

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	20.02	15.36	20.05	15.39	20.31	21.12	20.16	20.91
15.00	21.22	16.22	21.17	16.18	22.82	24.10	22.70	23.93
30.00	22.62	17.15	22.67	17.14	28.66	30.74	28.32	30.23
60.00	23.53	17.74	23.51	17.73	32.60	33.81	33.41	35.32

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	17.56	18.18	20.03	20.90	0.48	0.63	--	--
15.00	17.05	17.50	19.29	20.00	0.48	0.54	0.47	0.54
30.00	18.50	19.00	19.50	20.59	0.39	0.50	0.39	0.47
60.00	18.85	19.20	21.12	21.50	0.34	0.43	0.38	0.51

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	0.30	0.48	0.60	0.35	0.40
0.30	0.21	0.44	0.17	0.27	0.45	0.49
0.40	0.44	0.36	0.62	0.45	0.40	0.39
0.50	0.44	0.41	0.52	0.40	0.49	0.52
0.60	0.35	0.44	0.57	0.38	0.41	0.48
0.70	0.31	0.45	0.54	0.33	0.43	0.55
0.80	0.30	0.46	0.56	0.31	0.41	0.51
0.90	0.35	0.48	0.60	0.36	0.47	0.53
1.00	0.38	0.45	0.61	0.34	0.48	0.53
1.25	0.40	0.50	0.67	0.37	0.53	0.62
1.50	0.38	0.52	0.70	0.38	0.61	0.67
1.75	0.45	0.57	0.77	0.46	0.60	0.72
2.00	0.33	0.54	0.75	0.32	0.57	0.70
2.25	0.38	0.62	0.77	0.38	0.60	0.79
2.50	0.38	0.67	0.87	0.44	0.67	0.81
2.75	0.65	0.85	1.05	0.62	0.86	1.03
3.00	0.40	0.70	0.97	0.35	0.70	0.78
3.25	0.58	0.77	1.02	0.71	0.84	1.04
3.50	0.56	0.84	1.10	0.51	0.88	1.09
3.75	0.50	0.95	1.20	0.48	0.99	1.17
4.00	0.67	0.99	1.31	0.69	1.10	1.25
4.25	0.56	1.08	1.39	0.62	1.18	1.48
4.50	0.80	1.18	1.51	0.56	1.30	1.58
4.75	0.77	1.24	1.49	0.79	1.37	1.71
5.00	0.73	1.37	1.78	0.78	1.65	1.89
5.25	0.88	1.52	1.92	0.78	1.72	1.98
5.50	0.89	1.58	2.06	0.85	1.87	2.29
5.75	1.21	1.85	2.19	1.00	2.00	2.40
6.00	0.93	1.91	2.37	1.00	2.24	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	24.23	23.76	23.11	21.15	21.57	21.32	15.85	16.78	14.95
0.50	23.82	23.29	22.68	21.35	21.76	21.52	15.98	16.89	15.15
0.60	23.25	22.88	22.12	21.55	21.96	21.72	16.11	17.00	15.36
0.80	22.25	21.77	21.18	21.95	22.35	22.11	16.35	17.21	15.74
0.90	21.73	21.22	20.64	22.14	22.53	22.30	16.46	17.31	15.92
1.00	21.20	20.73	20.16	22.33	22.72	22.48	16.57	17.40	16.10
1.10	20.71	20.23	19.68	22.51	22.90	22.67	16.68	17.50	16.27
1.20	20.13	19.65	19.14	22.70	23.08	22.85	16.79	17.58	16.43
1.30	19.61	19.19	18.66	22.88	23.26	23.03	16.89	17.67	16.59
1.40	19.14	18.65	18.21	23.05	23.44	23.20	16.98	17.75	16.75
1.50	18.67	18.29	17.75	23.23	23.61	23.38	17.07	17.83	16.89
1.60	18.18	17.78	17.32	23.40	23.78	23.55	17.16	17.90	17.03
1.70	17.76	17.33	16.89	23.57	23.95	23.71	17.25	17.98	17.17
1.80	17.36	16.96	16.54	23.73	24.11	23.88	17.33	18.04	17.29
1.90	16.95	16.56	16.12	23.89	24.27	24.04	17.40	18.11	17.42
2.00	16.57	16.22	15.76	24.05	24.43	24.20	17.48	18.17	17.53
2.10	16.20	15.79	15.39	24.21	24.59	24.36	17.55	18.22	17.64
2.20	15.83	15.54	15.04	24.36	24.74	24.51	17.61	18.28	17.75
2.30	15.54	15.16	14.72	24.51	24.89	24.66	17.67	18.33	17.85
2.40	15.23	14.87	14.39	24.66	25.04	24.81	17.73	18.38	17.94
2.50	14.90	14.56	14.13	24.80	25.18	24.95	17.78	18.42	18.02
2.60	14.60	14.32	13.79	24.94	25.33	25.10	17.83	18.46	18.10
2.70	14.32	14.02	13.49	25.08	25.47	25.24	17.88	18.49	18.18
2.80	14.05	13.70	13.21	25.21	25.60	25.37	17.92	18.53	18.24
2.90	13.93	13.45	13.03	25.34	25.74	25.51	17.96	18.56	18.31
3.00	13.62	13.26	12.70	25.47	25.87	25.64	17.99	18.58	18.36
3.10	13.39	12.98	12.47	25.59	26.00	25.77	18.02	18.60	18.41
3.20	13.14	12.77	12.28	25.72	26.13	25.90	18.05	18.62	18.45
3.30	12.93	12.54	11.97	25.84	26.25	26.02	18.07	18.64	18.49
3.40	12.67	12.28	11.68	25.95	26.37	26.14	18.09	18.65	18.52
3.50	12.47	12.10	11.50	26.06	26.49	26.26	18.10	18.66	18.55
3.60	12.27	11.86	11.29	26.17	26.61	26.37	18.11	18.66	18.57
3.70	12.03	11.53	11.04	26.28	26.72	26.48	18.12	18.67	18.58
3.80	11.77	11.35	10.81	26.38	26.83	26.59	18.12	18.66	18.59
3.90	11.55	11.16	10.54	26.48	26.94	26.70	18.12	18.66	18.59
4.00	11.33	11.00	10.34	26.58	27.04	26.81	18.12	18.65	18.58
4.10	11.19	10.62	10.23	26.68	27.14	26.91	18.11	18.64	18.57
4.20	10.99	10.44	10.02	26.77	27.24	27.00	18.10	18.62	18.56
4.30	10.78	10.28	9.82	26.86	27.34	27.10	18.08	18.60	18.53
4.40	10.59	10.05	9.58	26.94	27.43	27.19	18.06	18.58	18.50
4.50	10.35	9.80	9.42	27.02	27.52	27.28	18.04	18.55	18.47
4.60	10.00	9.54	9.07	27.10	27.61	27.37	18.01	18.52	18.43
4.70	9.84	9.30	8.93	27.18	27.70	27.46	17.98	18.49	18.38
4.80	9.61	9.13	8.72	27.25	27.78	27.54	17.94	18.45	18.33
4.90	9.40	8.99	8.49	27.32	27.86	27.62	17.90	18.41	18.27
5.00	9.15	8.80	8.26	27.39	27.94	27.69	17.86	18.37	18.20
5.10	8.91	8.58	8.02	27.45	28.02	27.77	17.81	18.32	18.13
5.20	8.70	8.35	7.84	27.51	28.09	27.84	17.76	18.27	18.05
5.30	8.53	8.13	7.71	27.57	28.16	27.91	17.71	18.21	17.97
5.40	8.25	7.95	7.51	27.63	28.23	27.97	17.65	18.15	17.88
5.50	8.08	7.75	7.33	27.68	28.29	28.03	17.58	18.09	17.78
5.60	7.88	7.46	7.09	27.73	28.35	28.09	17.52	18.03	17.68
5.70	7.75	7.30	6.95	27.77	28.41	28.15	17.45	17.96	17.57
5.80	7.60	7.13	6.84	27.81	28.47	28.21	17.37	17.89	17.46
5.90	7.26	6.89	6.50	27.85	28.52	28.26	17.29	17.81	17.34
6.00	6.99	6.73	6.14	27.89	28.57	28.31	17.21	17.73	17.21

(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	24.24	23.66	22.87	21.18	21.45	21.55	18.03	19.27	19.52
0.50	23.81	23.23	22.55	21.38	21.64	21.74	18.19	19.37	19.58
0.60	23.28	22.75	22.15	21.57	21.83	21.93	18.34	19.46	19.64
0.80	22.24	21.77	21.16	21.95	22.20	22.29	18.63	19.64	19.76
0.90	21.77	21.17	20.63	22.14	22.38	22.47	18.77	19.73	19.81
1.00	21.20	20.63	20.18	22.32	22.56	22.65	18.91	19.81	19.87
1.10	20.70	20.21	19.70	22.50	22.73	22.83	19.04	19.89	19.92
1.20	20.18	19.67	19.17	22.68	22.91	23.00	19.17	19.97	19.97
1.30	19.65	19.17	18.70	22.85	23.08	23.17	19.29	20.05	20.02
1.40	19.15	18.68	18.20	23.02	23.25	23.34	19.41	20.12	20.06
1.50	18.70	18.25	17.82	23.19	23.41	23.50	19.52	20.19	20.11
1.60	18.22	17.80	17.38	23.35	23.57	23.66	19.63	20.25	20.15
1.70	17.80	17.35	16.97	23.52	23.73	23.83	19.74	20.32	20.19
1.80	17.42	16.97	16.57	23.67	23.89	23.98	19.84	20.37	20.23
1.90	17.02	16.55	16.16	23.83	24.05	24.14	19.93	20.43	20.27
2.00	16.61	16.18	15.78	23.98	24.20	24.29	20.02	20.49	20.31
2.10	16.23	15.85	15.43	24.13	24.35	24.44	20.11	20.54	20.34
2.20	15.86	15.48	15.09	24.28	24.50	24.59	20.19	20.58	20.37
2.30	15.61	15.15	14.77	24.42	24.64	24.74	20.27	20.63	20.41
2.40	15.25	14.84	14.40	24.56	24.79	24.88	20.34	20.67	20.43
2.50	14.97	14.56	14.16	24.70	24.93	25.02	20.41	20.71	20.46
2.60	14.65	14.23	13.83	24.83	25.07	25.16	20.47	20.75	20.49
2.70	14.36	13.94	13.55	24.97	25.20	25.30	20.53	20.78	20.51
2.80	14.09	13.69	13.27	25.09	25.33	25.43	20.58	20.81	20.53
2.90	13.95	13.53	13.08	25.22	25.46	25.56	20.63	20.84	20.55
3.00	13.66	13.20	12.74	25.34	25.59	25.69	20.68	20.86	20.57
3.10	13.46	13.00	12.56	25.46	25.72	25.82	20.72	20.88	20.59
3.20	13.22	12.75	12.31	25.58	25.84	25.94	20.76	20.90	20.60
3.30	12.97	12.50	12.03	25.69	25.96	26.07	20.79	20.92	20.62
3.40	12.73	12.26	11.74	25.80	26.08	26.19	20.82	20.93	20.63
3.50	12.54	12.03	11.54	25.91	26.19	26.30	20.84	20.94	20.64
3.60	12.34	11.85	11.35	26.01	26.31	26.42	20.86	20.95	20.65
3.70	12.10	11.59	11.07	26.11	26.42	26.53	20.87	20.95	20.65
3.80	11.85	11.35	10.83	26.21	26.52	26.64	20.88	20.95	20.66
3.90	11.64	11.12	10.63	26.31	26.63	26.75	20.89	20.95	20.66
4.00	11.43	10.89	10.38	26.40	26.73	26.85	20.89	20.95	20.66
4.10	11.28	10.77	10.24	26.49	26.83	26.96	20.88	20.94	20.66
4.20	11.10	10.61	10.08	26.57	26.93	27.06	20.88	20.93	20.66
4.30	10.88	10.36	9.87	26.66	27.03	27.15	20.86	20.91	20.65
4.40	10.67	10.18	9.63	26.74	27.12	27.25	20.84	20.90	20.65
4.50	10.43	9.95	9.50	26.81	27.21	27.34	20.82	20.88	20.64
4.60	10.07	9.60	9.13	26.89	27.30	27.43	20.80	20.85	20.63
4.70	9.94	9.50	8.95	26.96	27.38	27.52	20.76	20.83	20.62
4.80	9.70	9.26	8.82	27.03	27.46	27.61	20.73	20.80	20.61
4.90	9.48	9.05	8.60	27.09	27.54	27.69	20.69	20.77	20.59
5.00	9.23	8.79	8.31	27.15	27.62	27.77	20.64	20.73	20.58
5.10	8.99	8.56	8.13	27.21	27.70	27.85	20.59	20.70	20.56
5.20	8.78	8.37	7.93	27.27	27.77	27.93	20.54	20.66	20.54
5.30	8.61	8.18	7.75	27.32	27.84	28.00	20.48	20.61	20.52
5.40	8.32	7.98	7.56	27.37	27.91	28.07	20.42	20.57	20.49
5.50	8.20	7.81	7.43	27.42	27.97	28.14	20.35	20.52	20.47
5.60	7.98	7.51	7.14	27.46	28.03	28.21	20.28	20.47	20.44
5.70	7.85	7.41	7.04	27.50	28.09	28.28	20.20	20.41	20.41
5.80	7.65	7.25	6.95	27.54	28.15	28.34	20.12	20.35	20.38
5.90	7.32	6.93	6.56	27.57	28.21	28.40	20.04	20.29	20.35
6.00	7.05	6.65	6.26	27.60	28.26	28.45	19.95	20.23	20.32

(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	0.155	0.348	0.154	0.345		
15.00	0.153	0.347	0.135	0.306	0.134	0.302
20.00	0.166	0.370	0.134	0.303		
30.00	0.179	0.395	0.138	0.309	0.129	0.291
40.00	0.177	0.390	0.131	0.296	0.135	0.306
60.00	0.170	0.378	0.141	0.320	0.156	0.349

FREQUENCY (GHz)	F _{MIN} (dB) (1)		
	VDS=3V		
	10 mA	15 mA	20 mA
0.50	0.08	0.07	0.07
0.70	0.12	0.10	0.10
0.90	0.15	0.14	0.13
1.00	0.17	0.15	0.15
1.90	0.33	0.29	0.29
2.00	0.35	0.31	0.30
2.40	0.42	0.37	0.36
3.00	0.52	0.46	0.46
3.90	0.68	0.60	0.59
5.00	0.87	0.77	0.76
5.80	1.01	0.90	0.88
6.00	1.04	0.93	0.91

(1) F MIN is minimum Noise Figure