

Signal Generator

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (GHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-40 dBm	-30 dBm	-20 dBm	-10 dBm	-5 dBm	0 dBm	+5 dBm	+10 dBm	+15 dBm	+20 dBm
0.1	0.16	-0.26	0.33	0.14	0.10	-0.07	0.34	0.31	0.26	0.31
0.5	0.40	0.33	0.20	-0.03	0.34	0.25	0.36	0.36	0.26	0.36
1.0	0.03	0.00	-0.08	0.29	0.18	0.39	0.24	0.13	0.08	0.12
1.5	0.23	-0.13	0.27	0.09	0.06	0.60	0.38	0.37	0.23	0.81
2.0	0.06	-0.17	0.33	0.19	0.11	0.35	0.12	0.13	0.02	0.64
2.5	0.15	0.09	0.07	0.41	-0.06	0.28	0.03	0.06	0.00	0.70
3.0	0.13	0.04	0.03	-0.04	0.03	0.26	0.08	0.06	0.13	0.77
4.0	-0.04	0.00	0.47	0.42	0.19	0.21	0.08	0.08	-0.04	0.45
5.0	0.63	0.25	0.12	0.45	0.16	0.21	0.09	0.10	0.51	0.37
6.0	0.29	0.17	0.06	0.48	0.38	0.33	0.30	0.23	0.16	0.59
7.0	0.19	0.17	0.51	0.32	0.37	0.45	0.30	0.35	0.14	0.51
8.0	0.64	0.28	0.34	0.32	0.23	0.28	0.15	0.39	0.20	0.56
9.0	0.10	0.10	0.45	0.46	0.51	0.52	0.61	0.17	0.45	0.46
10.0	0.04	0.52	0.52	0.55	-0.02	0.05	0.54	0.25	0.09	0.48
11.0	0.37	0.51	0.27	0.31	0.38	0.29	0.30	0.07	0.51	0.36
12.0	0.19	0.23	0.04	0.10	0.20	0.12	0.51	0.51	0.48	0.34
13.0	0.40	0.36	0.11	0.12	0.11	0.09	0.34	0.50	0.37	0.57
14.0	0.38	0.18	0.26	0.26	0.29	0.22	0.69	0.16	0.56	0.74
15.0	0.24	0.13	0.10	0.06	0.11	0.09	0.79	0.25	0.64	0.73
16.0	0.29	-0.05	0.21	0.52	0.21	0.51	0.22	0.33	0.73	0.80
17.0	0.11	-0.02	0.40	0.40	0.52	0.15	0.28	0.28	0.68	0.84
18.0	0.30	0.13	0.32	0.26	0.34	0.06	0.32	0.41	0.11	0.95
19.0	0.44	0.42	0.84	0.36	0.45	0.37	0.48	0.36	0.23	0.71
20.0	0.30	0.72	0.58	0.68	0.41	0.80	0.36	0.57	0.87	1.25
20.5	0.43	0.19	0.47	0.50	0.52	0.47	0.65	0.47	0.32	0.86
21.0	-0.18	0.14	0.29	0.31	0.39	0.62	0.55	0.91	0.53	1.29
21.5	0.44	-0.04	0.18	0.20	0.24	0.22	0.17	-0.07	0.07	0.63
22.0	0.07	0.10	0.22	0.22	0.23	1.11	0.72	0.65	0.60	1.00
22.5	0.58	0.46	0.53	0.21	0.44	0.29	0.05	0.51	0.44	0.48
23.0	0.32	0.77	0.36	0.47	0.43	0.55	0.11	0.51	0.37	1.07
23.5	0.25	0.27	0.42	0.45	0.29	0.55	0.13	0.17	0.43	0.50
24.0	0.55	0.42	0.44	0.44	0.28	0.58	0.32	0.23	0.58	0.25
24.5	0.22	0.32	0.42	0.55	0.06	0.43	0.07	0.40	0.45	0.78
25.0	0.47	0.52	0.10	0.34	0.22	0.17	-0.12	0.24	0.26	0.40
25.5	-0.08	0.20	0.58	0.41	0.25	0.22	0.07	0.08	0.43	0.96
26.0	0.36	0.48	0.66	0.18	0.38	0.03	-0.28	-0.10	0.24	0.20
26.5	0.02	0.25	0.62	0.24	0.19	0.31	0.73	1.03	0.95	1.09
27.0	0.66	0.63	0.47	0.59	0.06	0.19	-0.28	-0.04	-0.34	-0.28
27.5	0.27	0.42	0.47	0.17	0.09	0.19	0.11	0.55	0.87	0.97
28.0	0.08	0.37	0.54	0.29	0.22	0.32	-0.12	0.14	0.45	0.23
28.5	0.17	0.24	-0.02	0.21	0.44	0.35	-0.56	0.14	0.48	0.41
29.0	0.15	0.15	0.19	0.03	0.37	0.34	0.11	0.21	0.13	0.54
29.5	0.10	0.03	0.14	0.48	0.43	0.56	-0.14	0.23	0.62	0.75
30.0	0.53	0.27	0.39	0.41	0.08	0.40	0.14	0.27	0.53	0.73
30.5	0.38	0.38	0.55	0.63	0.27	0.11	0.42	0.59	0.51	0.89
31.0	0.45	0.68	0.54	0.06	0.12	0.24	0.26	0.85	0.67	0.66
31.5	0.16	0.48	-0.09	0.27	0.00	0.27	0.36	0.57	0.47	0.59
32.0	-0.05	0.39	0.25	0.11	0.25	0.19	0.38	0.65	0.51	0.75
32.5	0.39	0.25	0.24	0.59	0.32	0.04	0.43	0.69	0.52	0.23
33.0	0.38	-0.16	0.31	0.25	0.34	0.46	0.21	0.45	0.31	0.41

Signal Generator

Typical Performance Data

Test Conditions: Temperature = +25°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dB)									
	0.1 GHz	0.5 GHz	1 GHz	5 GHz	10 GHz	15 GHz	20 GHz	25 GHz	30 GHz	33 GHz
-40	0.16	0.40	0.03	0.63	0.04	0.24	0.30	0.47	0.53	0.38
-39	0.16	0.30	0.03	0.55	0.14	0.31	0.34	0.45	0.44	0.36
-38	0.16	0.20	0.02	0.47	0.24	0.38	0.39	0.42	0.34	0.34
-37	0.15	0.09	0.02	0.39	0.35	0.45	0.44	0.40	0.25	0.33
-36	0.15	-0.01	0.02	0.30	0.45	0.51	0.49	0.37	0.15	0.31
-35	0.15	-0.11	0.01	0.22	0.55	0.58	0.54	0.34	0.06	0.30
-34	0.07	-0.02	0.01	0.23	0.54	0.49	0.58	0.38	0.10	0.21
-33	-0.01	0.07	0.01	0.23	0.54	0.40	0.61	0.41	0.14	0.12
-32	-0.09	0.16	0.01	0.24	0.53	0.31	0.65	0.45	0.18	0.03
-31	-0.18	0.25	0.00	0.25	0.53	0.22	0.68	0.48	0.22	-0.06
-30	-0.26	0.33	0.00	0.25	0.52	0.13	0.72	0.52	0.27	-0.16
-28	-0.21	0.29	0.01	0.21	0.55	0.14	0.53	0.32	0.35	0.05
-26	-0.17	0.25	0.02	0.16	0.58	0.16	0.34	0.12	0.43	0.27
-24	-0.05	0.23	0.00	0.13	0.58	0.15	0.31	0.04	0.45	0.36
-22	0.14	0.22	-0.04	0.13	0.55	0.13	0.45	0.07	0.42	0.33
-20	0.33	0.20	-0.08	0.12	0.52	0.10	0.58	0.10	0.39	0.31
-18	0.29	0.13	0.10	0.07	0.30	0.14	0.52	0.08	0.43	0.30
-16	0.25	0.06	0.28	0.02	0.08	0.17	0.45	0.07	0.47	0.29
-14	0.21	0.01	0.35	0.09	0.09	0.16	0.48	0.11	0.47	0.28
-12	0.17	-0.01	0.32	0.27	0.32	0.11	0.58	0.23	0.44	0.26
-10	0.14	-0.03	0.29	0.45	0.55	0.06	0.68	0.34	0.41	0.25
-8	0.12	0.12	0.25	0.33	0.33	0.08	0.57	0.29	0.28	0.28
-7	0.12	0.19	0.23	0.27	0.21	0.09	0.52	0.27	0.22	0.30
-6	0.11	0.26	0.21	0.22	0.10	0.10	0.47	0.25	0.15	0.32
-5	0.10	0.34	0.18	0.16	-0.02	0.11	0.41	0.22	0.08	0.34
-4	0.07	0.32	0.23	0.17	0.00	0.11	0.49	0.21	0.15	0.37
-3	0.03	0.30	0.27	0.18	0.01	0.10	0.57	0.20	0.21	0.39
-2	0.00	0.28	0.31	0.19	0.02	0.10	0.65	0.19	0.27	0.41
-1	-0.03	0.27	0.35	0.20	0.03	0.09	0.73	0.18	0.34	0.43
0	-0.07	0.25	0.39	0.21	0.05	0.09	0.80	0.17	0.40	0.46
+1	0.01	0.27	0.36	0.18	0.14	0.23	0.72	0.11	0.35	0.41
+2	0.09	0.29	0.33	0.16	0.24	0.37	0.63	0.05	0.30	0.36
+3	0.17	0.32	0.30	0.14	0.34	0.51	0.54	-0.01	0.25	0.31
+4	0.25	0.34	0.27	0.11	0.44	0.65	0.45	-0.06	0.20	0.26
+5	0.34	0.36	0.24	0.09	0.54	0.79	0.36	-0.12	0.14	0.21
+6	0.33	0.36	0.22	0.09	0.48	0.68	0.40	-0.05	0.17	0.26
+7	0.32	0.36	0.20	0.09	0.42	0.58	0.44	0.02	0.20	0.31
+8	0.32	0.36	0.18	0.10	0.37	0.47	0.48	0.09	0.22	0.35
+9	0.31	0.36	0.16	0.10	0.31	0.36	0.52	0.17	0.25	0.40
+10	0.31	0.36	0.13	0.10	0.25	0.25	0.57	0.24	0.27	0.45
+11	0.30	0.34	0.12	0.18	0.22	0.33	0.63	0.24	0.32	0.42
+12	0.29	0.32	0.11	0.26	0.19	0.41	0.69	0.25	0.37	0.39
+13	0.28	0.30	0.10	0.34	0.15	0.49	0.75	0.25	0.43	0.37
+14	0.27	0.28	0.09	0.43	0.12	0.56	0.81	0.26	0.48	0.34
+15	0.26	0.26	0.08	0.51	0.09	0.64	0.87	0.26	0.53	0.31
+16	0.27	0.28	0.09	0.48	0.17	0.66	0.95	0.29	0.57	0.33
+17	0.28	0.30	0.10	0.45	0.25	0.68	1.02	0.32	0.61	0.35
+18	0.29	0.32	0.10	0.43	0.32	0.70	1.10	0.35	0.65	0.37
+19	0.30	0.34	0.11	0.40	0.40	0.71	1.17	0.38	0.69	0.39
+20	0.31	0.36	0.12	0.37	0.48	0.73	1.25	0.40	0.73	0.41

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc)					
	F2			F3		
	-10 dBm	0 dBm	+10 dBm	-10 dBm	0 dBm	+10 dBm
0.1	-50.24	-50.62	-33.63	-8.80	-8.76	-8.67
0.5	-40.50	-39.56	-20.62	-12.35	-12.50	-12.19
1.0	-39.63	-19.63	-19.19	-12.45	-12.61	-12.54
1.5	-34.92	-18.48	-18.04	-14.76	-13.79	-13.80
2.0	-33.10	-18.63	-18.04	-14.97	-13.89	-13.98
2.5	-28.21	-17.02	-16.38	-16.13	-15.39	-15.51
3.0	-25.20	-17.03	-16.35	-15.04	-15.14	-15.29
4.0	-18.47	-17.37	-16.40	-10.09	-14.08	-14.27
5.0	-13.90	-17.84	-16.77	-10.39	-17.47	-17.67
6.0	-10.25	-16.90	-15.73	-8.67	-17.78	-17.25
7.0	-10.26	-15.29	-14.85	-9.37	-21.34	-20.02
8.0	-14.23	-14.05	-14.07	-21.44	-20.61	-22.44
9.0	-15.12	-14.75	-14.96	-26.83	-26.62	-33.69
10.0	-13.63	-13.69	-14.69	-33.35	-38.25	-33.46
11.0	-12.71	-12.95	-13.92	-41.70	-40.96	-30.10
12.0	-17.39	-17.87	-19.36	-42.68	-37.58	-28.86
13.0	-19.24	-20.45	-20.67	-41.65	-36.55	-27.91
14.0	-21.12	-24.98	-22.93	-40.32	-37.46	-24.15
15.0	-31.52	-15.08	-20.98	-46.03	-26.27	-26.14
16.0	-29.57	-41.51	-21.95	-39.39	-47.92	-25.02
17.0	-31.37	-19.36	-23.26	-54.04	-26.61	-25.64
18.0	-28.15	-14.46	-13.91	-54.94	-35.95	-24.68
19.0	-31.56	-16.54	-12.94	-60.31	-35.41	-27.94
20.0	-29.16	-13.55	-10.12	-59.71	-34.94	-32.65
20.5	-28.78	-19.15	-11.24	-60.52	-44.55	-34.68
21.0	-27.53	-10.58	-8.10	-59.71	-45.31	-34.24
21.5	-28.03	-11.04	-8.15	-59.58	-45.46	-33.65
22.0	-32.84	-15.41	-10.61	-59.03	-42.15	-30.76
22.5	-24.76	-19.69	-11.22	-54.90	-45.40	-30.08
23.0	-24.08	-17.75	-8.55	-57.65	-44.11	-28.10
23.5	-25.44	-20.83	-13.18	-58.98	-48.84	-34.18
24.0	-30.45	-24.06	-16.29	-60.09	-53.43	-38.36
24.5	-27.84	-23.00	-13.99	-58.57	-55.59	-38.94
25.0	-30.42	-25.69	-14.91	-55.23	-59.87	-44.65
25.5	-34.30	-25.73	-14.06	-57.89	-58.71	-45.85
26.0	-33.17	-26.13	-15.46	-59.23	-61.13	-50.72
26.5	-38.69	-28.06	-18.46	-57.93	-65.80	-58.38
27.0	-40.56	-30.84	-21.77	-57.98	-68.84	-61.20
27.5	-36.68	-30.25	-19.25	-61.12	-66.27	-56.33
28.0	-44.02	-32.20	-20.44	-57.87	-68.96	-63.70
28.5	-44.07	-32.42	-22.36	-58.71	-66.66	-63.64
29.0	-37.47	-33.73	-26.82	-59.19	-68.53	-69.86
29.5	-43.23	-35.46	-28.85	-57.55	-69.98	-71.59
30.0	-50.75	-40.67	-29.26	-57.35	-70.90	-70.46
30.5	-47.36	-40.66	-30.78	--	--	--
31.0	-50.23	-41.41	-32.20	--	--	--
31.5	-48.65	-40.78	-32.14	--	--	--
32.0	-47.95	-39.85	-31.24	--	--	--
32.5	-45.92	-37.26	-28.72	--	--	--
33.0	-44.69	-35.09	-27.51	--	--	--

Note: No sub-harmonics below 22 GHz. Testing limited to 90 GHz due to setup limitations.

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc)								
	F0.5			F1.5			F2.5		
	-10 dBm	0 dBm	+10 dBm	-10 dBm	0 dBm	+10 dBm	-10 dBm	0 dBm	+10 dBm
0.1	--	--	--	--	--	--	--	--	--
0.5	--	--	--	--	--	--	--	--	--
1.0	--	--	--	--	--	--	--	--	--
1.5	--	--	--	--	--	--	--	--	--
2.0	--	--	--	--	--	--	--	--	--
2.5	--	--	--	--	--	--	--	--	--
3.0	--	--	--	--	--	--	--	--	--
4.0	--	--	--	--	--	--	--	--	--
5.0	--	--	--	--	--	--	--	--	--
6.0	--	--	--	--	--	--	--	--	--
7.0	--	--	--	--	--	--	--	--	--
8.0	--	--	--	--	--	--	--	--	--
9.0	--	--	--	--	--	--	--	--	--
10.0	--	--	--	--	--	--	--	--	--
11.0	--	--	--	--	--	--	--	--	--
12.0	--	--	--	--	--	--	--	--	--
13.0	--	--	--	--	--	--	--	--	--
14.0	--	--	--	--	--	--	--	--	--
15.0	--	--	--	--	--	--	--	--	--
16.0	--	--	--	--	--	--	--	--	--
17.0	--	--	--	--	--	--	--	--	--
18.0	--	--	--	--	--	--	--	--	--
19.0	--	--	--	--	--	--	--	--	--
20.0	--	--	--	--	--	--	--	--	--
20.5	--	--	--	--	--	--	--	--	--
21.0	--	--	--	--	--	--	--	--	--
21.5	--	--	--	--	--	--	--	--	--
22.0	-54.60	-55.90	-56.24	-53.81	-62.20	-64.33	-62.79	-72.81	-74.88
22.5	-55.79	-57.06	-59.58	-49.71	-52.51	-55.61	-64.76	-70.79	-72.40
23.0	-58.27	-58.30	-60.93	-53.68	-58.05	-60.78	-62.72	-71.59	-79.02
23.5	-64.53	-63.70	-67.57	-51.82	-60.69	-66.87	-65.07	-73.62	-82.10
24.0	-60.88	-59.79	-62.99	-50.11	-57.51	-65.49	-64.58	-72.93	-81.67
24.5	-57.38	-59.08	-62.90	-48.39	-53.57	-59.07	-61.22	-72.87	-82.53
25.0	-57.19	-56.93	-59.95	-52.38	-59.55	-64.63	-60.63	-72.24	-80.21
25.5	-56.67	-56.55	-59.53	-52.00	-59.23	-64.15	-63.00	-69.56	-80.75
26.0	-53.75	-52.61	-57.12	-52.60	-57.32	-64.70	-58.41	-68.62	-79.55
26.5	-50.95	-51.25	-54.14	-54.05	-57.53	-59.48	-63.03	-72.75	-76.41
27.0	-50.52	-51.44	-51.72	-48.64	-54.44	-53.51	-61.89	-69.04	-69.83
27.5	-50.15	-51.94	-52.93	-47.76	-57.41	-64.71	-62.72	-69.27	-80.17
28.0	-47.46	-48.96	-52.40	-49.78	-56.43	-58.94	-60.65	-71.83	-77.15
28.5	-43.98	-44.56	-54.23	-50.80	-57.46	-60.69	-61.55	-70.48	-78.54
29.0	-52.51	-65.66	-55.23	-48.37	-57.21	-55.71	-60.08	-71.66	-76.83
29.5	-40.05	-40.98	-45.31	-41.30	-41.71	-45.36	-55.21	-66.52	-70.13
30.0	-45.82	-46.08	-49.35	-47.88	-51.59	-53.17	-58.60	-68.00	-74.81
30.5	-46.67	-47.44	-49.88	-47.04	-51.24	-47.83	-55.51	-67.03	-74.84
31.0	-48.44	-49.09	-48.46	-49.38	-52.06	-51.25	-55.28	-68.95	-79.19
31.5	-47.85	-48.45	-48.22	-49.50	-52.68	-52.67	-57.93	-68.51	-79.52
32.0	-42.28	-42.59	-47.48	-45.50	-49.91	-53.99	-58.65	-69.48	-76.80
32.5	-32.32	-42.18	-42.01	-45.07	-50.83	-49.68	-55.76	-69.43	-78.00
33.0	-33.28	-45.85	-45.72	-44.56	-49.61	-51.24	-56.09	-67.94	-77.20

Note: No sub-harmonics below 22 GHz. Testing limited to 90 GHz due to setup limitations.

Signal Generator

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. (GHz)	Phase Noise vs. Output Frequency (dBc / Hz)				
	1 kHz	10 kHz	100 kHz	1 MHz	10 MHz
0.1	-116.69	-136.69	-138.57	-137.52	-136.55
0.5	-102.49	-128.17	-135.14	-130.31	-137.01
1.0	-96.17	-120.23	-130.98	-125.68	-138.70
1.5	-92.94	-116.59	-129.07	-117.38	-135.83
2.0	-90.29	-116.65	-124.95	-119.60	-135.52
2.5	-88.37	-114.82	-125.71	-120.60	-134.60
3.0	-87.32	-112.22	-123.14	-112.92	-131.30
4.0	-83.84	-109.52	-119.38	-113.32	-132.48
5.0	-82.53	-107.92	-120.11	-113.77	-131.79
6.0	-81.38	-106.56	-117.31	-105.53	-126.80
7.0	-79.91	-104.69	-117.58	-108.17	-128.17
8.0	-77.60	-103.03	-113.33	-107.48	-128.70
9.0	-78.05	-101.88	-115.45	-107.68	-128.81
10.0	-76.19	-102.92	-114.19	-107.94	-128.05
11.0	-75.90	-102.66	-109.31	-107.30	-132.26
12.0	-75.69	-101.74	-111.54	-100.37	-120.88
13.0	-73.68	-99.96	-110.59	-101.63	-121.81
14.0	-74.06	-98.32	-111.37	-102.82	-122.17
15.0	-72.93	-97.39	-109.09	-102.02	-122.52
16.0	-72.10	-97.79	-107.27	-102.17	-122.96
17.0	-72.28	-97.62	-107.14	-101.71	-122.06
18.0	-71.85	-97.54	-109.56	-104.31	-123.13
19.0	-71.15	-96.37	-109.26	-103.04	-122.38
20.0	-70.27	-94.98	-107.90	-101.26	-123.07
20.5	-70.06	-94.63	-106.34	-100.42	-122.23
21.0	-69.44	-94.86	-104.96	-101.95	-123.98
21.5	-70.21	-95.55	-102.95	-101.85	-126.64
22.0	-69.72	-94.75	-104.25	-100.96	-128.01
22.5	-69.82	-95.31	-103.89	-102.04	-126.91
23.0	-68.91	-93.68	-105.60	-94.56	-115.53
23.5	-69.87	-93.64	-104.59	-94.03	-115.04
24.0	-69.42	-94.23	-105.56	-95.24	-114.88
24.5	-68.66	-92.61	-105.29	-93.44	-114.88
25.0	-68.75	-95.18	-105.44	-94.43	-114.37
25.5	-68.01	-92.77	-105.00	-95.05	-116.31
26.0	-68.31	-92.09	-104.55	-94.47	-115.87
26.5	-68.71	-94.66	-103.67	-95.23	-115.41
27.0	-68.47	-92.26	-104.55	-93.70	-115.17
27.5	-67.49	-92.60	-104.22	-94.25	-114.84
28.0	-68.00	-92.71	-105.35	-95.92	-115.69
28.5	-68.35	-92.52	-102.03	-97.08	-115.88
29.0	-66.75	-91.88	-105.26	-97.15	-116.74
29.5	-67.56	-91.39	-102.92	-95.50	-116.62
30.0	-66.45	-91.66	-103.14	-95.68	-116.61
30.5	-66.14	-91.64	-103.40	-95.32	-116.54
31.0	-66.05	-90.49	-104.46	-95.24	-115.86
31.5	-66.93	-91.32	-104.52	-97.84	-117.07
32.0	-65.84	-90.85	-101.47	-95.20	-116.64
32.5	-66.57	-91.91	-103.01	-96.78	-116.83
33.0	-65.60	-90.46	-100.28	-94.52	-116.37

Freq. (GHz)	Power (dBm) Max
0.1	25.25
0.5	25.23
1.0	25.11
1.5	25.19
2.0	25.10
2.5	25.18
3.0	25.07
4.0	24.33
5.0	24.45
6.0	24.57
7.0	24.63
8.0	24.39
9.0	24.19
10.0	24.18
11.0	24.23
12.0	24.18
13.0	23.97
14.0	23.76
15.0	23.66
16.0	23.76
17.0	23.66
18.0	23.37
19.0	23.41
20.0	23.71
20.5	23.59
21.0	23.10
21.5	23.24
22.0	23.35
22.5	23.40
23.0	23.15
23.5	23.15
24.0	23.04
24.5	22.59
25.0	22.52
25.5	22.60
26.0	22.60
26.5	22.88
27.0	21.95
27.5	21.80
28.0	21.70
28.5	21.50
29.0	21.39
29.5	21.33
30.0	21.98
30.5	21.62
31.0	21.68
31.5	21.40
32.0	21.17
32.5	21.58
33.0	21.63

Signal Generator

Typical Performance Data

Test Conditions: Temperature = +25°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Frequency (dBc / Hz)				
	1 GHz	5 GHz	10 GHz	20 GHz	33 GHz
1	-96.17	-82.53	-76.19	-70.27	-65.60
10	-120.23	-107.92	-102.92	-94.98	-90.46
100	-130.98	-120.11	-114.19	-107.90	-100.28
1000	-125.68	-113.77	-107.94	-101.26	-94.52
10000	-138.70	-131.79	-128.05	-123.07	-116.37

Freq. (GHz)	Spurious (dBc)	
	Far	Near
0.1	--	--
0.5	-72.61	-86.71
1.0	-68.48	-82.61
1.5	-66.21	-77.15
2.0	-64.11	-72.79
2.5	-65.28	-70.00
3.0	-58.78	-67.86
4.0	-58.98	-67.89
5.0	-57.60	-64.49
6.0	-52.57	-65.94
7.0	-53.61	-63.78
8.0	-50.23	-63.41
9.0	-49.99	-64.59
10.0	-52.71	-57.59
11.0	-51.54	-60.42
12.0	-46.80	-59.20
13.0	-47.06	-53.96
14.0	-47.12	-61.17
15.0	-46.62	-55.01
16.0	-46.68	-53.61
17.0	-44.19	-56.10
18.0	-49.07	-56.14
19.0	-46.79	-47.82
20.0	-47.09	-51.77
20.5	-47.52	-54.08
21.0	-47.24	-53.30
21.5	-50.20	-55.97
22.0	-46.82	-52.47
22.5	-46.31	-53.85
23.0	-39.84	-50.41
23.5	-39.46	-53.23
24.0	-38.58	-54.05
24.5	-39.32	-51.47
25.0	-41.21	-54.64
25.5	-39.56	-52.15
26.0	-43.27	-52.91
26.5	-40.23	-52.73
27.0	-38.33	-54.43
27.5	-39.86	-50.95
28.0	-40.32	-52.33
28.5	-37.82	-41.33
29.0	-39.63	-52.86
29.5	-40.74	-54.29
30.0	-39.24	-51.79
30.5	-41.69	-52.62
31.0	-36.50	-52.72
31.5	-41.00	-53.66
32.0	-40.46	-50.69
32.5	-39.87	-51.06
33.0	-38.41	-52.63

Note: Spurious was measured in Close offsets of 1 kHz to 1000 kHz and Far offsets of 1 MHz to 40 MHz.