	12.04	11.67	34.84	34.15	33.50	18.92	19.39	19.48
4.10	12.44	11.84	11.50	34.80	34.13	33.48	18.93	19.40	19.50
4.20	12.24	11.71	11.35	34.77	34.10	33.45	18.95	19.41	19.51
4.30	12.06	11.55	11.16	34.73	34.06	33.42	18.96	19.43	19.53
4.40	11.95	11.37	11.03	34.68	34.02	33.39	18.98	19.44	19.54
4.50	11.77	11.18	10.87	34.63	33.97	33.35	18.99	19.46	19.55
4.60	11.50	11.06	10.63	34.57	33.92	33.30	19.00	19.47	19.57
4.70	11.40	10.89	10.47	34.51	33.87	33.25	19.02	19.48	19.58
4.80	11.19	10.66	10.38	34.44	33.81	33.20	19.03	19.50	19.59
4.90	11.10	10.51	10.20	34.37	33.74	33.14	19.04	19.51	19.61
5.00	10.97	10.34	9.99	34.29	33.67	33.08	19.06	19.52	19.62
5.10	10.79	10.16	9.83	34.21	33.59	33.01	19.07	19.54	19.63
5.20	10.52	10.01	9.57	34.12	33.51	32.93	19.08	19.55	19.64
5.30	10.38	9.89	9.53	34.03	33.43	32.86	19.10	19.56	19.66
5.40	10.23	9.72	9.40	33.93	33.33	32.77	19.11	19.58	19.67
5.50	10.05	9.58	9.11	33.83	33.24	32.69	19.12	19.59	19.68
5.60	9.97	9.38	9.06	33.72	33.14	32.59	19.13	19.60	19.69
5.70	9.66	9.25	8.86	33.60	33.03	32.50	19.14	19.61	19.70
5.80	9.65	9.14	8.74	33.49	32.92	32.40	19.16	19.63	19.71
5.90	9.54	9.01	8.77	33.36	32.80	32.29	19.17	19.64	19.72
6.00	9.28	8.76	8.47	33.23	32.68	32.18	19.18	19.65	19.74

(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=60mA			OIP3 vs FREQ & TEMPERATURE ⁽¹⁾ @ VDS=4V, IDS=60mA			P1dB vs FREQ & TEMPERATURE ^(1,2) @ VDS=4V, IDS=60mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	27.46	26.98	26.62	31.43	31.75	31.71	20.62	20.98	20.85
0.50	26.63	26.32	25.86	31.86	32.09	32.00	20.64	21.00	20.87
0.60	25.91	25.53	25.16	32.27	32.41	32.29	20.67	21.02	20.89
0.70	25.25	24.78	24.41	32.67	32.72	32.57	20.70	21.03	20.91
0.80	24.51	24.04	23.64	33.06	33.03	32.84	20.72	21.05	20.93
0.90	23.79	23.35	22.99	33.43	33.32	33.10	20.75	21.07	20.95
1.00	23.11	22.69	22.29	33.80	33.61	33.35	20.78	21.09	20.97
1.10	22.49	22.04	21.66	34.15	33.88	33.59	20.80	21.10	20.99
1.20	21.87	21.44	21.05	34.50	34.15	33.83	20.83	21.12	21.00
1.30	21.26	20.84	20.48	34.83	34.40	34.06	20.85	21.14	21.02
1.40	20.72	20.28	19.93	35.15	34.65	34.28	20.88	21.16	21.04
1.50	20.21	19.77	19.42	35.46	34.89	34.49	20.90	21.17	21.06
1.60	19.69	19.24	18.91	35.75	35.12	34.69	20.93	21.19	21.08
1.70	19.26	18.79	18.47	36.04	35.34	34.89	20.95	21.21	21.10
1.80	18.79	18.32	18.01	36.31	35.55	35.08	20.97	21.23	21.12
1.90	18.34	17.91	17.58	36.57	35.75	35.26	21.00	21.24	21.14
2.00	17.98	17.52	17.20	36.83	35.95	35.43	21.02	21.26	21.15
2.10	17.54	17.11	16.79	37.06	36.13	35.59	21.04	21.28	21.17
2.20	17.16	16.73	16.40	37.29	36.30	35.74	21.07	21.30	21.19
2.30	16.83	16.36	16.05	37.51	36.47	35.89	21.09	21.32	21.21
2.40	16.48	16.02	15.71	37.71	36.62	36.03	21.11	21.33	21.23
2.50	16.14	15.70	15.38	37.91	36.77	36.16	21.14	21.35	21.25
2.60	15.79	15.34	15.04	38.09	36.90	36.28	21.16	21.37	21.27
2.70	15.49	15.02	14.72	38.26	37.03	36.39	21.18	21.39	21.29
2.80	15.19	14.71	14.41	38.42	37.15	36.50	21.20	21.41	21.31
2.90	14.95	14.50	14.18	38.56	37.26	36.59	21.22	21.43	21.32
3.00	14.64	14.17	13.88	38.70	37.36	36.68	21.25	21.45	21.34
3.10	14.44	13.97	13.67	38.83	37.45	36.76	21.27	21.46	21.36
3.20	14.18	13.71	13.40	38.94	37.53	36.84	21.29	21.48	21.38
3.30	13.92	13.44	13.21	39.04	37.60	36.90	21.31	21.50	21.40
3.40	13.72	13.22	12.91	39.13	37.66	36.96	21.33	21.52	21.42
3.50	13.48	13.01	12.71	39.21	37.71	37.00	21.35	21.54	21.44
3.60	13.28	12.80	12.47	39.27	37.76	37.04	21.37	21.56	21.46
3.70	13.03	12.56	12.24	39.33	37.79	37.07	21.39	21.58	21.47
3.80	12.89	12.39	12.06	39.37	37.82	37.10	21.41	21.60	21.49
3.90	12.65	12.16	11.79	39.41	37.83	37.11	21.43	21.62	21.51
4.00	12.52	11.99	11.68	39.43	37.84	37.12	21.45	21.63	21.53
4.10	12.41	11.88	11.50	39.44	37.84	37.12	21.47	21.65	21.55
4.20	12.20	11.73	11.36	39.43	37.82	37.11	21.49	21.67	21.57
4.30	12.04	11.53	11.18	39.42	37.80	37.09	21.51	21.69	21.59
4.40	11.89	11.35	11.03	39.40	37.77	37.06	21.53	21.71	21.61
4.50	11.75	11.20	10.91	39.36	37.73	37.03	21.54	21.73	21.63
4.60	11.48	10.96	10.67	39.31	37.68	36.99	21.56	21.75	21.64
4.70	11.38	10.82	10.50	39.25	37.62	36.94	21.58	21.77	21.66
4.80	11.16	10.65	10.36	39.18	37.56	36.88	21.60	21.79	21.68
4.90	11.09	10.60	10.21	39.10	37.48	36.81	21.62	21.81	21.70
5.00	10.94	10.39	10.02	39.01	37.39	36.74	21.63	21.83	21.72
5.10	10.77	10.21	9.87	38.90	37.30	36.65	21.65	21.85	21.74
5.20	10.51	10.03	9.65	38.78	37.19	36.56	21.67	21.87	21.76
5.30	10.37	9.83	9.52	38.65	37.08	36.46	21.68	21.89	21.78
5.40	10.18	9.62	9.45	38.51	36.95	36.35	21.70	21.91	21.79
5.50	10.05	9.53	9.16	38.36	36.82	36.24	21.72	21.93	21.81
5.60	9.97	9.46	9.10	38.20	36.68	36.11	21.73	21.95	21.83
5.70	9.68	9.14	8.86	38.03	36.52	35.98	21.75	21.97	21.85
5.80	9.62	9.14	8.70	37.84	36.36	35.84	21.76	21.99	21.87
5.90	9.52	9.04	8.75	37.64	36.19	35.69	21.78	22.01	21.89
6.00	9.23	8.72	8.46	37.43	36.01	35.53	21.79	22.03	21.91

(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		
	40 mA	60 mA	80 mA
0.50	0.08	0.08	0.09
0.70	0.11	0.12	0.13
0.90	0.14	0.15	0.17
1.00	0.16	0.17	0.19
1.90	0.31	0.32	0.36
2.00	0.32	0.34	0.38
2.40	0.39	0.41	0.46
3.00	0.48	0.51	0.57
3.90	0.63	0.67	0.74
5.00	0.81	0.86	0.95
5.80	0.94	1.00	1.11
6.00	0.97	1.03	1.14

(1) F MIN is minimum Noise Figure