Signal Generator

SSG-30GHP-RC

Typical Performance Data

Test Conditions: @ Temperature = 0°C.

Freq. (GHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-30 dBm	-20 dBm	-10 dBm	0 dBm	+5 dBm	+10 dBm	+15 dBm	+20 dBm	+22 dBm	+25 dBm
0.05	0.60	0.33	0.82	0.94	1.12	0.87	0.66	0.22	0.23	-0.43
0.50	0.31	0.29	0.55	0.50	0.53	0.59	0.42	0.22	0.00	0.16
1.00	-0.23	-0.01	0.69	0.64	0.45	0.61	0.36	0.34	0.19	-0.23
2.00	0.61	0.54	0.56	0.72	0.69	0.98	0.67	0.37	0.81	0.25
3.00	1.02	-0.19	1.13	1.25	0.32	0.14	0.33	0.23	0.05	-0.16
4.00	0.23	-0.09	0.43	0.04	0.21	0.55	0.46	0.99	0.35	0.00
5.00	1.03	0.66	0.47	1.08	1.07	1.10	0.82	0.59	0.74	-0.07
6.00	-0.06	-0.04	0.14	0.13	-0.49	0.14	0.17	0.26	-0.01	0.01
7.00	-1.28	-0.21	-0.32	-0.79	0.37	0.37	0.27	0.91	0.75	0.36
8.00	0.47	0.03	0.18	0.29	0.43	0.39	0.52	1.10	0.93	0.54
9.00	-0.33	0.35	0.25	-0.37	0.38	0.41	0.43	0.36	0.10	-0.04
10.00	0.92	-0.28	0.18	0.22	0.07	0.02	0.19	-0.06	-0.11	-0.51
11.00	-0.94	0.06	-0.02	-0.09	-0.40	-0.33	-0.17	0.34	-0.08	-0.44
12.00	0.39	0.78	0.89	0.99	0.81	0.83	1.15	0.83	0.65	0.22
13.00	-0.73	-0.31	0.05	-0.42	-0.10	-0.14	0.25	0.21	0.21	-0.11
14.00	-0.44	-0.05	-0.03	0.01	-0.40	-0.11	-0.16	0.20	0.20	-0.34
15.00	-0.40	0.10	0.16	-0.40	-0.08	-0.18	0.32	-0.31	-0.29	-1.00
15.50	-0.34	0.06	-0.14	0.24	-0.23	-0.02	-0.21	0.24	0.21	-0.54
16.00	0.47	0.65	-0.15	-0.31	0.17	0.11	0.40	0.32	0.47	-0.08
16.50	0.80	0.60	-0.16	0.21	-0.13	-0.36	-0.07	0.30	0.44	-0.51
17.00	0.61	0.29	0.07	0.39	0.15	-0.07	0.21	0.67	0.27	-0.41
17.50	0.28	-0.01	0.00	0.26	0.08	-0.14	0.15	0.65	0.22	-0.59
18.00	-0.03	0.47	-0.03	0.23	-0.09	-0.13	0.17	0.13	0.17	-0.82
18.50	0.64	0.94	0.42	0.27	0.03	0.38	0.20	0.67	0.60	-0.75
19.00	-0.47	-0.08	0.14	-0.06	-0.16	0.21	-0.20	0.30	0.28	-0.72
19.50	0.23	0.09	-0.07	-0.34	-0.51	-0.14	0.18	0.04	0.13	-0.83
20.00	0.19	-0.23	-0.21	-0.42	-0.73	-0.36	-0.15	0.33	0.03	-0.73
20.50	1.05	0.88	0.61	0.44	0.35	0.27	0.43	0.78	0.38	-0.50
21.00	0.18	0.57	0.20	0.10	0.12	0.35	0.11	0.53	0.66	-0.47
21.50	-0.13	-0.31	-0.86	-0.45	-1.06	-0.77	-0.88	-0.67	-0.55	--
22.00	-0.46	-0.22	-0.64	-0.35	-0.71	-0.62	-0.45	-0.07	-0.52	--
22.50	0.38	0.21	0.12	-0.15	-0.34	-0.03	-0.43	0.06	0.28	--
23.00	0.48	0.34	0.18	0.01	-0.11	0.12	0.35	0.37	0.53	--
23.50	0.91	0.85	0.49	0.37	0.26	0.54	0.37	0.89	0.88	--
24.00	0.62	0.76	0.23	0.50	0.52	0.77	0.49	0.91	0.92	--
24.50	0.19	0.57	0.18	0.25	0.18	0.08	0.25	0.62	0.33	--
25.00	0.68	0.79	0.26	0.36	-0.04	0.34	0.44	0.40	0.57	--
25.50	-0.28	-0.04	-0.49	-0.29	-0.29	-0.21	-1.31	-0.92	-0.45	--
26.00	-0.18	-0.13	-0.13	-0.40	-0.20	-0.26	-1.13	-0.59	-0.15	--
26.50	-0.06	0.27	-0.27	-0.12	-0.24	-0.08	-1.26	-0.79	-0.60	--
27.00	0.43	0.56	0.02	0.33	0.29	-1.42	-0.80	-0.56	-0.32	--
27.50	-0.16	-0.45	-0.27	0.03	-0.03	-1.85	-1.35	-1.27	-0.95	--
28.00	-0.03	0.02	0.03	0.18	-0.03	-1.18	-0.99	-0.47	-1.04	--
28.50	0.04	-0.18	-0.14	0.38	0.31	-1.51	-1.29	-0.69	-0.60	--
29.00	0.66	0.51	0.51	0.91	0.93	-1.31	-0.77	-0.24	-0.28	--
30.00	1.63	1.07	1.48	1.53	0.63	-0.15	-0.02	0.14	-0.57	--

Signal Generator

Typical Performance Data

Test Conditions: @ Temperature = 0°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dBm)									
	0.05 GHz	1 GHz	5 GHz	10 GHz	15 GHz	18 GHz	21 GHz	25 GHz	27 GHz	30 GHz
-30	0.60	-0.23	1.03	0.92	-0.40	-0.03	0.18	0.68	0.43	1.63
-29	0.48	-0.10	0.91	1.13	-0.26	0.01	0.21	0.65	0.48	1.58
-28	0.36	0.03	0.80	1.33	-0.12	0.05	0.24	0.62	0.53	1.54
-27	0.40	0.04	0.76	1.29	-0.17	0.07	0.29	0.70	0.62	1.53
-26	0.45	0.04	0.71	1.24	-0.23	0.08	0.35	0.77	0.71	1.52
-25	0.32	-0.09	0.71	1.11	-0.17	0.13	0.39	0.69	0.49	1.59
-24	0.19	-0.22	0.71	0.98	-0.12	0.18	0.44	0.61	0.27	1.65
-23	0.59	-0.10	0.67	0.95	0.00	0.24	0.48	0.68	0.32	1.41
-22	0.98	0.02	0.62	0.92	0.12	0.29	0.52	0.74	0.37	1.16
-21	0.66	0.00	0.64	0.32	0.11	0.38	0.55	0.77	0.47	1.12
-20	0.33	-0.01	0.66	-0.28	0.10	0.47	0.57	0.79	0.56	1.07
-18	0.39	0.22	0.53	0.09	0.40	0.15	0.72	0.90	-0.19	1.31
-16	1.08	-0.08	0.47	0.17	-0.02	-0.16	0.29	0.20	-0.11	1.44
-14	0.63	0.36	0.47	0.02	0.07	-0.15	0.17	0.08	0.03	1.05
-12	0.99	0.76	0.51	0.09	0.06	-0.09	0.20	0.13	0.21	0.97
-10	0.82	0.69	0.47	0.18	0.16	-0.03	0.20	0.26	0.02	1.48
-8	0.78	0.67	0.33	0.01	-1.03	0.01	0.28	0.10	0.16	1.37
-6	1.07	0.66	0.79	0.12	0.03	0.11	-0.07	0.30	0.28	1.16
-4	1.03	0.66	0.44	-0.20	0.06	0.10	0.40	0.21	0.45	1.09
-2	0.93	0.55	0.68	-0.08	-0.23	0.22	0.11	0.44	0.27	1.66
0	0.94	0.64	1.08	0.22	-0.40	0.23	0.10	0.36	0.33	1.53
+1	1.11	0.55	1.19	0.16	-0.24	-0.21	0.12	0.40	0.35	1.48
+2	1.27	0.45	1.31	0.09	-0.08	-0.64	0.14	0.44	0.37	1.44
+3	1.22	0.47	1.11	0.09	-0.12	-0.23	0.11	0.16	0.44	1.51
+4	1.17	0.49	0.92	0.10	-0.17	0.19	0.08	-0.12	0.51	1.57
+5	1.12	0.45	1.07	0.07	-0.08	-0.09	0.12	-0.04	0.29	0.63
+6	1.07	0.41	1.23	0.03	0.01	-0.37	0.16	0.05	0.07	-0.32
+7	1.01	0.37	1.19	-0.01	-0.21	-0.30	0.22	0.10	0.11	-0.37
+8	0.95	0.32	1.15	-0.06	-0.42	-0.24	0.27	0.16	0.14	-0.42
+9	0.91	0.46	1.12	-0.02	-0.30	-0.18	0.31	0.25	-0.64	-0.28
+10	0.87	0.61	1.10	0.02	-0.18	-0.13	0.35	0.34	-1.42	-0.15
+11	0.79	0.57	1.03	-0.13	-0.23	-0.08	0.15	0.29	-1.29	-0.17
+12	0.72	0.54	0.97	-0.29	-0.27	-0.04	-0.04	0.25	-1.16	-0.18
+13	0.64	0.50	0.94	-0.21	0.07	0.03	0.00	0.34	-1.05	-0.11
+14	0.56	0.45	0.91	-0.12	0.42	0.10	0.05	0.43	-0.95	-0.04
+15	0.66	0.36	0.82	0.19	0.32	0.17	0.11	0.44	-0.80	-0.02
+16	0.76	0.26	0.73	0.50	0.23	0.23	0.17	0.45	-0.65	0.01
+17	0.58	0.23	0.73	0.13	-0.02	0.08	0.27	0.61	-0.63	0.17
+18	0.41	0.20	0.73	-0.23	-0.27	-0.07	0.36	0.77	-0.61	0.32
+19	0.31	0.27	0.66	-0.15	-0.29	0.03	0.45	0.58	-0.59	0.23
+20	0.22	0.34	0.59	-0.06	-0.31	0.13	0.53	0.40	-0.56	0.14
+21	0.22	0.27	0.66	-0.09	-0.30	0.15	0.60	0.48	-0.44	-0.21
+22	0.23	0.19	0.74	-0.11	-0.29	0.17	0.66	0.57	-0.32	-0.57
+23	0.04	-0.01	0.42	-0.31	-0.38	-0.04	0.32	0.31	--	--
+24	-0.15	-0.21	0.11	-0.51	-0.47	-0.25	-0.02	0.06	--	--
+25	-0.43	-0.23	-0.07	-0.51	-1.00	-0.82	-0.47	--	--	--

Typical Performance Data

Test Conditions: @ Temperature = 0°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc)									
	-20 dBm					+10 dBm				
	F2	F3	F0.5	F1.5	F2.5	F2	F3	F0.5	F1.5	F2.5
0.05	-44.77	-7.41	--	--	--	-39.00	-11.35	--	--	--
0.50	-30.04	-8.66	--	--	--	-31.97	-8.39	--	--	--
1.00	-19.43	-8.39	--	--	--	-16.23	-7.28	--	--	--
2.00	-20.97	-40.61	--	--	--	-22.24	-44.10	--	--	--
3.00	-46.30	-46.47	--	--	--	-37.78	-69.41	--	--	--
4.00	-40.22	-49.09	--	--	--	-38.40	-65.81	--	--	--
5.00	-40.66	-48.75	--	--	--	-38.65	-67.49	--	--	--
6.00	-20.92	-44.30	--	--	--	-25.83	-49.43	--	--	--
7.00	-14.96	-41.35	--	--	--	-15.41	-50.51	--	--	--
8.00	-29.22	-39.44	--	--	--	-27.89	-58.79	--	--	--
9.00	-34.84	-42.27	--	--	--	-41.04	-66.53	--	--	--
10.00	-40.99	-40.33	--	--	--	-43.10	-65.41	--	--	--
11.00	-41.50	-42.76	--	--	--	-41.81	-61.41	--	--	--
12.00	-44.00	-43.39	--	--	--	-37.48	-66.48	--	--	--
13.00	-41.07	-37.08	--	--	--	-37.72	-62.85	--	--	--
14.00	-42.35	-37.43	--	--	--	-34.67	-60.66	--	--	--
15.00	-43.12	-35.54	-49.57	-47.56	-37.23	-36.12	-59.98	-69.53	-75.06	-69.68
15.50	-42.50	-34.56	-41.94	-32.87	-33.65	-34.13	-57.26	-71.51	-63.09	-66.46
16.00	-41.18	-35.60	-35.33	-44.63	-36.90	-30.75	-57.52	-66.87	-71.26	-66.14
16.50	-40.43	-33.86	-41.95	-41.29	-36.57	-33.03	-60.37	-72.64	-73.41	-67.53
17.00	-33.49	-48.47	-43.75	-43.41	-37.73	-31.50	-62.83	-77.30	-74.00	-65.76
17.50	-35.22	-41.52	-25.54	-44.67	-36.79	-36.89	-64.46	-56.60	-73.56	-69.45
18.00	-38.22	-44.92	-40.35	-43.47	-38.58	-43.16	-66.85	-68.85	-73.04	-66.50
18.50	-38.02	-50.25	-28.98	-45.91	-36.77	-51.82	-68.03	-59.08	-75.34	-65.43
19.00	-38.29	-51.05	-33.48	-37.74	-33.29	-42.17	-70.48	-62.31	-69.35	-68.00
19.50	-38.59	-54.36	-43.17	-43.95	-33.43	-36.61	-67.88	-69.02	-71.90	-62.06
20.00	-38.71	-54.13	-39.03	-41.32	-36.91	-36.17	-63.03	-65.85	-69.45	-65.11
20.50	-35.20	-53.76	-40.18	-41.26	-52.76	-36.01	-62.70	-65.16	-71.18	-68.21
21.00	-37.75	-51.02	-38.93	-42.60	-54.57	-38.11	-61.81	-58.19	-69.80	-68.20
21.50	-35.74	-51.05	-35.69	-43.08	-53.37	-39.83	-63.50	-59.80	-69.90	-67.07
22.00	-34.80	-53.26	-42.10	-42.00	-52.16	-38.33	-62.45	-64.46	-70.43	-68.53
22.50	-35.34	-53.28	-41.10	-43.39	-53.47	-37.80	-67.90	-67.05	-70.64	-68.58
23.00	-32.49	-53.35	-33.03	-39.95	-55.55	-38.26	-66.58	-66.08	-67.72	-67.33
23.50	-30.49	-52.09	-27.05	-41.86	-56.29	-39.65	-65.35	-50.01	-71.47	-70.56
24.00	-30.30	-51.15	-31.16	-39.40	-55.72	-44.21	-68.25	-50.95	-70.36	-68.26
24.50	-30.93	-45.07	-27.68	-38.56	-52.78	-44.60	-67.21	-54.42	-69.94	-70.95
25.00	-30.94	-43.10	-23.17	-39.39	-51.30	-41.64	-62.39	-59.24	-69.07	-72.07
25.50	-39.30	-48.60	-29.22	-38.25	-55.30	-44.85	-61.11	-61.76	-69.93	-67.31
26.00	-36.39	-51.38	-26.51	-37.47	-53.90	-46.02	-62.81	-53.66	-69.25	-70.06
26.50	-34.28	-48.82	-28.81	-38.61	-55.49	-46.61	-63.88	-52.61	-68.57	-69.82
27.00	-38.58	-49.14	-28.53	-37.53	-55.48	-52.24	-63.74	-55.30	-65.93	-67.70
27.50	-39.31	-50.67	-32.94	-39.52	-53.87	-51.26	-65.42	-56.99	-64.68	-64.05
28.00	-53.35	-52.43	-31.84	-35.23	-54.07	-52.77	-66.01	-54.93	-64.99	-63.72
28.50	-49.21	-49.79	-28.25	-34.91	-53.02	-51.32	-63.75	-52.81	-67.18	-64.18
29.00	-54.28	-52.87	-28.36	-39.13	-49.42	-52.59	-67.74	-56.03	-65.74	-64.47
30.00	-56.91	-54.49	-28.43	-38.92	-49.50	-47.25	-63.80	-57.63	-66.14	-65.49

Note: No sub-harmonics below 15 GHz.

Typical Performance Data

Test Conditions: @ Temperature = 0°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc) +20 dBm				
	F2	F3	F0.5	F1.5	F2.5
0.05	-38.82	-11.44	--	--	--
0.50	-34.70	-8.32	--	--	--
1.00	-16.70	-7.21	--	--	--
2.00	-18.88	-37.21	--	--	--
3.00	-26.29	-49.23	--	--	--
4.00	-24.08	-29.14	--	--	--
5.00	-26.81	-43.75	--	--	--
6.00	-25.34	-40.19	--	--	--
7.00	-22.78	-37.15	--	--	--
8.00	-21.93	-35.67	--	--	--
9.00	-28.62	-41.34	--	--	--
10.00	-35.70	-55.92	--	--	--
11.00	-28.93	-39.42	--	--	--
12.00	-23.72	-45.26	--	--	--
13.00	-24.94	-42.32	--	--	--
14.00	-23.11	-42.06	--	--	--
15.00	-23.48	-38.26	-75.47	-85.64	-79.34
15.50	-18.70	-35.41	-81.71	-72.16	-78.49
16.00	-16.44	-33.78	-76.92	-76.76	-76.68
16.50	-18.60	-36.43	-83.28	-85.63	-77.83
17.00	-16.85	-39.65	-87.67	-81.51	-78.58
17.50	-22.92	-41.29	-68.18	-80.80	-78.66
18.00	-30.50	-47.19	-79.35	-81.36	-79.81
18.50	-40.82	-46.37	-69.38	-83.95	-77.80
19.00	-28.64	-47.94	-72.62	-81.31	-73.73
19.50	-22.58	-45.55	-73.86	-77.51	-73.61
20.00	-22.71	-45.11	-64.87	-69.47	-74.49
20.50	-22.85	-43.85	-60.65	-67.27	-74.41
21.00	-25.23	-37.17	-58.90	-67.14	-77.13
21.50	-27.11	-38.69	-65.26	-76.03	-76.64
22.00	-24.43	-38.31	-64.31	-71.33	-77.93
22.50	-24.55	-42.75	-65.76	-72.68	-79.32
23.00	-24.28	-45.73	-60.46	-68.90	-78.88
23.50	-25.17	-45.36	-54.67	-72.05	-79.75
24.00	-26.78	-49.12	-53.16	-71.57	-80.70
24.50	-26.70	-52.71	-56.71	-77.95	-80.36
25.00	-26.62	-56.24	-65.89	-74.93	-78.32
25.50	-33.30	-53.34	-68.32	-74.43	-77.20
26.00	-32.88	-53.62	-80.71	-77.83	-76.33
26.50	-34.88	-54.24	-61.64	-73.69	-75.60
27.00	-39.19	-56.08	-59.31	-72.86	-76.98
27.50	-37.71	-59.43	-58.07	-71.36	-78.39
28.00	-39.80	-61.69	-57.26	-71.15	-76.34
28.50	-40.11	-61.79	-55.85	-74.05	-75.31
29.00	-38.80	-68.55	-56.42	-69.59	-75.97
30.00	-34.33	-56.25	-65.15	-75.38	-72.27

Note: No sub-harmonics below 15 GHz.

Typical Performance Data

Test Conditions: @ Temperature = 0°C.

Freq. (GHz)	Phase Noise vs. Output Freq. at Frequency Offsets (dBc / Hz)					
	100 Hz	1 kHz	10 kHz	100 kHz	1 MHz	10 MHz
0.05	-119.04	-129.03	-131.44	-130.41	-133.19	-129.82
0.50	-98.09	-118.65	-122.62	-122.51	-131.61	-128.68
1.00	-93.57	-113.11	-118.45	-117.50	-129.74	-128.00
2.00	-90.72	-106.59	-113.62	-111.21	-130.33	-126.34
3.00	-83.15	-102.72	-109.29	-108.50	-125.41	-122.59
4.00	-80.15	-100.65	-106.05	-104.91	-122.34	-122.08
5.00	-81.73	-98.96	-104.64	-102.98	-119.61	-119.89
6.00	-78.21	-96.83	-102.42	-101.11	-124.16	-120.78
7.00	-75.40	-95.03	-100.50	-100.78	-121.10	-123.59
8.00	-74.99	-93.55	-101.36	-100.35	-121.36	-120.35
9.00	-73.87	-93.04	-99.84	-98.22	-122.41	-121.06
10.00	-75.00	-92.37	-99.12	-97.08	-120.97	-120.19
11.00	-75.98	-90.76	-98.42	-96.35	-122.08	-121.50
12.00	-70.86	-90.90	-95.12	-95.87	-121.58	-121.93
13.00	-70.60	-89.90	-96.75	-96.40	-117.90	-122.19
14.00	-69.83	-89.03	-95.97	-94.12	-115.72	-117.24
15.00	-66.83	-87.94	-96.39	-94.27	-114.87	-118.64
15.50	-68.24	-88.30	-95.88	-93.82	-119.55	-121.62
16.00	-68.70	-88.73	-94.88	-93.18	-117.76	-117.49
16.50	-67.04	-87.77	-94.74	-94.04	-121.00	-122.35
17.00	-69.07	-88.19	-94.38	-92.97	-114.67	-120.37
17.50	-69.01	-87.81	-94.21	-93.53	-121.60	-116.04
18.00	-67.40	-88.14	-94.14	-92.85	-119.12	-115.64
18.50	-65.96	-87.90	-94.40	-92.65	-119.50	-115.18
19.00	-66.23	-86.97	-94.15	-91.99	-118.68	-115.44
19.50	-66.05	-87.28	-92.95	-92.01	-117.48	-114.33
20.00	-67.54	-87.43	-94.84	-91.56	-112.96	-112.86
20.50	-65.64	-87.00	-93.06	-91.25	-119.32	-115.00
21.00	-67.74	-85.93	-93.00	-92.34	-114.42	-116.36
21.50	-65.82	-86.68	-93.99	-91.25	-116.06	-114.99
22.00	-64.64	-86.17	-92.32	-90.32	-113.00	-115.67
22.50	-68.04	-85.81	-90.23	-91.15	-113.70	-113.90
23.00	-63.36	-84.66	-89.91	-89.33	-113.40	-115.07
23.50	-64.11	-84.36	-92.27	-90.40	-115.96	-115.82
24.00	-64.73	-84.60	-92.87	-90.41	-112.49	-114.72
24.50	-61.31	-85.25	-91.73	-89.64	-112.35	-111.98
25.00	-64.51	-84.62	-90.76	-88.68	-113.48	-114.63
25.50	-61.76	-83.25	-89.65	-88.81	-111.96	-114.41
26.00	-65.94	-82.88	-90.23	-89.86	-111.20	-110.84
26.50	-64.35	-84.10	-91.22	-89.01	-106.82	-111.04
27.00	-62.53	-83.43	-89.95	-88.93	-111.18	-111.72
27.50	-59.33	-83.51	-88.42	-88.18	-110.21	-110.45
28.00	-68.52	-83.51	-91.27	-88.23	-108.51	-110.87
28.50	-67.12	-83.79	-90.67	-87.04	-107.76	-111.71
29.00	-65.28	-83.71	-89.06	-87.53	-109.47	-111.68
30.00	-64.43	-83.00	-88.66	-89.00	-108.20	-111.41

Typical Performance Data

Test Conditions: @ Temperature = 0°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Freq. at Frequency Output (dBc / Hz)					
	0.05 GHz	1 GHz	5 GHz	10 GHz	20 GHz	30 GHz
0.1	-119.04	-93.57	-81.73	-75.00	-67.54	-64.43
1	-129.03	-113.11	-98.96	-92.37	-87.43	-83.00
10	-131.44	-118.45	-104.64	-99.12	-94.84	-88.66
100	-130.41	-117.50	-102.98	-97.08	-91.56	-89.00
1000	-133.19	-129.74	-119.61	-120.97	-112.96	-108.20
10000	-129.82	-128.00	-119.89	-120.19	-112.86	-111.41

Freq. (GHz)	Spurious (dBc)
0.05	-73.93
0.50	-80.28
1.00	-76.55
2.00	-76.95
3.00	-66.66
4.00	-72.93
5.00	-71.58
6.00	-66.99
7.00	-65.45
8.00	-63.61
9.00	-61.80
10.00	-64.71
11.00	-61.28
12.00	-58.79
13.00	-59.74
14.00	-53.57
15.00	-53.04
15.50	-58.92
16.00	-55.84
16.50	-57.29
17.00	-60.31
17.50	-57.38
18.00	-56.83
18.50	-54.07
19.00	-56.13
19.50	-57.05
20.00	-55.20
20.50	-53.32
21.00	-56.91
21.50	-57.11
22.00	-51.28
22.50	-52.32
23.00	-51.46
23.50	-55.57
24.00	-52.52
24.50	-48.64
25.00	-52.11
25.50	-50.42
26.00	-55.45
26.50	-50.12
27.00	-49.05
27.50	-48.86
28.00	-48.15
28.50	-45.53
29.00	-49.80
30.00	-45.39

Typical Performance Data

Test Conditions: @ Temperature = 25°C.

Freq. (GHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-30 dBm	-20 dBm	-10 dBm	0 dBm	+5 dBm	+10 dBm	+15 dBm	+20 dBm	+22 dBm	+25 dBm
0.05	0.98	0.54	1.32	0.95	0.87	1.08	0.74	0.38	0.05	-0.64
0.50	0.72	0.45	0.58	0.55	0.64	0.65	0.49	0.25	0.15	0.14
1.00	-0.14	0.12	0.69	0.46	0.74	0.68	0.62	0.47	0.28	-0.28
2.00	0.98	1.11	1.23	0.63	0.93	0.84	0.68	0.96	0.64	0.30
3.00	0.46	0.33	0.67	0.59	0.62	0.46	0.31	0.18	0.59	-0.11
4.00	0.53	0.48	0.53	0.54	0.91	0.70	0.70	0.54	0.15	-0.01
5.00	0.16	-0.43	-0.33	-0.56	-0.20	-0.07	0.60	0.21	-0.71	-1.00
6.00	-0.13	0.45	0.22	0.39	0.04	0.09	0.26	0.23	0.10	-0.27
7.00	-0.18	-0.26	-0.06	-0.02	0.39	0.16	-0.04	-0.33	0.00	-0.45
8.00	0.87	0.53	0.35	0.32	0.45	0.62	0.61	0.23	0.04	-0.14
9.00	-0.22	0.23	0.36	0.12	0.37	0.32	0.14	0.01	-0.22	-0.46
10.00	0.81	0.08	-0.03	0.10	0.21	0.11	0.15	0.22	-0.04	-0.65
11.00	-0.76	-0.24	0.02	-0.73	-0.48	-0.53	-0.62	-0.08	-0.69	-1.01
12.00	0.52	0.38	0.76	0.64	0.48	0.66	0.52	0.03	0.16	-0.59
13.00	0.08	-0.01	0.07	0.14	0.01	0.18	-0.06	-0.15	-0.27	-0.58
14.00	-0.07	0.26	0.07	-0.01	0.00	-0.38	-0.06	-0.15	-0.33	-0.88
15.00	0.58	0.21	0.26	0.41	0.25	0.33	-0.29	-0.20	-0.48	-1.53
15.50	-0.42	-0.47	-0.25	-0.08	-0.54	-0.38	-0.13	-0.31	-0.37	-1.04
16.00	-0.11	-0.14	-0.21	-0.18	-0.12	-0.32	-0.09	-0.21	-0.11	-0.59
16.50	0.16	-0.74	-0.24	-0.87	-0.40	-0.24	-0.48	-0.13	-0.58	-0.69
17.00	0.02	-0.38	-0.32	-0.41	0.01	0.17	-0.07	0.30	-0.15	-0.47
17.50	-0.13	-0.12	0.13	-0.27	-0.01	-0.24	0.02	0.30	-0.27	-0.67
18.00	-0.07	0.09	-0.31	-0.10	-0.46	-0.25	0.03	-0.07	-0.15	-0.82
18.50	-0.10	-0.12	-0.35	-0.15	-0.04	-0.34	-0.03	0.34	0.19	-0.75
19.00	-1.05	-0.51	-0.47	-0.73	-0.39	-0.23	-0.57	-0.22	-0.25	-0.89
19.50	0.33	-0.07	-0.46	-0.74	-0.49	-0.27	0.11	-0.14	-0.19	-0.91
20.00	-0.29	-0.17	-0.21	-0.62	-0.53	-0.33	-0.14	-0.17	-0.19	-0.62
20.50	0.59	0.28	0.32	-0.17	0.41	0.09	0.24	0.19	-0.06	-0.55
21.00	0.01	0.15	0.12	-0.40	0.12	-0.23	0.06	0.47	-0.09	-0.56
21.50	-0.04	-0.58	-0.33	-0.70	-0.82	-0.70	-0.37	-0.70	-0.64	--
22.00	-0.20	-0.43	-0.54	-0.53	-0.16	-0.57	-0.25	-0.56	-0.53	--
22.50	-0.26	-0.23	-0.05	0.20	-0.28	-0.15	0.08	0.10	-0.11	--
23.00	-0.12	-0.15	0.03	0.24	0.17	-0.13	0.10	0.22	0.01	--
23.50	0.61	0.35	0.42	-0.10	0.08	0.24	0.58	0.64	0.47	--
24.00	0.54	0.06	0.06	0.03	0.36	0.59	0.35	0.76	0.12	--
24.50	0.25	-0.18	-0.10	0.19	0.13	-0.23	0.22	0.64	0.01	--
25.00	0.48	0.47	-0.20	0.06	-0.09	-0.23	0.07	0.12	-0.16	--
25.50	-0.05	-0.10	-0.26	0.08	0.00	-0.78	-0.35	-0.18	-0.10	--
26.00	0.11	0.18	-0.02	0.27	0.31	-0.63	-0.64	0.13	-0.10	--
26.50	-0.06	-0.03	-0.76	-0.46	-0.32	-0.97	-0.54	-0.51	-0.51	--
27.00	0.72	-0.12	0.33	0.21	0.25	-0.34	-0.27	0.24	-0.18	--
27.50	0.05	0.12	0.27	0.34	0.10	-0.99	-1.01	-0.80	-0.60	--
28.00	-0.04	0.11	0.10	-0.22	-0.28	-0.69	-0.71	-0.48	-0.44	--
28.50	0.25	0.14	-0.09	0.06	-0.18	-0.47	-0.56	-0.67	-0.69	--
29.00	0.14	0.14	0.48	0.71	-0.18	-0.23	-0.34	-0.34	-0.33	--
30.00	0.98	0.78	0.42	0.56	0.02	0.16	-0.06	-0.10	-0.24	--

Signal Generator

Typical Performance Data

Test Conditions: @ Temperature = 25°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dBm)									
	0.05 GHz	1 GHz	5 GHz	10 GHz	15 GHz	18 GHz	21 GHz	25 GHz	27 GHz	30 GHz
-30	0.98	-0.14	0.16	0.81	0.58	-0.07	0.01	0.48	0.72	0.98
-29	0.81	-0.01	0.03	1.02	0.49	-0.04	0.05	0.55	0.76	0.98
-28	0.65	0.12	-0.10	1.23	0.39	-0.02	0.08	0.63	0.79	0.97
-27	0.72	0.10	-0.31	1.13	0.30	-0.07	0.05	0.46	0.46	0.90
-26	0.79	0.07	-0.52	1.03	0.20	-0.12	0.01	0.30	0.13	0.82
-25	0.85	-0.03	-0.30	0.97	0.33	-0.11	0.05	0.37	0.20	0.79
-24	0.92	-0.13	-0.07	0.91	0.45	-0.11	0.09	0.44	0.27	0.76
-23	0.98	0.13	-0.09	0.63	0.34	-0.06	0.10	0.41	0.32	0.63
-22	1.04	0.39	-0.11	0.35	0.23	0.00	0.12	0.38	0.37	0.50
-21	0.79	0.26	-0.27	0.21	0.22	0.04	0.14	0.42	0.12	0.64
-20	0.54	0.12	-0.43	0.08	0.21	0.09	0.15	0.47	-0.12	0.78
-18	0.40	0.19	-0.54	0.01	0.27	-0.08	-0.27	-0.02	-0.04	0.52
-16	0.97	-0.05	-0.20	0.24	0.56	0.14	0.17	0.12	0.26	0.69
-14	0.67	0.70	-0.45	0.09	0.17	-0.31	0.09	-0.08	0.52	0.51
-12	0.78	0.76	-0.26	0.17	0.30	-0.23	0.24	0.11	0.39	0.71
-10	1.32	0.69	-0.33	-0.03	0.26	-0.31	0.12	-0.20	0.33	0.42
-8	1.12	0.52	-0.26	0.04	0.44	-0.24	0.20	-0.03	-0.03	0.58
-6	0.83	0.54	-0.05	-0.08	0.12	-0.22	0.23	-0.14	0.14	0.50
-4	1.04	0.52	-0.32	0.27	0.20	-0.12	0.27	-0.01	-0.07	0.65
-2	0.99	0.35	-0.15	0.11	0.00	-0.14	0.27	-0.04	0.14	0.59
0	0.95	0.46	-0.56	0.10	0.41	-0.10	-0.40	0.06	0.21	0.56
+1	0.93	0.60	-0.45	-0.01	0.14	0.01	-0.13	0.04	0.30	0.62
+2	0.92	0.73	-0.34	-0.11	-0.14	0.11	0.13	0.02	0.40	0.69
+3	0.93	0.66	-0.31	-0.04	-0.01	-0.19	0.12	0.08	0.32	0.38
+4	0.93	0.59	-0.27	0.02	0.12	-0.50	0.11	0.14	0.24	0.07
+5	0.87	0.74	-0.20	0.21	0.25	-0.46	0.12	-0.09	0.25	0.02
+6	0.81	0.89	-0.12	0.39	0.38	-0.42	0.14	-0.33	0.26	-0.04
+7	0.76	0.80	-0.04	0.40	0.40	-0.37	0.19	-0.22	-0.12	0.10
+8	0.71	0.71	0.04	0.40	0.41	-0.32	0.25	-0.12	-0.50	0.25
+9	0.89	0.70	-0.02	0.25	0.37	-0.29	0.01	-0.17	-0.42	0.20
+10	1.08	0.68	-0.07	0.11	0.33	-0.25	-0.23	-0.23	-0.34	0.16
+11	0.96	0.58	-0.17	0.11	0.23	-0.22	-0.19	-0.09	-0.41	-0.02
+12	0.85	0.48	-0.28	0.12	0.13	-0.19	-0.16	0.04	-0.48	-0.19
+13	0.85	0.50	0.20	0.27	-0.08	-0.11	-0.09	0.01	-0.36	-0.20
+14	0.84	0.52	0.68	0.43	-0.28	-0.03	-0.01	-0.03	-0.24	-0.21
+15	0.74	0.62	0.60	0.15	-0.29	0.03	0.06	0.07	-0.27	-0.06
+16	0.64	0.71	0.52	-0.13	-0.30	0.09	0.13	0.16	-0.31	0.09
+17	0.73	0.69	0.48	-0.09	-0.34	-0.08	0.16	0.19	-0.12	0.10
+18	0.81	0.67	0.43	-0.06	-0.38	-0.25	0.18	0.22	0.06	0.10
+19	0.59	0.57	0.32	0.08	-0.29	-0.16	0.32	0.17	0.15	0.00
+20	0.38	0.47	0.21	0.22	-0.20	-0.07	0.47	0.12	0.24	-0.10
+21	0.21	0.38	-0.25	0.09	-0.34	-0.11	0.19	-0.02	0.03	-0.17
+22	0.05	0.28	-0.71	-0.04	-0.48	-0.15	-0.09	-0.16	-0.18	-0.24
+23	-0.14	0.01	-0.77	-0.26	-0.74	-0.37	-0.20	-0.30	--	--
+24	-0.34	-0.25	-0.84	-0.48	-1.01	-0.58	-0.31	-0.43	--	--
+25	-0.64	-0.28	-1.00	-0.65	-1.53	-0.82	-0.56	--	--	--

Typical Performance Data

Test Conditions: @ Temperature = 25°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc)									
	-20 dBm					+10 dBm				
	F2	F3	F0.5	F1.5	F2.5	F2	F3	F0.5	F1.5	F2.5
0.05	-45.95	-7.29	--	--	--	-40.24	-11.11	--	--	--
0.50	-29.11	-7.98	--	--	--	-30.27	-8.54	--	--	--
1.00	-18.51	-8.69	--	--	--	-16.03	-7.56	--	--	--
2.00	-21.04	-42.69	--	--	--	-21.75	-44.55	--	--	--
3.00	-48.65	-47.70	--	--	--	-37.28	-69.13	--	--	--
4.00	-40.23	-49.52	--	--	--	-38.34	-63.84	--	--	--
5.00	-40.75	-48.20	--	--	--	-40.09	-65.99	--	--	--
6.00	-19.78	-44.57	--	--	--	-24.93	-51.32	--	--	--
7.00	-17.00	-44.69	--	--	--	-18.23	-52.15	--	--	--
8.00	-31.62	-41.64	--	--	--	-30.10	-58.78	--	--	--
9.00	-34.16	-45.67	--	--	--	-41.99	-64.91	--	--	--
10.00	-42.17	-43.77	--	--	--	-42.93	-67.23	--	--	--
11.00	-41.51	-42.91	--	--	--	-40.92	-61.32	--	--	--
12.00	-43.78	-39.42	--	--	--	-38.55	-67.78	--	--	--
13.00	-44.02	-36.66	--	--	--	-37.30	-63.34	--	--	--
14.00	-42.63	-39.93	--	--	--	-35.10	-61.35	--	--	--
15.00	-40.35	-34.33	-51.39	-45.84	-36.16	-35.88	-60.01	-69.03	-76.48	-68.62
15.50	-44.87	-37.10	-41.54	-35.63	-34.80	-33.37	-57.64	-72.16	-64.24	-66.94
16.00	-42.19	-36.66	-35.32	-43.64	-37.48	-31.33	-56.90	-65.64	-71.87	-66.65
16.50	-43.07	-34.02	-41.63	-43.54	-35.71	-33.73	-60.31	-72.20	-72.12	-67.75
17.00	-42.73	-51.01	-44.05	-41.59	-37.58	-32.32	-64.16	-76.74	-73.34	-69.56
17.50	-40.81	-53.05	-26.32	-44.01	-36.48	-39.23	-61.73	-55.94	-71.82	-68.39
18.00	-37.31	-48.25	-36.57	-41.23	-35.36	-47.60	-66.46	-66.04	-70.44	-68.80
18.50	-38.52	-50.33	-27.53	-43.00	-37.76	-48.45	-65.43	-57.03	-72.97	-66.43
19.00	-38.28	-51.76	-32.94	-39.47	-33.89	-38.67	-65.60	-61.91	-69.18	-62.62
19.50	-37.69	-52.96	-42.46	-42.55	-35.04	-35.38	-65.53	-66.19	-72.21	-63.83
20.00	-34.54	-56.44	-38.11	-43.44	-36.05	-36.14	-65.08	-68.52	-69.47	-64.76
20.50	-33.92	-53.32	-37.02	-44.54	-52.79	-36.65	-64.21	-66.13	-69.73	-68.21
21.00	-37.78	-49.96	-36.64	-45.18	-51.72	-38.54	-62.47	-56.48	-69.52	-67.06
21.50	-37.20	-49.45	-34.33	-41.40	-55.28	-39.22	-61.41	-57.89	-68.73	-65.28
22.00	-34.07	-54.46	-41.98	-42.65	-53.82	-37.75	-62.56	-62.51	-71.49	-68.24
22.50	-32.98	-53.65	-38.53	-43.50	-52.81	-37.33	-66.02	-63.99	-71.94	-69.79
23.00	-36.62	-52.72	-32.01	-43.17	-57.09	-38.48	-63.87	-63.99	-71.10	-69.95
23.50	-33.21	-48.66	-24.76	-38.77	-53.96	-38.69	-65.40	-50.16	-68.47	-67.95
24.00	-32.93	-47.94	-29.91	-36.37	-59.56	-42.00	-66.28	-50.49	-70.19	-70.98
24.50	-31.71	-47.11	-25.94	-39.16	-55.23	-43.53	-66.42	-57.10	-68.57	-68.79
25.00	-29.94	-45.26	-20.71	-37.80	-53.24	-42.52	-62.04	-53.94	-67.21	-67.66
25.50	-38.47	-46.22	-28.11	-38.76	-53.46	-45.00	-61.47	-58.39	-66.28	-67.93
26.00	-36.68	-50.86	-25.42	-35.51	-54.27	-45.71	-63.22	-56.81	-66.31	-68.21
26.50	-35.15	-47.31	-26.90	-40.88	-54.28	-46.98	-64.03	-54.23	-68.73	-69.60
27.00	-52.37	-52.89	-26.14	-38.50	-53.72	-49.96	-62.77	-53.81	-68.20	-69.01
27.50	-53.85	-51.60	-31.66	-37.52	-55.16	-49.45	-65.35	-55.78	-64.48	-69.66
28.00	-51.86	-50.63	-32.13	-37.59	-55.26	-50.43	-63.37	-55.06	-64.83	-67.25
28.50	-50.47	-52.00	-28.79	-37.55	-52.40	-50.35	-65.97	-53.45	-68.79	-68.94
29.00	-52.21	-52.11	-28.13	-37.40	-50.27	-51.22	-66.76	-57.75	-68.29	-66.48
30.00	-57.75	-53.15	-26.69	-38.93	-50.24	-46.00	-65.14	-54.59	-67.18	-66.05

Note: No sub-harmonics below 15 GHz.

Typical Performance Data

Test Conditions: @ Temperature = 25°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc) +20 dBm				
	F2	F3	F0.5	F1.5	F2.5
0.05	-47.46	-11.13	--	--	--
0.50	-32.98	-8.42	--	--	--
1.00	-15.94	-7.49	--	--	--
2.00	-19.03	-38.08	--	--	--
3.00	-25.91	-47.02	--	--	--
4.00	-24.90	-29.96	--	--	--
5.00	-28.69	-45.69	--	--	--
6.00	-27.18	-40.36	--	--	--
7.00	-25.33	-42.29	--	--	--
8.00	-25.09	-40.66	--	--	--
9.00	-29.52	-42.19	--	--	--
10.00	-45.33	-50.99	--	--	--
11.00	-29.17	-40.72	--	--	--
12.00	-26.48	-54.38	--	--	--
13.00	-25.42	-42.09	--	--	--
14.00	-23.41	-42.39	--	--	--
15.00	-24.20	-38.95	-72.58	-81.56	-77.39
15.50	-19.23	-34.46	-80.65	-76.70	-76.85
16.00	-17.80	-35.79	-75.03	-80.93	-77.28
16.50	-19.90	-38.35	-81.54	-84.22	-76.56
17.00	-18.94	-40.56	-87.96	-82.55	-77.87
17.50	-26.59	-41.78	-67.81	-78.07	-76.45
18.00	-36.14	-45.04	-77.46	-79.58	-75.77
18.50	-34.87	-45.55	-67.28	-79.13	-79.06
19.00	-26.37	-47.70	-71.72	-80.75	-78.77
19.50	-23.10	-45.66	-71.95	-77.63	-71.90
20.00	-23.89	-44.98	-66.60	-73.07	-76.33
20.50	-24.50	-43.51	-59.90	-67.74	-75.28
21.00	-25.77	-36.70	-57.14	-66.78	-77.50
21.50	-27.10	-37.96	-62.07	-73.15	-77.44
22.00	-25.49	-38.21	-62.34	-72.46	-78.50
22.50	-24.46	-42.66	-63.13	-72.48	-78.36
23.00	-24.59	-46.51	-60.31	-70.67	-76.35
23.50	-24.89	-45.38	-56.12	-75.23	-79.08
24.00	-26.97	-49.01	-52.82	-75.89	-78.99
24.50	-27.28	-53.07	-58.12	-79.11	-79.04
25.00	-29.29	-57.67	-63.32	-74.25	-79.27
25.50	-31.28	-52.43	-72.43	-77.31	-79.04
26.00	-31.23	-55.68	-70.78	-76.33	-77.08
26.50	-33.11	-55.21	-60.33	-71.70	-76.59
27.00	-36.01	-58.87	-57.92	-71.95	-81.31
27.50	-35.74	-59.10	-57.19	-70.22	-77.99
28.00	-37.32	-61.09	-56.19	-69.71	-75.33
28.50	-38.01	-59.37	-55.68	-69.69	-77.03
29.00	-38.85	-68.81	-56.33	-69.73	-77.71
30.00	-33.10	-55.50	-60.17	-73.61	-75.67

Note: No sub-harmonics below 15 GHz.

Typical Performance Data

Test Conditions: @ Temperature = 25°C.

Freq. (GHz)	Phase Noise vs. Output Freq. at Frequency Offsets (dBc / Hz)					
	100 Hz	1 kHz	10 kHz	100 kHz	1 MHz	10 MHz
0.05	-114.66	-128.12	-132.04	-129.77	-132.09	-127.43
0.50	-97.09	-115.87	-123.21	-122.50	-129.16	-127.11
1.00	-92.96	-111.16	-118.74	-117.44	-127.88	-126.91
2.00	-83.43	-104.22	-112.75	-110.46	-129.44	-127.37
3.00	-81.91	-101.47	-109.44	-107.67	-122.98	-122.54
4.00	-76.83	-97.97	-103.94	-105.86	-124.68	-124.28
5.00	-79.34	-97.02	-105.14	-103.59	-121.50	-119.06
6.00	-73.62	-95.24	-102.93	-101.61	-120.63	-125.38
7.00	-75.86	-93.85	-101.53	-99.84	-122.19	-123.41
8.00	-69.38	-92.96	-100.43	-99.27	-126.31	-122.57
9.00	-72.57	-90.65	-99.07	-97.84	-120.49	-117.61
10.00	-71.56	-91.55	-98.58	-98.37	-121.82	-119.76
11.00	-68.30	-89.71	-97.80	-96.14	-117.76	-119.85
12.00	-69.36	-89.24	-97.34	-96.38	-119.78	-118.86
13.00	-68.40	-88.43	-96.80	-94.98	-119.06	-121.02
14.00	-71.30	-88.43	-96.77	-94.11	-117.03	-118.26
15.00	-67.08	-88.35	-95.77	-94.06	-113.16	-121.12
15.50	-66.54	-87.09	-95.35	-93.61	-115.09	-117.45
16.00	-66.95	-86.10	-95.60	-93.30	-122.02	-118.75
16.50	-71.00	-86.87	-95.41	-92.58	-117.99	-119.61
17.00	-64.99	-87.14	-94.48	-92.63	-116.67	-118.65
17.50	-67.94	-86.78	-94.00	-91.94	-119.35	-120.50
18.00	-68.92	-85.71	-93.79	-92.25	-118.91	-117.75
18.50	-67.29	-85.76	-94.04	-92.16	-116.14	-116.47
19.00	-66.23	-85.77	-93.03	-91.67	-115.17	-113.91
19.50	-63.07	-85.76	-92.99	-92.46	-114.83	-115.27
20.00	-65.51	-85.04	-93.04	-90.62	-115.79	-113.23
20.50	-64.81	-83.45	-91.84	-91.96	-115.82	-115.85
21.00	-66.54	-84.63	-91.97	-89.59	-113.75	-115.51
21.50	-66.04	-84.07	-89.38	-89.79	-115.21	-116.20
22.00	-62.60	-83.25	-90.51	-90.05	-112.51	-115.98
22.50	-65.68	-84.37	-91.10	-90.08	-113.67	-113.83
23.00	-63.69	-83.37	-91.75	-89.91	-112.77	-115.11
23.50	-63.41	-84.12	-92.51	-88.91	-111.20	-116.78
24.00	-65.83	-82.86	-90.71	-90.06	-111.62	-115.50
24.50	-61.75	-83.50	-88.24	-90.28	-111.94	-113.21
25.00	-65.05	-82.34	-89.35	-89.36	-107.77	-113.02
25.50	-63.93	-81.95	-90.72	-88.58	-109.36	-111.17
26.00	-65.47	-82.18	-90.46	-88.25	-111.40	-110.76
26.50	-63.54	-83.03	-89.80	-88.77	-110.81	-110.71
27.00	-60.97	-82.16	-89.62	-87.85	-108.56	-110.55
27.50	-63.54	-81.43	-90.04	-87.46	-106.88	-112.71
28.00	-59.73	-81.99	-90.08	-87.63	-111.86	-112.27
28.50	-60.69	-82.27	-87.53	-88.51	-109.93	-113.46
29.00	-64.33	-82.32	-88.91	-87.49	-111.46	-110.22
30.00	-60.89	-81.34	-89.70	-88.34	-108.94	-111.38

Typical Performance Data

Test Conditions: @ Temperature = 25°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Freq. at Frequency Output (dBc / Hz)					
	0.05 GHz	1 GHz	5 GHz	10 GHz	20 GHz	30 GHz
0.1	-114.66	-92.96	-79.34	-71.56	-65.51	-60.89
1	-128.12	-111.16	-97.02	-91.55	-85.04	-81.34
10	-132.04	-118.74	-105.14	-98.58	-93.04	-89.70
100	-129.77	-117.44	-103.59	-98.37	-90.62	-88.34
1000	-132.09	-127.88	-121.50	-121.82	-115.79	-108.94
10000	-127.43	-126.91	-119.06	-119.76	-113.23	-111.38

Freq. (GHz)	Spurious (dBc)
0.05	-73.81
0.50	-79.99
1.00	-79.06
2.00	-77.04
3.00	-75.26
4.00	-74.98
5.00	-73.33
6.00	-68.05
7.00	-69.18
8.00	-71.19
9.00	-68.43
10.00	-69.01
11.00	-66.77
12.00	-68.37
13.00	-60.08
14.00	-62.19
15.00	-60.71
15.50	-63.70
16.00	-67.10
16.50	-61.63
17.00	-61.12
17.50	-62.82
18.00	-63.77
18.50	-51.87
19.00	-63.04
19.50	-63.53
20.00	-62.94
20.50	-62.34
21.00	-59.49
21.50	-55.50
22.00	-58.73
22.50	-60.20
23.00	-59.44
23.50	-60.18
24.00	-56.29
24.50	-54.94
25.00	-52.79
25.50	-54.17
26.00	-54.32
26.50	-53.13
27.00	-54.39
27.50	-53.90
28.00	-55.94
28.50	-56.27
29.00	-54.40
30.00	-54.11

Typical Performance Data

Test Conditions: @ Temperature = 50°C.

Freq. (GHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-30 dBm	-20 dBm	-10 dBm	0 dBm	+5 dBm	+10 dBm	+15 dBm	+20 dBm	+22 dBm	+25 dBm
0.05	1.79	0.81	0.76	0.58	1.06	0.88	0.67	0.28	-0.03	-0.51
0.50	0.91	0.88	0.78	0.71	0.86	0.78	0.69	0.67	0.43	0.40
1.00	0.99	0.31	0.42	0.71	0.96	0.56	0.48	0.27	0.12	0.03
2.00	1.44	1.79	0.81	1.02	1.04	0.75	0.85	0.92	0.47	0.24
3.00	0.85	0.76	-0.25	-0.13	0.57	0.56	0.72	0.50	0.29	-0.15
4.00	0.89	1.14	0.21	0.71	0.86	0.56	0.86	0.54	0.40	0.13
5.00	-0.48	-0.81	-0.87	-0.67	-0.82	-0.56	-0.46	-0.73	-0.60	-1.05
6.00	0.62	0.29	0.08	0.18	-0.21	-0.32	-0.13	-0.13	-0.03	-0.42
7.00	0.22	0.52	0.46	0.15	0.19	0.24	-0.40	-1.09	-1.08	-1.16
8.00	1.33	1.07	0.53	0.52	0.60	0.57	-0.08	-0.28	-0.29	-0.52
9.00	-0.29	0.07	0.14	0.29	-0.05	0.17	-0.43	-0.51	-0.54	-0.89
10.00	1.28	0.29	0.34	0.08	0.09	-0.08	-0.05	-0.41	-0.66	-0.77
11.00	-0.44	-0.03	-0.73	-0.66	-0.67	-0.56	-1.18	-1.84	-1.45	-1.71
12.00	0.66	0.68	0.17	0.49	0.42	0.32	-0.73	-0.51	-0.82	-0.99
13.00	0.64	0.75	0.31	0.15	0.13	0.08	-0.74	-0.93	-0.67	-1.05
14.00	0.11	0.65	0.20	0.00	0.44	0.43	0.27	-1.49	-1.73	-1.70
15.00	0.51	0.53	0.86	0.45	0.62	0.69	-0.49	-0.38	-1.03	-1.60
15.50	-0.52	-0.32	-0.59	-0.08	-0.60	-0.54	-0.41	-0.76	-0.64	-1.62
16.00	-0.24	-0.10	-0.65	-0.17	-0.38	-0.53	-0.46	-0.64	-0.23	-0.09
16.50	-0.10	-0.10	-0.57	-0.71	-0.55	-0.40	-0.81	-0.55	-0.61	-0.21
17.00	-0.09	-0.30	-0.31	-0.38	-0.20	-0.09	-0.47	-0.20	-0.27	-0.02
17.50	-0.16	0.43	-0.20	-0.31	-0.19	-0.11	-0.50	-0.29	-0.38	-0.20
18.00	-0.02	-0.11	-0.61	-0.05	-0.56	-0.44	-0.54	-0.55	-0.11	-0.23
18.50	0.03	-0.15	-0.20	-0.37	-0.14	-0.48	-0.36	-0.18	-0.17	-0.25
19.00	-1.01	-1.19	-0.99	-0.93	-0.66	-1.21	-1.00	-0.86	-0.77	-0.28
19.50	0.09	-0.52	-0.80	-0.38	-0.55	-0.49	-0.63	-0.72	0.03	-0.28
20.00	0.04	-0.41	-0.52	-0.82	-0.52	-0.44	-0.33	-0.55	-0.08	-0.15
20.50	0.37	-0.04	-0.32	0.22	0.29	-0.09	-0.08	-0.38	0.03	-0.01
21.00	-0.47	-0.30	-0.52	-0.18	-0.03	-0.38	-0.29	-0.57	-0.44	-0.13
21.50	-0.52	-0.42	-0.68	-0.50	-0.30	-0.68	-0.54	-0.98	-0.73	--
22.00	0.00	-0.04	-0.35	-0.15	0.08	0.11	-0.24	0.05	0.14	--
22.50	-0.07	0.04	-0.53	-0.39	-0.19	-0.19	-0.12	-0.39	-0.23	--
23.00	-0.28	-0.32	-0.86	-0.35	-0.25	-0.55	-0.47	-0.27	-0.12	--
23.50	0.41	0.20	-0.43	0.01	0.15	-0.13	-0.02	-0.17	-0.07	--
24.00	0.35	0.16	-0.49	0.26	-0.07	0.08	-0.25	-0.09	0.00	--
24.50	-0.07	-0.23	-0.69	-0.37	-0.06	-0.03	-0.39	-0.16	-0.02	--
25.00	-0.14	-0.21	-0.76	-0.31	-0.06	-0.48	-0.45	-0.26	-0.10	--
25.50	0.38	0.56	0.04	-0.05	-0.09	-0.12	-0.03	0.16	0.33	--
26.00	0.58	0.54	0.62	0.21	0.06	0.05	-0.03	0.60	0.58	--
26.50	0.16	0.90	-0.09	0.14	-0.25	0.00	-0.40	0.11	0.02	--
27.00	0.29	0.12	0.14	0.22	-0.02	0.08	0.02	0.42	0.04	--
27.50	0.20	0.34	0.10	-0.03	-0.30	-0.36	-0.60	-0.02	0.02	--
28.00	-0.01	0.10	-0.27	-0.08	-0.59	0.15	-0.35	-0.38	-0.10	--
28.50	0.40	0.26	0.02	0.12	-0.31	-0.21	-0.67	-0.21	0.09	--
29.00	0.30	0.81	0.46	0.16	-0.24	-0.13	-0.30	0.25	0.16	--
30.00	0.56	0.78	-0.07	0.30	0.01	0.06	0.21	0.49	-0.16	--

Signal Generator

Typical Performance Data

Test Conditions: @ Temperature = 50°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dBm)									
	0.05 GHz	1 GHz	5 GHz	10 GHz	15 GHz	18 GHz	21 GHz	25 GHz	27 GHz	30 GHz
-30	1.79	0.99	-0.48	1.28	0.51	-0.02	-0.47	-0.14	0.29	0.56
-29	1.25	0.85	-0.59	1.25	0.56	-0.01	-0.44	-0.12	0.32	0.59
-28	0.70	0.72	-0.70	1.23	0.61	0.00	-0.41	-0.10	0.35	0.62
-27	0.84	0.44	-0.74	0.97	0.78	0.02	-0.33	-0.12	0.46	0.67
-26	0.98	0.17	-0.78	0.70	0.96	0.03	-0.25	-0.14	0.57	0.71
-25	1.08	0.13	-0.70	0.73	0.96	-0.27	-0.21	-0.10	0.55	0.55
-24	1.18	0.09	-0.63	0.75	0.96	-0.57	-0.18	-0.05	0.53	0.38
-23	0.90	0.35	-0.58	0.74	0.63	-0.54	-0.25	-0.13	0.51	0.48
-22	0.62	0.62	-0.53	0.73	0.30	-0.52	-0.32	-0.20	0.49	0.59
-21	0.71	0.46	-0.67	0.51	0.42	-0.31	-0.31	-0.21	0.31	0.68
-20	0.81	0.31	-0.81	0.29	0.53	-0.11	-0.30	-0.21	0.12	0.78
-18	0.71	0.33	-1.01	0.28	0.81	0.04	-0.17	0.49	0.27	0.41
-16	0.97	0.20	-0.70	-0.16	0.71	-0.24	-0.45	0.10	-0.04	0.30
-14	0.62	0.55	-0.58	-0.07	0.38	-0.29	-0.67	-0.10	-0.23	0.39
-12	0.71	0.52	-0.80	0.30	0.38	-0.69	-0.56	-0.66	0.03	0.31
-10	0.76	0.42	-0.87	0.34	0.86	-0.61	-0.52	-0.76	0.14	-0.07
-8	0.72	0.51	-1.02	0.22	0.09	-0.60	-0.46	-0.60	0.28	-0.13
-6	0.73	0.52	-0.87	0.29	0.20	-0.56	-0.38	-0.71	0.02	0.49
-4	0.99	0.50	-0.88	0.37	0.47	-0.55	-0.36	-0.63	0.10	0.40
-2	0.59	0.78	-0.69	0.10	0.53	-0.50	-0.40	-0.74	0.10	0.23
0	0.58	0.71	-0.67	0.08	0.45	-0.05	-0.18	-0.31	0.22	0.30
+1	0.84	0.68	-0.74	0.12	0.47	-0.36	-0.15	-0.23	0.00	0.16
+2	1.10	0.66	-0.82	0.15	0.49	-0.67	-0.12	-0.16	-0.21	0.02
+3	1.08	0.76	-0.84	0.10	0.65	-0.62	-0.08	-0.13	0.00	-0.05
+4	1.07	0.87	-0.85	0.04	0.80	-0.58	-0.05	-0.10	0.22	-0.11
+5	1.06	0.96	-0.82	0.09	0.62	-0.56	-0.03	-0.06	-0.02	0.01
+6	1.05	1.05	-0.79	0.14	0.44	-0.54	-0.02	-0.03	-0.26	0.13
+7	1.02	0.80	-0.52	0.00	0.43	-0.52	-0.23	-0.10	-0.17	0.07
+8	0.99	0.55	-0.25	-0.13	0.42	-0.51	-0.45	-0.16	-0.09	0.00
+9	0.94	0.56	-0.40	-0.10	0.55	-0.47	-0.41	-0.32	0.00	0.03
+10	0.88	0.56	-0.56	-0.08	0.69	-0.44	-0.38	-0.48	0.08	0.06
+11	0.84	0.79	-0.69	-0.01	0.10	-0.43	-0.37	-0.53	0.17	0.02
+12	0.80	1.01	-0.83	0.05	-0.49	-0.42	-0.36	-0.58	0.25	-0.02
+13	0.61	0.72	-0.61	0.00	-0.44	-0.38	-0.32	-0.51	0.19	0.10
+14	0.41	0.42	-0.38	-0.05	-0.39	-0.33	-0.28	-0.43	0.13	0.23
+15	0.67	0.48	-0.46	-0.05	-0.49	-0.54	-0.29	-0.45	0.02	0.21
+16	0.93	0.53	-0.54	-0.06	-0.58	-0.74	-0.30	-0.47	-0.10	0.19
+17	0.74	0.50	-0.55	-0.22	-0.49	-0.69	-0.25	-0.37	0.00	0.24
+18	0.55	0.47	-0.55	-0.38	-0.40	-0.63	-0.20	-0.27	0.09	0.30
+19	0.41	0.37	-0.64	-0.40	-0.39	-0.59	-0.38	-0.26	0.26	0.39
+20	0.28	0.27	-0.73	-0.41	-0.38	-0.55	-0.57	-0.26	0.42	0.49
+21	0.13	0.20	-0.67	-0.54	-0.70	-0.33	-0.51	-0.18	0.23	0.16
+22	-0.03	0.12	-0.60	-0.66	-1.03	-0.11	-0.44	-0.10	0.04	-0.16
+23	-0.23	0.09	-0.88	-0.73	-1.04	0.26	-0.10	0.21	--	--
+24	-0.44	0.05	-1.17	-0.79	-1.06	0.63	0.24	0.52	--	--
+25	-0.51	0.03	-1.05	-0.77	-1.60	-0.23	-0.13	--	--	--

Typical Performance Data

Test Conditions: @ Temperature = 50°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc)									
	-20 dBm					+10 dBm				
	F2	F3	F0.5	F1.5	F2.5	F2	F3	F0.5	F1.5	F2.5
0.05	-46.10	-7.01	--	--	--	-39.65	-10.69	--	--	--
0.50	-28.06	-8.33	--	--	--	-29.91	-8.32	--	--	--
1.00	-16.95	-8.92	--	--	--	-15.18	-7.83	--	--	--
2.00	-20.74	-43.13	--	--	--	-21.62	-45.14	--	--	--
3.00	-48.76	-48.99	--	--	--	-37.37	-67.23	--	--	--
4.00	-40.42	-51.41	--	--	--	-38.81	-62.71	--	--	--
5.00	-41.50	-45.60	--	--	--	-41.19	-65.77	--	--	--
6.00	-20.43	-46.25	--	--	--	-24.60	-52.52	--	--	--
7.00	-19.17	-43.30	--	--	--	-21.39	-53.96	--	--	--
8.00	-34.89	-43.83	--	--	--	-32.12	-58.67	--	--	--
9.00	-35.93	-42.40	--	--	--	-43.46	-65.23	--	--	--
10.00	-41.30	-42.38	--	--	--	-43.21	-64.97	--	--	--
11.00	-42.67	-40.49	--	--	--	-40.79	-61.32	--	--	--
12.00	-43.15	-35.96	--	--	--	-38.44	-69.49	--	--	--
13.00	-45.27	-35.83	--	--	--	-36.70	-61.43	--	--	--
14.00	-43.19	-37.61	--	--	--	-34.33	-61.15	--	--	--
15.00	-39.38	-36.47	-49.67	-44.88	-36.25	-36.33	-61.60	-67.64	-72.68	-65.27
15.50	-39.31	-36.33	-42.52	-35.86	-34.76	-32.94	-58.35	-71.43	-66.58	-67.27
16.00	-40.36	-35.09	-35.88	-42.22	-36.05	-31.46	-59.34	-65.17	-72.02	-66.54
16.50	-39.87	-33.36	-41.30	-46.31	-36.64	-33.51	-58.50	-73.30	-74.50	-66.86
17.00	-41.67	-51.34	-45.29	-44.00	-35.66	-33.14	-63.72	-75.37	-72.64	-67.74
17.50	-42.20	-53.18	-27.03	-42.51	-36.43	-42.13	-63.03	-56.96	-71.58	-68.93
18.00	-38.08	-55.26	-34.99	-39.81	-37.23	-53.81	-65.88	-65.39	-70.99	-69.67
18.50	-40.51	-54.15	-26.94	-41.85	-33.53	-43.54	-65.95	-56.65	-72.62	-65.17
19.00	-36.21	-52.67	-32.09	-39.92	-35.20	-38.05	-68.36	-60.97	-72.33	-63.96
19.50	-36.39	-55.83	-42.52	-40.26	-34.42	-35.01	-66.36	-66.13	-72.64	-64.40
20.00	-35.82	-53.62	-37.04	-40.19	-33.31	-35.81	-64.52	-70.05	-72.07	-63.78
20.50	-38.21	-50.45	-36.30	-40.48	-53.56	-36.44	-64.08	-66.95	-71.86	-66.24
21.00	-37.33	-49.60	-34.65	-40.81	-51.17	-38.96	-61.73	-55.77	-70.87	-68.11
21.50	-36.51	-47.54	-34.65	-38.40	-54.76	-39.49	-61.16	-56.76	-67.94	-67.81
22.00	-32.22	-53.50	-42.33	-41.51	-55.58	-37.85	-62.97	-60.96	-67.33	-68.01
22.50	-34.43	-51.75	-36.67	-39.13	-53.95	-37.19	-65.26	-60.72	-71.25	-69.89
23.00	-32.47	-52.95	-30.89	-40.99	-54.06	-38.16	-65.47	-61.22	-69.25	-69.61
23.50	-33.36	-48.82	-22.46	-39.62	-54.14	-38.20	-64.33	-51.13	-69.43	-70.18
24.00	-34.33	-48.32	-31.66	-39.26	-54.74	-40.60	-67.31	-53.25	-70.29	-68.04
24.50	-35.95	-47.21	-24.00	-37.85	-54.81	-44.23	-66.14	-58.71	-71.29	-68.39
25.00	-33.17	-44.54	-18.81	-39.15	-51.62	-42.76	-64.72	-50.51	-67.38	-64.93
25.50	-52.02	-49.12	-29.36	-37.36	-57.00	-44.56	-64.06	-60.81	-71.07	-68.02
26.00	-52.36	-50.78	-25.60	-37.64	-54.59	-45.26	-61.94	-56.72	-67.10	-69.08
26.50	-55.73	-49.42	-26.70	-37.61	-54.84	-46.92	-62.92	-54.52	-68.54	-68.18
27.00	-53.39	-49.65	-24.55	-38.67	-55.50	-50.84	-62.98	-52.66	-66.74	-70.40
27.50	-54.62	-51.34	-29.68	-37.60	-55.22	-50.10	-65.30	-55.61	-68.29	-67.56
28.00	-52.90	-51.62	-33.52	-36.44	-53.16	-50.70	-65.18	-55.18	-66.51	-66.75
28.50	-51.39	-51.48	-28.18	-34.81	-53.65	-50.84	-66.69	-53.01	-65.89	-68.40
29.00	-55.79	-51.56	-28.84	-36.68	-52.03	-50.61	-64.01	-59.28	-66.62	-67.97
30.00	-55.70	-52.63	-23.13	-35.97	-48.02	-45.63	-65.11	-50.92	-68.77	-62.41

Note: No sub-harmonics below 15 GHz.

Typical Performance Data

Test Conditions: @ Temperature = 50°C.

Freq. (GHz)	Harmonics levels vs. Output Frequency (dBc) +20 dBm				
	F2	F3	F0.5	F1.5	F2.5
0.05	-39.76	-10.61	--	--	--
0.50	-32.58	-8.50	--	--	--
1.00	-15.14	-7.76	--	--	--
2.00	-19.06	-38.66	--	--	--
3.00	-26.28	-45.62	--	--	--
4.00	-25.10	-30.87	--	--	--
5.00	-30.11	-46.52	--	--	--
6.00	-28.67	-41.29	--	--	--
7.00	-24.43	-44.77	--	--	--
8.00	-26.54	-43.01	--	--	--
9.00	-31.72	-45.31	--	--	--
10.00	-40.80	-48.51	--	--	--
11.00	-31.72	-45.85	--	--	--
12.00	-27.82	-63.29	--	--	--
13.00	-27.50	-44.95	--	--	--
14.00	-26.67	-48.09	--	--	--
15.00	-25.51	-42.05	-68.90	-82.84	-75.35
15.50	-19.74	-35.35	-80.74	-76.72	-77.06
16.00	-18.73	-36.54	-74.93	-80.27	-73.34
16.50	-21.00	-39.70	-80.98	-84.43	-77.32
17.00	-20.62	-43.48	-85.61	-83.36	-75.00
17.50	-29.94	-43.43	-67.94	-81.64	-77.90
18.00	-43.79	-47.81	-74.19	-77.70	-76.14
18.50	-31.32	-48.85	-65.70	-79.70	-75.00
19.00	-25.41	-49.49	-71.63	-83.14	-74.14
19.50	-22.74	-46.14	-72.90	-79.81	-73.78
20.00	-24.04	-46.03	-67.75	-73.57	-75.11
20.50	-24.55	-45.02	-59.77	-68.98	-74.46
21.00	-27.08	-39.10	-56.91	-67.05	-75.40
21.50	-27.21	-39.15	-60.93	-69.82	-76.24
22.00	-24.46	-40.70	-60.34	-70.52	-79.12
22.50	-24.58	-44.50	-60.22	-69.63	-82.05
23.00	-24.37	-48.34	-60.31	-70.95	-78.36
23.50	-24.99	-46.86	-57.79	-77.68	-77.03
24.00	-26.12	-49.70	-54.85	-78.29	-79.25
24.50	-28.19	-54.92	-60.37	-73.24	-79.74
25.00	-28.93	-59.05	-61.11	-73.04	-79.46
25.50	-30.52	-53.94	-75.70	-78.24	-77.97
26.00	-31.57	-56.97	-68.29	-73.08	-79.04
26.50	-33.30	-55.92	-60.16	-73.79	-76.72
27.00	-37.35	-61.11	-56.60	-69.35	-81.10
27.50	-36.91	-59.28	-56.82	-69.57	-76.91
28.00	-38.11	-60.13	-55.95	-68.56	-78.11
28.50	-38.67	-60.29	-54.92	-70.58	-75.03
29.00	-38.36	-70.58	-56.18	-69.66	-75.60
30.00	-30.31	-54.23	-56.78	-74.22	-75.69

Note: No sub-harmonics below 15 GHz.

Typical Performance Data

Test Conditions: @ Temperature = 50°C.

Freq. (GHz)	Phase Noise vs. Output Freq. at Frequency Offsets (dBc / Hz)					
	100 Hz	1 kHz	10 kHz	100 kHz	1 MHz	10 MHz
0.05	-117.29	-127.00	-129.50	-129.71	-128.21	-128.58
0.50	-97.59	-115.52	-122.76	-123.06	-130.91	-126.29
1.00	-90.58	-110.05	-117.76	-116.70	-129.99	-126.04
2.00	-88.20	-103.54	-111.41	-111.74	-126.59	-126.57
3.00	-81.88	-100.91	-108.63	-108.31	-123.36	-122.70
4.00	-76.02	-98.49	-106.63	-105.80	-123.42	-120.93
5.00	-75.17	-97.23	-103.63	-103.82	-119.81	-119.34
6.00	-78.60	-93.92	-103.25	-102.10	-125.51	-121.77
7.00	-73.86	-93.04	-100.70	-100.55	-120.76	-119.94
8.00	-72.51	-91.10	-99.22	-99.02	-120.87	-121.37
9.00	-71.12	-91.01	-98.67	-97.66	-119.97	-119.32
10.00	-69.36	-90.51	-97.57	-97.07	-125.66	-122.11
11.00	-65.86	-89.15	-97.70	-95.83	-118.43	-118.40
12.00	-72.50	-88.31	-96.35	-94.50	-120.27	-119.13
13.00	-68.09	-87.62	-96.41	-95.15	-119.55	-119.66
14.00	-67.51	-86.38	-94.00	-94.79	-115.23	-118.35
15.00	-66.01	-87.49	-94.60	-93.70	-114.91	-116.92
15.50	-66.65	-86.17	-93.89	-92.96	-118.76	-118.84
16.00	-64.79	-86.18	-93.60	-93.21	-115.89	-118.02
16.50	-70.43	-86.61	-93.71	-92.29	-116.02	-118.43
17.00	-64.75	-85.97	-92.52	-93.34	-121.58	-118.97
17.50	-66.35	-85.51	-93.26	-92.08	-118.74	-115.20
18.00	-64.16	-83.87	-93.99	-92.66	-114.80	-118.44
18.50	-65.14	-84.89	-91.29	-91.40	-118.90	-118.98
19.00	-64.74	-85.39	-92.80	-91.49	-113.65	-115.48
19.50	-62.99	-84.47	-92.67	-92.54	-119.36	-118.65
20.00	-61.78	-85.08	-92.92	-92.75	-116.65	-114.01
20.50	-64.79	-83.65	-91.72	-90.55	-114.88	-115.50
21.00	-62.78	-84.51	-91.88	-90.78	-114.17	-117.98
21.50	-68.11	-83.27	-92.27	-89.90	-116.94	-112.48
22.00	-64.07	-83.03	-91.39	-90.41	-118.50	-117.15
22.50	-68.42	-84.31	-92.06	-91.01	-114.53	-118.37
23.00	-62.93	-83.09	-90.95	-89.78	-113.30	-115.49
23.50	-66.69	-83.84	-88.48	-90.63	-113.43	-113.51
24.00	-62.71	-83.14	-91.59	-89.59	-111.73	-113.67
24.50	-60.58	-81.60	-90.45	-89.60	-114.90	-114.47
25.00	-62.00	-82.03	-90.11	-89.03	-110.62	-116.14
25.50	-61.71	-81.90	-90.85	-88.68	-109.26	-114.12
26.00	-59.62	-81.22	-90.35	-87.92	-110.18	-115.43
26.50	-61.03	-82.95	-90.37	-88.55	-112.95	-111.28
27.00	-63.58	-82.41	-87.72	-88.80	-110.37	-115.81
27.50	-59.79	-81.61	-90.01	-87.65	-109.93	-110.65
28.00	-60.15	-80.93	-89.33	-88.06	-113.83	-111.38
28.50	-57.96	-80.79	-89.79	-87.22	-111.89	-114.27
29.00	-59.43	-80.53	-88.07	-87.62	-107.50	-113.48
30.00	-60.62	-81.25	-87.97	-87.09	-111.09	-112.96

Signal Generator

SSG-30GHP-RC

Typical Performance Data

Test Conditions: @ Temperature = 50°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Freq. at Frequency Output (dBc / Hz)					
	0.05 GHz	1 GHz	5 GHz	10 GHz	20 GHz	30 GHz
0.1	-117.29	-90.58	-75.17	-69.36	-61.78	-60.62
1	-127.00	-110.05	-97.23	-90.51	-85.08	-81.25
10	-129.50	-117.76	-103.63	-97.57	-92.92	-87.97
100	-129.71	-116.70	-103.82	-97.07	-92.75	-87.09
1000	-128.21	-129.99	-119.81	-125.66	-116.65	-111.09
10000	-128.58	-126.04	-119.34	-122.11	-114.01	-112.96

Freq. (GHz)	Spurious (dBc)
0.05	-72.92
0.50	-78.51
1.00	-78.54
2.00	-76.58
3.00	-75.43
4.00	-74.84
5.00	-69.20
6.00	-69.39
7.00	-70.92
8.00	-70.35
9.00	-68.41
10.00	-66.94
11.00	-66.43
12.00	-66.21
13.00	-64.65
14.00	-63.51
15.00	-61.66
15.50	-63.22
16.00	-65.56
16.50	-63.85
17.00	-63.79
17.50	-63.18
18.00	-62.51
18.50	-63.27
19.00	-61.30
19.50	-61.52
20.00	-58.44
20.50	-63.73
21.00	-63.09
21.50	-58.17
22.00	-61.34
22.50	-61.84
23.00	-62.44
23.50	-58.45
24.00	-59.47
24.50	-61.59
25.00	-61.11
25.50	-55.51
26.00	-58.84
26.50	-58.58
27.00	-59.63
27.50	-56.08
28.00	-58.64
28.50	-55.40
29.00	-53.46
30.00	-56.26