

*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) <sup>(1)</sup>				OIP3 (dBm) <sup>(1)</sup>			
	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 <sup>(1,2)</sup> (dBm)				NOISE FIGURE <sup>(1)</sup> (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 <sup>(1)</sup> @ VDS=3V, IDS=60mA			NF vs FREQ & TEMPERATURE <sup>(1)</sup> @ VDS=4V, IDS=60mA		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
	0.25	0.27	0.26	0.40	0.26	0.31
0.30	0.27	0.31	0.45	0.25	0.35	0.51
0.40	0.38	0.26	0.40	0.40	0.29	0.44
0.50	0.40	0.30	0.46	0.40	0.34	0.48
0.60	0.32	0.30	0.46	0.35	0.38	0.53
0.70	0.25	0.34	0.49	0.33	0.38	0.55
0.80	0.31	0.29	0.44	0.30	0.35	0.51
0.90	0.31	0.34	0.50	0.31	0.38	0.56
1.00	0.32	0.34	0.52	0.35	0.40	0.56
1.25	0.33	0.40	0.58	0.36	0.45	0.62
1.50	0.33	0.46	0.65	0.35	0.54	0.72
1.75	0.42	0.46	0.65	0.42	0.52	0.71
2.00	0.28	0.43	0.65	0.30	0.51	0.69
2.25	0.37	0.56	0.76	0.39	0.55	0.78
2.50	0.36	0.60	0.85	0.41	0.61	0.85
2.75	0.63	0.74	1.05	0.61	0.85	1.05
3.00	0.45	0.61	0.94	0.42	0.70	1.01
3.25	0.53	0.77	1.09	0.51	0.79	1.23
3.50	0.54	0.82	1.15	0.46	0.90	1.33
3.75	0.57	0.88	1.27	0.59	0.98	1.41
4.00	0.58	0.95	1.42	0.66	0.99	1.50
4.25	0.49	1.08	1.51	0.57	1.12	1.69
4.50	0.78	1.19	1.65	0.57	1.27	1.85
4.75	0.79	1.25	1.83	0.86	1.36	2.02
5.00	0.87	1.47	1.95	1.00	1.46	2.16
5.25	0.72	1.54	2.13	0.78	1.60	2.34
5.50	0.79	1.79	2.45	0.60	1.73	2.49
5.75	0.93	1.80	2.44	1.09	1.93	2.65
6.00	0.83	1.98	2.67	1.25	2.03	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 <sup>(1)</sup> @ VDS=3V, IDS=60mA			P1dB vs FREQ & TEMPERATURE <sup>(1,2)</sup> @ VDS=3V, IDS=60mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	27.44	27.18	26.59	32.59	32.19	31.58	18.79	19.05	19.13
0.50	26.86	26.34	25.99	32.70	32.28	31.66	18.81	19.07	19.14
0.60	26.11	25.71	25.26	32.81	32.36	31.73	18.82	19.09	19.15
0.70	25.33	24.92	24.51	32.91	32.44	31.80	18.84	19.11	19.17
0.80	24.60	24.24	23.72	33.00	32.52	31.86	18.85	19.12	19.18
0.90	23.96	23.53	23.04	33.09	32.59	31.92	18.87	19.14	19.18
1.00	23.28	22.89	22.49	33.18	32.66	31.98	18.88	19.15	19.19
1.10	22.72	22.28	21.86	33.26	32.72	32.03	18.89	19.16	19.20
1.20	22.03	21.63	21.28	33.33	32.78	32.08	18.90	19.18	19.20
1.30	21.46	21.06	20.66	33.40	32.83	32.13	18.91	19.19	19.21
1.40	20.94	20.49	20.11	33.47	32.88	32.17	18.91	19.19	19.21
1.50	20.39	20.01	19.66	33.53	32.93	32.21	18.92	19.20	19.22
1.60	19.90	19.51	19.18	33.59	32.97	32.24	18.92	19.21	19.22
1.70	19.44	19.02	18.69	33.64	33.01	32.28	18.93	19.21	19.22
1.80	18.99	18.61	18.23	33.69	33.05	32.30	18.93	19.21	19.22
1.90	18.55	18.17	17.80	33.73	33.08	32.33	18.93	19.22	19.22
2.00	18.14	17.74	17.37	33.77	33.10	32.35	18.93	19.22	19.21
2.10	17.75	17.35	16.97	33.80	33.12	32.36	18.93	19.22	19.21
2.20	17.35	16.98	16.61	33.83	33.14	32.38	18.93	19.21	19.20
2.30	17.01	16.61	16.25	33.85	33.16	32.39	18.93	19.21	19.20
2.40	16.67	16.28	15.89	33.87	33.16	32.39	18.92	19.21	19.19
2.50	16.38	16.01	15.61	33.88	33.17	32.39	18.92	19.20	19.18
2.60	16.04	15.67	15.25	33.89	33.17	32.39	18.91	19.19	19.17
2.70	15.74	15.34	14.91	33.89	33.17	32.39	18.90	19.18	19.16
2.80	15.47	15.05	14.65	33.89	33.16	32.38	18.89	19.17	19.15
2.90	15.32	14.87	14.44	33.88	33.15	32.37	18.88	19.16	19.14
3.00	14.99	14.54	14.10	33.87	33.13	32.35	18.87	19.15	19.13
3.10	14.76	14.32	13.87	33.86	33.11	32.33	18.86	19.13	19.11
3.20	14.53	14.08	13.61	33.84	33.09	32.30	18.85	19.12	19.10
3.30	14.27	13.81	13.33	33.81	33.06	32.28	18.83	19.10	19.08
3.40	13.99	13.53	13.02	33.78	33.03	32.25	18.82	19.08	19.06
3.50	13.78	13.33	12.81	33.75	32.99	32.21	18.80	19.06	19.04
3.60	13.56	13.09	12.59	33.70	32.95	32.17	18.78	19.04	19.02
3.70	13.30	12.83	12.31	33.66	32.91	32.13	18.76	19.02	19.00
3.80	13.05	12.56	12.04	33.61	32.86	32.08	18.74	18.99	18.98
3.90	12.81	12.30	11.81	33.56	32.81	32.03	18.72	18.97	18.96
4.00	12.58	12.06	11.57	33.50	32.75	31.98	18.70	18.94	18.93
4.10	12.42	11.94	11.43	33.43	32.69	31.92	18.68	18.91	18.91
4.20	12.23	11.74	11.27	33.36	32.62	31.86	18.65	18.88	18.88
4.30	12.01	11.51	11.02	33.29	32.55	31.80	18.63	18.85	18.86
4.40	11.80	11.28	10.78	33.21	32.48	31.73	18.60	18.82	18.83
4.50	11.54	11.06	10.60	33.13	32.40	31.66	18.57	18.79	18.80
4.60	11.17	10.69	10.23	33.04	32.32	31.58	18.54	18.75	18.77
4.70	11.02	10.56	10.09	32.94	32.23	31.50	18.51	18.72	18.74
4.80	10.79	10.37	9.92	32.85	32.14	31.42	18.48	18.68	18.70
4.90	10.58	10.12	9.73	32.74	32.05	31.33	18.45	18.64	18.67
5.00	10.30	9.88	9.42	32.63	31.95	31.24	18.41	18.60	18.64
5.10	10.06	9.64	9.21	32.52	31.85	31.15	18.38	18.56	18.60
5.20	9.82	9.43	9.02	32.40	31.74	31.05	18.34	18.51	18.56
5.30	9.65	9.24	8.85	32.28	31.63	30.95	18.31	18.47	18.53
5.40	9.40	9.08	8.70	32.15	31.52	30.85	18.27	18.42	18.49
5.50	9.23	8.88	8.51	32.02	31.40	30.74	18.23	18.38	18.45
5.60	9.04	8.60	8.23	31.89	31.27	30.62	18.19	18.33	18.41
5.70	8.90	8.46	8.19	31.74	31.15	30.51	18.15	18.28	18.36
5.80	8.72	8.29	8.01	31.60	31.01	30.39	18.10	18.23	18.32
5.90	8.35	7.93	7.64	31.45	30.88	30.26	18.06	18.17	18.28
6.00	8.09	7.72	7.34	31.29	30.74	30.14	18.01	18.12	18.23

(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 <sup>(1)</sup> @ VDS=4V, IDS=60mA			P1dB vs FREQ & TEMPERATURE <sup>(1,2)</sup> @ VDS=4V, IDS=60mA		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
0.40	27.61	27.07	26.52	32.28	32.21	31.90	20.95	21.09	21.09
0.50	26.77	26.34	25.91	32.59	32.45	32.12	20.98	21.12	21.10
0.60	26.10	25.64	25.16	32.89	32.68	32.33	21.00	21.16	21.11
0.70	25.31	24.93	24.44	33.17	32.90	32.53	21.03	21.19	21.12
0.80	24.62	24.22	23.78	33.45	33.11	32.73	21.06	21.22	21.13
0.90	23.93	23.51	23.09	33.72	33.32	32.92	21.09	21.24	21.14
1.00	23.29	22.87	22.46	33.97	33.52	33.10	21.11	21.27	21.15
1.10	22.64	22.25	21.82	34.22	33.71	33.27	21.13	21.29	21.16
1.20	22.06	21.65	21.23	34.46	33.89	33.44	21.16	21.32	21.17
1.30	21.45	21.06	20.66	34.69	34.06	33.60	21.18	21.34	21.18
1.40	20.88	20.51	20.11	34.91	34.23	33.75	21.20	21.36	21.18
1.50	20.40	20.01	19.65	35.12	34.39	33.90	21.21	21.38	21.19
1.60	19.89	19.52	19.21	35.32	34.54	34.04	21.23	21.40	21.20
1.70	19.42	19.00	18.65	35.51	34.68	34.17	21.25	21.41	21.20
1.80	18.97	18.60	18.22	35.69	34.82	34.29	21.26	21.43	21.21
1.90	18.52	18.18	17.81	35.86	34.94	34.41	21.28	21.44	21.21
2.00	18.10	17.73	17.36	36.02	35.06	34.52	21.29	21.45	21.21
2.10	17.69	17.36	17.00	36.18	35.17	34.62	21.30	21.46	21.21
2.20	17.32	17.00	16.62	36.32	35.27	34.72	21.31	21.47	21.22
2.30	17.00	16.60	16.24	36.45	35.37	34.81	21.32	21.48	21.22
2.40	16.64	16.25	15.88	36.57	35.45	34.89	21.33	21.49	21.22
2.50	16.35	15.99	15.62	36.69	35.53	34.96	21.34	21.49	21.22
2.60	16.02	15.65	15.27	36.79	35.60	35.03	21.34	21.50	21.22
2.70	15.73	15.33	14.90	36.89	35.67	35.09	21.35	21.50	21.21
2.80	15.45	15.05	14.64	36.97	35.72	35.14	21.35	21.50	21.21
2.90	15.28	14.86	14.44	37.05	35.77	35.19	21.35	21.50	21.21
3.00	14.96	14.53	14.10	37.11	35.80	35.23	21.35	21.50	21.21
3.10	14.73	14.29	13.88	37.17	35.83	35.26	21.35	21.50	21.20
3.20	14.50	14.06	13.61	37.21	35.86	35.28	21.35	21.49	21.20
3.30	14.24	13.79	13.30	37.25	35.87	35.30	21.35	21.48	21.19
3.40	13.97	13.51	13.02	37.28	35.88	35.31	21.34	21.48	21.18
3.50	13.75	13.30	12.83	37.30	35.88	35.31	21.34	21.47	21.18
3.60	13.55	13.10	12.60	37.30	35.87	35.30	21.33	21.46	21.17
3.70	13.28	12.80	12.32	37.30	35.85	35.29	21.32	21.45	21.16
3.80	13.04	12.56	12.05	37.29	35.82	35.27	21.32	21.43	21.15
3.90	12.79	12.32	11.84	37.27	35.79	35.25	21.31	21.42	21.14
4.00	12.55	12.08	11.57	37.24	35.75	35.21	21.30	21.40	21.13
4.10	12.41	11.92	11.43	37.20	35.70	35.17	21.28	21.39	21.12
4.20	12.24	11.75	11.27	37.15	35.64	35.13	21.27	21.37	21.11
4.30	12.00	11.52	11.04	37.09	35.58	35.07	21.26	21.35	21.10
4.40	11.78	11.28	10.82	37.02	35.50	35.01	21.24	21.33	21.09
4.50	11.55	11.05	10.63	36.94	35.42	34.94	21.22	21.31	21.07
4.60	11.17	10.71	10.23	36.86	35.33	34.86	21.21	21.28	21.06
4.70	11.03	10.57	10.10	36.76	35.23	34.78	21.19	21.26	21.04
4.80	10.79	10.39	9.98	36.65	35.13	34.69	21.17	21.23	21.03
4.90	10.56	10.16	9.74	36.53	35.01	34.59	21.14	21.20	21.01
5.00	10.32	9.89	9.43	36.41	34.89	34.49	21.12	21.17	20.99
5.10	10.06	9.67	9.29	36.27	34.76	34.37	21.10	21.14	20.98
5.20	9.83	9.41	9.05	36.13	34.63	34.26	21.07	21.11	20.96
5.30	9.66	9.30	8.89	35.97	34.48	34.13	21.05	21.07	20.94
5.40	9.43	9.08	8.72	35.81	34.33	34.00	21.02	21.04	20.92
5.50	9.24	8.87	8.57	35.63	34.17	33.85	20.99	21.00	20.90
5.60	9.04	8.61	8.23	35.45	34.00	33.71	20.96	20.96	20.88
5.70	8.91	8.51	8.15	35.25	33.82	33.55	20.93	20.93	20.86
5.80	8.73	8.34	8.05	35.05	33.63	33.39	20.90	20.88	20.84
5.90	8.38	8.00	7.68	34.84	33.44	33.22	20.86	20.84	20.81
6.00	8.08	7.80	7.39	34.62	33.24	33.04	20.83	20.80	20.79

(1) Includes test board loss

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

## Typical Performance Data

IDS (mA)	F <sub>MIN</sub> (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 <sub>MIN</sub> (dB) (1)		
	VDS=3V		
	40 mA	60 mA	80 mA
0.50	0.07	0.08	0.09
0.70	0.10	0.11	0.12
0.90	0.13	0.14	0.16
1.00	0.15	0.16	0.18
1.90	0.28	0.30	0.34
2.00	0.30	0.32	0.36
2.40	0.36	0.39	0.43
3.00	0.45	0.48	0.54
3.90	0.58	0.63	0.71
5.00	0.75	0.81	0.91
5.80	0.87	0.94	1.06
6.00	0.90	0.97	1.09

(1) F MIN is minimum Noise Figure