

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 0°C.

Freq. (MHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-50 dBm	-45 dBm	-40 dBm	-30 dBm	-20 dBm	-10 dBm	0 dBm	+10 dBm	+15 dBm	+20 dBm
10	-0.08	0.08	-0.03	0.00	0.04	-0.03	0.14	0.10	0.43	0.11
50	0.10	0.16	0.04	0.15	0.06	0.12	0.12	0.22	0.53	0.24
100	0.04	0.13	0.04	0.11	0.08	0.14	0.13	0.36	0.47	0.17
200	-0.06	0.02	0.00	-0.01	0.03	0.15	0.12	0.46	0.33	0.13
400	0.16	0.16	0.20	0.31	0.35	0.56	0.38	0.52	0.54	0.31
600	0.00	-0.03	0.02	0.10	0.17	0.30	0.23	0.40	0.49	0.25
800	-0.28	-0.24	-0.22	-0.10	-0.05	0.25	0.02	0.20	0.22	0.01
1000	-0.21	-0.12	-0.07	-0.01	0.10	0.44	0.06	0.33	0.39	0.11
1200	-0.18	-0.14	-0.17	-0.15	0.01	0.28	0.03	0.16	0.25	0.06
1400	-0.09	-0.03	0.01	0.07	0.13	0.14	0.10	0.23	0.33	0.05
1600	-0.10	-0.06	-0.03	-0.04	0.05	0.07	0.05	0.22	0.27	0.05
1800	-0.15	-0.07	-0.07	-0.05	0.04	0.06	0.07	0.11	0.23	0.09
2000	-0.19	-0.15	-0.09	0.03	0.14	0.17	0.06	0.23	0.24	0.07
2200	-0.16	-0.17	-0.15	-0.06	0.04	0.12	0.04	0.14	0.16	0.00
2400	-0.10	-0.20	-0.16	-0.03	0.03	0.15	0.02	0.15	0.15	0.01
2600	-0.15	-0.15	-0.16	0.00	0.10	0.18	0.01	0.16	0.16	0.02
2800	-0.11	-0.15	-0.13	-0.01	0.13	0.18	-0.01	0.13	0.11	-0.02
3000	-0.16	-0.16	-0.09	-0.02	0.11	0.23	0.05	0.25	0.20	0.09
3250	-0.09	-0.05	-0.05	0.01	0.17	0.25	0.05	0.16	0.09	0.06
3500	-0.20	-0.17	-0.17	-0.08	0.10	0.15	-0.07	0.05	-0.03	-0.04
3750	0.00	0.07	0.08	0.21	0.36	0.35	-0.01	0.12	0.15	0.03
4000	-0.06	-0.07	-0.06	0.03	0.16	0.20	0.03	0.05	0.11	0.01
4250	-0.08	0.01	0.01	0.11	0.26	0.25	0.04	0.13	0.18	0.08
4500	-0.08	-0.05	-0.07	0.05	0.17	0.22	0.00	0.09	0.07	-0.02
4750	0.00	-0.02	-0.02	-0.01	0.14	0.21	-0.14	0.04	0.09	0.00
5000	0.01	0.01	0.00	0.11	0.24	0.28	0.15	0.19	0.23	0.09
5200	-0.07	-0.08	-0.05	0.03	0.12	0.15	0.05	0.20	0.16	0.05
5400	0.00	-0.02	0.01	0.08	0.19	0.11	-0.04	0.14	0.07	0.01
5600	0.05	0.01	0.02	0.12	0.22	0.15	0.02	0.19	0.10	0.07
5800	-0.11	-0.08	-0.08	-0.02	0.10	0.01	0.09	0.25	0.21	0.16
6000	-0.21	-0.16	-0.12	0.00	0.13	0.03	-0.02	0.07	0.12	0.05
6200	0.23	0.16	0.16	0.21	0.29	0.18	0.11	0.14	0.20	0.07
6400	-0.17	-0.09	-0.06	0.04	0.10	0.07	0.15	0.19	0.28	0.15
6600	-0.05	-0.07	-0.12	0.04	0.13	0.12	-0.06	0.11	0.10	0.08
6800	-0.33	-0.19	-0.06	0.05	0.19	0.11	-0.02	0.12	0.03	0.02
7000	0.03	-0.03	-0.04	0.05	0.24	0.14	-0.01	0.13	0.06	0.09
7200	-0.06	-0.06	-0.01	-0.03	0.13	0.29	0.19	0.27	0.18	0.16
7400	0.24	0.15	0.18	0.31	0.47	0.16	0.09	0.16	0.11	0.04
7600	-0.21	-0.16	-0.13	-0.02	0.18	0.17	0.13	0.21	0.21	0.15
7800	-0.31	-0.19	-0.11	0.01	0.15	0.08	0.01	0.02	0.07	-0.02
8000	-0.19	-0.16	-0.14	0.06	0.21	0.23	0.18	0.19	0.25	0.15
8200	-0.14	-0.17	-0.15	-0.06	0.02	0.04	-0.04	0.05	0.06	0.05
8400	-0.18	-0.16	-0.08	-0.01	0.08	0.10	0.01	0.11	0.09	0.04
8600	0.00	0.03	0.05	0.11	0.32	0.20	0.14	0.23	0.17	0.09
8800	-0.10	-0.11	-0.11	0.01	0.21	0.01	-0.07	0.07	-0.05	-0.02
9000	-0.20	-0.18	-0.16	-0.08	0.19	-0.07	-0.10	0.06	0.00	-0.03

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 0°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dB)									
	500 MHz	1000 MHz	2000 MHz	3000 MHz	4000 MHz	5000 MHz	6000 MHz	7000 MHz	8000 MHz	9000 MHz
-50	0.37	-0.14	-0.13	-0.30	0.05	-0.03	-0.28	0.11	-0.04	-0.25
-49	0.37	-0.12	-0.12	-0.29	0.04	-0.03	-0.27	0.10	-0.04	-0.25
-48	0.37	-0.11	-0.11	-0.28	0.03	-0.03	-0.25	0.08	-0.05	-0.25
-47	0.37	-0.09	-0.09	-0.27	0.02	-0.02	-0.24	0.06	-0.06	-0.25
-46	0.37	-0.07	-0.08	-0.26	0.01	-0.02	-0.23	0.05	-0.06	-0.25
-45	0.37	-0.05	-0.07	-0.25	0.00	-0.02	-0.22	0.03	-0.07	-0.25
-44	0.38	-0.04	-0.07	-0.23	0.00	-0.01	-0.20	0.02	-0.08	-0.24
-43	0.39	-0.03	-0.06	-0.21	0.00	0.00	-0.19	0.01	-0.09	-0.23
-42	0.40	-0.02	-0.06	-0.19	0.00	0.00	-0.18	0.01	-0.09	-0.22
-41	0.41	-0.01	-0.06	-0.17	0.00	0.01	-0.16	0.00	-0.10	-0.21
-40	0.42	0.00	-0.05	-0.15	0.00	0.02	-0.15	-0.01	-0.11	-0.20
-38	0.43	0.01	-0.04	-0.14	0.00	0.01	-0.13	-0.01	-0.09	-0.20
-36	0.45	0.03	-0.03	-0.12	0.00	0.01	-0.11	0.00	-0.07	-0.21
-34	0.46	0.04	0.00	-0.09	0.02	0.03	-0.09	0.01	-0.04	-0.20
-32	0.49	0.05	0.04	-0.06	0.07	0.08	-0.07	0.02	0.00	-0.18
-30	0.52	0.06	0.08	-0.04	0.11	0.13	-0.05	0.04	0.04	-0.16
-28	0.51	0.07	0.10	-0.02	0.12	0.14	-0.02	0.06	0.05	-0.14
-26	0.51	0.09	0.12	0.00	0.14	0.16	0.01	0.08	0.06	-0.13
-24	0.51	0.10	0.14	0.03	0.16	0.18	0.04	0.12	0.09	-0.08
-22	0.53	0.11	0.16	0.08	0.20	0.21	0.07	0.17	0.13	0.01
-20	0.55	0.12	0.17	0.12	0.24	0.24	0.10	0.22	0.18	0.09
-18	0.61	0.17	0.20	0.13	0.26	0.26	0.11	0.27	0.20	0.05
-16	0.67	0.22	0.23	0.14	0.29	0.28	0.12	0.32	0.22	0.00
-14	0.75	0.28	0.24	0.16	0.30	0.29	0.10	0.29	0.22	-0.06
-12	0.85	0.36	0.22	0.19	0.30	0.29	0.05	0.18	0.21	-0.11
-10	0.95	0.43	0.21	0.23	0.30	0.29	0.00	0.07	0.20	-0.17
-8	0.83	0.34	0.20	0.18	0.23	0.22	0.00	0.04	0.18	-0.17
-6	0.71	0.26	0.19	0.14	0.17	0.16	0.00	0.01	0.17	-0.17
-4	0.64	0.19	0.17	0.11	0.12	0.12	0.00	-0.02	0.16	-0.17
-2	0.63	0.16	0.14	0.10	0.09	0.11	0.00	-0.05	0.16	-0.19
0	0.62	0.12	0.11	0.08	0.05	0.11	-0.01	-0.08	0.16	-0.21
+2	0.63	0.15	0.14	0.10	0.05	0.10	0.00	-0.05	0.15	-0.19
+4	0.65	0.18	0.16	0.12	0.05	0.09	0.01	-0.02	0.15	-0.16
+6	0.68	0.23	0.19	0.15	0.07	0.10	0.03	0.01	0.15	-0.13
+8	0.72	0.29	0.23	0.20	0.10	0.13	0.07	0.05	0.15	-0.09
+10	0.77	0.35	0.28	0.25	0.13	0.15	0.10	0.09	0.16	-0.04
+11	0.78	0.36	0.28	0.25	0.13	0.16	0.11	0.07	0.17	-0.06
+12	0.79	0.37	0.28	0.24	0.14	0.17	0.12	0.05	0.18	-0.07
+13	0.80	0.38	0.29	0.23	0.15	0.18	0.12	0.03	0.19	-0.09
+14	0.81	0.39	0.29	0.23	0.16	0.19	0.13	0.01	0.20	-0.10
+15	0.82	0.40	0.29	0.22	0.16	0.20	0.14	-0.01	0.21	-0.12
+16	0.78	0.35	0.26	0.19	0.15	0.18	0.12	0.00	0.19	-0.12
+17	0.74	0.30	0.22	0.16	0.13	0.15	0.11	0.01	0.17	-0.12
+18	0.70	0.24	0.19	0.14	0.11	0.12	0.10	0.02	0.14	-0.12
+19	0.66	0.19	0.15	0.11	0.09	0.09	0.09	0.03	0.12	-0.11
+20	0.61	0.14	0.12	0.08	0.07	0.07	0.08	0.04	0.09	-0.11

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 0°C.

Freq. (MHz)	Harmonics levels vs. Output Frequency (dBc)									
	F2					F3				
	-50 dBm	-40 dBm	-20 dBm	0 dBm	+20 dBm	-50 dBm	-40 dBm	-20 dBm	0 dBm	+20 dBm
10	-40.54	-49.40	-41.31	-2.93	-10.35	-7.87	-8.34	-8.37	-7.08	-12.18
50	-49.19	-52.22	-53.37	-12.28	-18.09	-11.74	-12.20	-11.70	-12.07	-11.53
100	-50.45	-50.69	-49.63	-10.78	-16.49	-11.50	-12.41	-12.05	-12.70	-12.67
200	-39.88	-44.62	-44.11	-11.08	-15.20	-11.09	-12.50	-12.21	-13.61	-14.07
400	-36.92	-38.30	-37.50	-18.84	-14.92	-8.41	-10.23	-11.35	-10.67	-12.61
600	-29.74	-32.77	-33.68	-22.26	-15.43	-10.59	-11.39	-12.78	-10.47	-13.54
800	-26.58	-26.99	-28.26	-16.78	-12.95	-9.65	-9.97	-11.44	-9.01	-12.05
1000	-24.45	-24.57	-25.10	-17.28	-13.27	-10.36	-10.08	-11.23	-9.75	-12.11
1200	-24.00	-22.90	-21.84	-20.53	-14.56	-11.57	-10.30	-9.57	-13.28	-11.62
1400	-8.54	-7.94	-6.87	-6.67	-7.79	-17.59	-17.67	-17.15	-21.35	-21.01
1600	-7.13	-7.35	-7.15	-8.78	-8.47	-16.81	-17.16	-17.42	-25.97	-19.67
1800	-6.66	-7.19	-7.22	-11.35	-9.39	-16.30	-17.48	-18.48	-20.62	-17.70
2000	-13.20	-14.34	-15.21	-14.92	-16.60	-10.15	-11.39	-12.37	-14.38	-12.02
2200	-13.27	-13.97	-14.62	-15.76	-16.86	-13.30	-13.39	-14.04	-15.01	-12.31
2400	-14.25	-14.39	-15.00	-17.42	-16.97	-11.42	-13.85	-15.60	-15.37	-12.63
2600	-14.13	-14.94	-15.99	-20.70	-16.27	-15.43	-16.06	-16.78	-14.97	-13.10
2800	-14.37	-15.38	-16.56	-23.21	-15.31	-14.48	-16.61	-18.21	-15.26	-13.53
3000	-14.78	-15.93	-17.10	-21.96	-14.80	-18.51	-19.44	-20.34	-15.68	-13.69
3250	-16.83	-16.74	-17.38	-21.91	-14.93	-21.81	-22.99	-24.29	-17.30	-13.75
3500	-13.54	-15.52	-17.24	-22.11	-15.22	-24.62	-26.16	-27.79	-18.25	-13.98
3750	-14.44	-15.32	-16.42	-19.19	-17.06	-26.53	-28.52	-29.49	-18.71	-13.19
4000	-18.77	-17.91	-16.32	-17.26	-17.89	-24.36	-28.62	-31.66	-21.53	-13.43
4250	-9.85	-13.04	-15.98	-18.43	-18.22	-35.14	-33.46	-34.03	-22.59	-13.12
4500	-16.01	-16.34	-16.75	-21.73	-18.23	-24.87	-29.04	-31.61	-20.69	-12.60
4750	-10.55	-13.71	-16.65	-24.63	-17.36	-20.80	-23.61	-25.94	-17.45	-12.01
5000	-17.45	-18.53	-20.24	-21.13	-16.78	-26.02	-26.40	-27.16	-21.75	-13.55
5200	-16.44	-16.71	-17.99	-20.94	-17.30	-22.89	-24.73	-25.56	-20.43	-13.18
5400	-19.05	-16.77	-16.77	-20.22	-18.02	-26.66	-26.06	-25.67	-21.42	-13.72
5600	-15.68	-15.42	-16.13	-20.10	-18.55	-20.88	-21.33	-20.38	-22.74	-13.73
5800	-11.63	-14.47	-16.46	-19.69	-18.46	-41.96	-34.58	-32.87	-23.87	-13.66
6000	-9.63	-14.40	-18.04	-19.95	-18.76	-27.36	-30.71	-33.49	-24.30	-13.80
6200	-18.05	-19.26	-19.71	-20.71	-19.39	-29.59	-32.15	-32.63	-25.21	-13.94
6400	-24.32	-21.53	-20.92	-20.80	-17.92	-38.22	-37.02	-36.11	-26.69	-14.99
6600	-23.97	-21.52	-21.92	-21.12	-17.05	-32.46	-35.83	-39.11	-27.34	-16.25
6800	-17.78	-19.44	-21.14	-20.30	-16.57	-39.01	-44.18	-42.56	-26.88	-16.47
7000	-12.78	-15.85	-18.46	-19.31	-15.46	-39.72	-41.76	-45.60	-27.63	-17.08
7200	-11.47	-14.91	-16.86	-17.83	-15.41	-34.74	-40.65	-44.47	-27.85	-18.06
7400	-18.56	-19.27	-19.13	-21.07	-15.96	-37.19	-44.16	-47.27	-28.69	-18.28
7600	-16.23	-16.18	-16.19	-21.56	-15.22	-32.17	-33.50	-44.72	-28.88	-18.43
7800	-11.81	-13.66	-14.22	-21.61	-14.77	-25.68	-31.67	-42.30	-30.04	-18.25
8000	-13.82	-15.41	-14.47	-21.96	-15.22	-38.78	-39.59	-45.94	-31.44	-19.49
8200	-18.68	-15.27	-12.95	-22.31	-15.04	-43.85	-42.27	-53.60	-31.08	-19.99
8400	-10.66	-8.82	-6.44	-23.24	-15.32	-34.73	-38.64	-52.27	-32.65	-19.39
8600	-20.78	-20.60	-16.01	-25.07	-15.88	-34.56	-39.94	-58.83	-35.35	-18.82
8800	-21.46	-22.19	-20.50	-26.00	-15.68	--	--	--	--	--
9000	-12.30	-18.37	-19.52	-28.52	-16.69	--	--	--	--	--

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 0°C.

Freq. (MHz)	Phase Noise vs. Output Frequency (dBc / Hz)			
	1 kHz	10 kHz	100 kHz	1 MHz
10	-118.67	-125.33	-130.68	-133.71
50	-123.44	-130.07	-135.46	-137.13
100	-124.38	-130.75	-135.67	-138.17
200	-124.87	-130.92	-136.13	-139.21
400	-122.20	-130.68	-136.46	-139.40
600	-119.71	-129.02	-134.20	-138.50
800	-119.26	-127.18	-132.81	-139.57
1000	-116.44	-126.50	-131.44	-137.19
1200	-114.91	-124.73	-129.94	-135.41
1400	-113.65	-124.05	-129.05	-135.71
1600	-112.42	-122.99	-127.94	-133.94
1800	-113.07	-121.72	-126.79	-132.32
2000	-110.67	-121.17	-126.36	-132.67
2200	-109.80	-120.24	-125.14	-131.80
2400	-108.45	-119.83	-124.18	-130.74
2600	-108.79	-118.66	-123.25	-130.07
2800	-106.78	-117.70	-122.99	-130.09
3000	-108.08	-117.42	-122.56	-126.06
3250	-107.39	-116.72	-121.76	-123.71
3500	-107.13	-116.37	-121.15	-124.99
3750	-104.94	-115.30	-120.13	-123.16
4000	-104.97	-115.44	-120.50	-126.52
4250	-105.56	-114.99	-119.58	-124.19
4500	-104.10	-113.91	-118.91	-126.93
4750	-104.32	-113.27	-118.09	-125.36
5000	-103.06	-113.24	-117.88	-125.73
5200	-101.65	-112.54	-117.58	-125.19
5400	-101.35	-112.60	-117.05	-123.92
5600	-101.96	-111.88	-116.70	-123.27
5800	-101.21	-112.13	-116.86	-121.56
6000	-101.20	-111.43	-116.54	-120.85
6200	-100.58	-110.77	-116.38	-118.20
6400	-100.50	-111.06	-115.90	-117.85
6600	-100.54	-110.15	-115.27	-119.80
6800	-99.71	-110.62	-115.61	-118.67
7000	-101.15	-109.97	-115.28	-117.93
7200	-98.92	-109.71	-114.83	-118.33
7400	-99.11	-109.32	-114.40	-116.84
7600	-99.88	-109.85	-114.23	-122.19
7800	-101.33	-109.21	-113.98	-121.90
8000	-97.63	-108.81	-114.56	-120.21
8200	-98.81	-108.71	-113.85	-120.12
8400	-99.92	-108.19	-113.48	-120.35
8600	-97.34	-108.63	-112.91	-121.67
8800	-97.19	-108.31	-112.88	-120.40
9000	-96.93	-108.41	-112.70	-120.38

Freq. (MHz)	Power (dBm) Max
10	23.45
50	23.89
100	23.78
200	23.63
400	22.93
600	23.29
800	22.36
1000	22.59
1200	22.76
1400	21.55
1600	21.66
1800	21.85
2000	22.86
2200	22.81
2400	22.80
2600	22.68
2800	22.49
3000	22.44
3250	22.32
3500	22.29
3750	22.21
4000	22.28
4250	22.23
4500	22.06
4750	21.79
5000	21.86
5200	21.81
5400	21.73
5600	21.74
5800	21.75
6000	21.66
6200	21.58
6400	21.70
6600	21.62
6800	21.51
7000	21.58
7200	21.70
7400	21.51
7600	21.79
7800	21.47
8000	21.65
8200	21.47
8400	21.33
8600	21.23
8800	21.11
9000	20.94

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 0°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Frequency (dBc / Hz)				
	1000 MHz	3000 MHz	5000 MHz	7000 MHz	9000 MHz
1	-116.44	-108.08	-103.06	-101.15	-96.93
10	-126.50	-117.42	-113.24	-109.97	-108.41
100	-131.44	-122.56	-117.88	-115.28	-112.70
1000	-137.19	-126.06	-125.73	-117.93	-120.38

Freq. (MHz)	Spurious (dBc)	
	Far	Near
10	-69.62	-77.41
50	-69.82	-80.04
100	-69.84	-79.75
200	-69.77	-79.32
400	-68.43	-78.18
600	-68.86	-78.83
800	-68.36	-78.67
1000	-69.17	-78.87
1200	-67.71	-78.55
1400	-68.16	-78.91
1600	-68.05	-77.22
1800	-66.85	-78.10
2000	-67.75	-78.36
2200	-66.69	-75.90
2400	-66.60	-77.32
2600	-65.87	-77.64
2800	-66.09	-76.30
3000	-66.06	-75.80
3250	-65.29	-76.35
3500	-65.45	-74.89
3750	-65.50	-70.14
4000	-65.91	-71.64
4250	-66.88	-72.07
4500	-65.94	-71.11
4750	-65.06	-72.19
5000	-65.59	-71.96
5200	-66.60	-69.21
5400	-65.79	-69.69
5600	-65.93	-70.24
5800	-65.70	-67.91
6000	-65.52	-69.50
6200	-66.86	-69.21
6400	-64.19	-69.77
6600	-65.70	-68.18
6800	-65.41	-67.78
7000	-65.68	-68.66
7200	-65.05	-68.26
7400	-65.53	-68.85
7600	-65.35	-68.13
7800	-66.10	-68.09
8000	-65.69	-66.30
8200	-65.67	-65.91
8400	-66.30	-65.97
8600	-66.47	-68.86
8800	-65.93	-64.35
9000	-66.19	-67.50

**Note:** Spurious was measured in Close offsets of 1 kHz to 100 kHz and Far offsets of 100 kHz to 150 MHz.

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 25°C.

Freq. (MHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-50 dBm	-45 dBm	-40 dBm	-30 dBm	-20 dBm	-10 dBm	0 dBm	+10 dBm	+15 dBm	+20 dBm
10	-0.35	-0.02	-0.04	0.08	0.07	0.03	0.32	0.26	0.50	0.09
50	0.20	0.22	0.09	0.18	0.16	0.06	0.28	0.24	0.52	0.19
100	0.12	0.14	0.11	0.12	0.15	0.12	0.23	0.29	0.45	0.13
200	0.00	-0.02	0.06	0.05	0.09	0.13	0.16	0.35	0.34	0.09
400	0.14	0.18	0.19	0.34	0.37	0.51	0.26	0.31	0.39	0.31
600	0.01	-0.03	0.07	0.19	0.25	0.38	0.17	0.27	0.40	0.29
800	-0.21	-0.20	-0.12	0.00	0.01	0.23	-0.07	0.16	0.21	0.04
1000	-0.12	-0.02	0.02	0.15	0.17	0.40	0.06	0.30	0.38	0.15
1200	-0.07	-0.09	-0.05	0.00	0.05	0.25	-0.01	0.10	0.16	0.07
1400	0.00	0.05	0.11	0.20	0.22	0.14	0.03	0.25	0.29	0.09
1600	-0.01	0.02	0.05	0.07	0.13	0.12	0.02	0.18	0.25	0.05
1800	-0.03	0.00	0.05	0.10	0.09	0.09	0.00	0.15	0.23	0.05
2000	-0.06	-0.04	0.02	0.11	0.13	0.08	0.05	0.17	0.14	0.07
2200	-0.11	-0.09	-0.05	0.03	0.07	0.04	-0.03	0.10	0.08	0.01
2400	-0.10	-0.08	-0.05	0.07	0.10	0.07	-0.01	0.09	0.05	0.02
2600	-0.06	-0.07	-0.05	0.06	0.08	0.11	-0.03	0.09	0.07	0.03
2800	-0.07	-0.02	0.00	0.08	0.10	0.11	-0.08	0.04	0.04	-0.02
3000	-0.09	-0.07	-0.03	0.06	0.10	0.17	0.02	0.11	0.08	0.07
3250	0.00	0.05	0.06	0.12	0.17	0.24	0.02	0.06	0.07	0.04
3500	-0.12	-0.07	-0.04	0.04	0.09	0.18	-0.16	-0.08	0.01	-0.06
3750	0.04	0.08	0.15	0.22	0.32	0.34	-0.01	0.02	0.18	0.07
4000	0.02	-0.02	0.02	0.12	0.17	0.22	0.06	0.04	0.14	0.09
4250	-0.06	-0.02	0.03	0.11	0.16	0.19	-0.04	-0.03	0.13	0.05
4500	-0.06	-0.05	-0.02	0.11	0.13	0.15	-0.01	-0.01	0.11	0.00
4750	-0.10	-0.10	-0.06	0.03	0.04	0.04	-0.21	-0.16	0.01	-0.08
5000	-0.08	-0.04	0.02	0.13	0.16	0.12	0.04	0.11	0.16	0.05
5200	-0.11	-0.08	-0.03	0.04	0.05	-0.01	-0.06	0.05	0.07	0.03
5400	0.01	-0.04	0.00	0.13	0.12	0.07	-0.08	0.01	-0.02	0.02
5600	0.04	0.01	0.02	0.18	0.13	0.13	-0.06	0.05	0.10	0.08
5800	-0.19	-0.09	-0.06	0.02	0.00	-0.08	0.04	0.04	0.18	0.12
6000	-0.16	-0.15	-0.10	0.07	0.08	0.02	-0.09	-0.04	0.07	0.01
6200	0.11	0.10	0.14	0.30	0.31	0.22	0.08	0.15	0.16	0.07
6400	-0.17	-0.04	-0.02	0.08	0.12	0.19	0.04	0.14	0.13	0.14
6600	-0.19	-0.08	-0.07	0.08	0.12	0.06	-0.10	0.02	-0.03	0.07
6800	-0.11	-0.03	0.01	0.08	0.15	0.08	0.01	0.06	0.06	0.03
7000	-0.09	-0.07	-0.03	0.13	0.19	0.07	-0.04	0.03	0.07	0.05
7200	-0.10	-0.06	-0.02	-0.02	0.07	0.21	0.08	0.15	0.16	0.12
7400	0.04	0.01	0.07	0.29	0.30	0.03	-0.05	-0.01	0.08	0.01
7600	-0.19	-0.10	-0.10	0.00	0.05	0.10	-0.01	0.01	0.12	0.06
7800	-0.06	-0.06	-0.04	0.03	0.05	0.01	-0.08	-0.06	0.01	-0.02
8000	-0.23	-0.14	-0.12	0.00	0.01	0.08	-0.01	0.07	0.05	0.07
8200	-0.05	-0.03	-0.04	-0.01	0.04	-0.01	-0.08	0.03	-0.04	0.06
8400	0.10	0.12	0.07	0.10	0.22	0.09	0.02	0.14	0.03	0.05
8600	0.01	0.07	0.13	0.20	0.40	0.17	0.11	0.22	0.17	0.14
8800	-0.10	-0.06	-0.07	0.04	0.23	-0.03	-0.09	0.04	-0.02	0.02
9000	-0.19	-0.16	-0.09	0.00	0.14	-0.09	-0.12	-0.04	0.00	-0.03

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 25°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dB)									
	500 MHz	1000 MHz	2000 MHz	3000 MHz	4000 MHz	5000 MHz	6000 MHz	7000 MHz	8000 MHz	9000 MHz
-50	0.36	-0.06	0.00	-0.20	0.13	-0.09	-0.26	-0.07	-0.26	-0.26
-49	0.36	-0.04	0.00	-0.19	0.12	-0.08	-0.24	-0.06	-0.23	-0.25
-48	0.36	-0.02	0.01	-0.18	0.11	-0.08	-0.23	-0.05	-0.21	-0.24
-47	0.37	0.00	0.01	-0.17	0.10	-0.08	-0.21	-0.05	-0.18	-0.22
-46	0.37	0.02	0.01	-0.15	0.09	-0.07	-0.20	-0.04	-0.16	-0.21
-45	0.37	0.04	0.01	-0.14	0.08	-0.07	-0.18	-0.03	-0.13	-0.20
-44	0.38	0.05	0.02	-0.13	0.08	-0.05	-0.16	-0.02	-0.13	-0.19
-43	0.39	0.06	0.04	-0.11	0.08	-0.03	-0.15	-0.01	-0.12	-0.17
-42	0.41	0.07	0.05	-0.10	0.09	-0.02	-0.13	0.00	-0.12	-0.16
-41	0.42	0.08	0.06	-0.08	0.09	0.00	-0.11	0.01	-0.11	-0.14
-40	0.43	0.09	0.07	-0.07	0.09	0.02	-0.10	0.02	-0.10	-0.13
-38	0.45	0.10	0.09	-0.04	0.10	0.03	-0.08	0.02	-0.09	-0.12
-36	0.48	0.11	0.10	-0.02	0.11	0.04	-0.07	0.03	-0.08	-0.12
-34	0.51	0.13	0.11	0.01	0.14	0.07	-0.04	0.05	-0.06	-0.11
-32	0.55	0.16	0.13	0.05	0.17	0.11	0.00	0.09	-0.02	-0.08
-30	0.59	0.19	0.15	0.08	0.20	0.16	0.04	0.13	0.02	-0.06
-28	0.58	0.19	0.16	0.07	0.22	0.16	0.03	0.12	0.01	-0.04
-26	0.57	0.19	0.17	0.07	0.25	0.15	0.03	0.11	0.01	-0.03
-24	0.58	0.19	0.18	0.07	0.26	0.16	0.04	0.13	0.01	0.00
-22	0.60	0.19	0.19	0.08	0.26	0.17	0.04	0.16	0.01	0.04
-20	0.62	0.19	0.19	0.08	0.26	0.18	0.05	0.20	0.01	0.08
-18	0.64	0.22	0.17	0.09	0.27	0.18	0.09	0.18	0.03	0.03
-16	0.66	0.25	0.16	0.09	0.28	0.18	0.14	0.16	0.06	-0.02
-14	0.73	0.29	0.15	0.11	0.29	0.17	0.13	0.13	0.07	-0.07
-12	0.85	0.35	0.14	0.14	0.31	0.16	0.05	0.09	0.08	-0.12
-10	0.97	0.40	0.13	0.17	0.32	0.14	-0.02	0.05	0.08	-0.17
-8	0.83	0.32	0.15	0.12	0.25	0.10	-0.03	0.02	0.07	-0.18
-6	0.69	0.23	0.16	0.07	0.17	0.06	-0.03	-0.02	0.05	-0.18
-4	0.60	0.17	0.16	0.04	0.13	0.04	-0.04	-0.04	0.03	-0.18
-2	0.56	0.12	0.12	0.04	0.13	0.02	-0.05	-0.04	0.02	-0.19
0	0.53	0.08	0.09	0.04	0.13	0.01	-0.07	-0.05	0.01	-0.19
+2	0.57	0.10	0.10	0.03	0.10	0.02	-0.08	-0.03	0.01	-0.18
+4	0.61	0.12	0.10	0.03	0.08	0.03	-0.09	-0.01	0.02	-0.16
+6	0.62	0.17	0.13	0.05	0.08	0.04	-0.09	0.00	0.03	-0.14
+8	0.61	0.25	0.17	0.09	0.09	0.06	-0.08	0.01	0.05	-0.12
+10	0.60	0.33	0.21	0.13	0.10	0.07	-0.07	0.03	0.06	-0.09
+11	0.63	0.35	0.21	0.12	0.12	0.08	-0.03	0.03	0.07	-0.09
+12	0.66	0.36	0.20	0.12	0.14	0.10	0.00	0.04	0.07	-0.08
+13	0.69	0.37	0.20	0.11	0.17	0.11	0.04	0.05	0.07	-0.08
+14	0.72	0.39	0.19	0.11	0.19	0.12	0.07	0.05	0.07	-0.07
+15	0.75	0.40	0.19	0.10	0.21	0.13	0.10	0.06	0.07	-0.07
+16	0.72	0.36	0.18	0.10	0.20	0.11	0.09	0.06	0.07	-0.07
+17	0.70	0.32	0.16	0.09	0.19	0.09	0.08	0.05	0.07	-0.07
+18	0.68	0.27	0.15	0.08	0.18	0.07	0.07	0.05	0.06	-0.07
+19	0.65	0.23	0.13	0.07	0.17	0.05	0.05	0.04	0.06	-0.06
+20	0.63	0.18	0.12	0.07	0.16	0.03	0.04	0.04	0.05	-0.06

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 25°C.

Freq. (MHz)	Harmonics levels vs. Output Frequency (dBc)									
	F2					F3				
	-50 dBm	-40 dBm	-20 dBm	0 dBm	+20 dBm	-50 dBm	-40 dBm	-20 dBm	0 dBm	+20 dBm
10	-38.05	-44.97	-41.29	-3.22	-10.57	-8.59	-8.44	-8.44	-7.35	-12.13
50	-44.65	-44.54	-52.21	-12.23	-18.24	-11.75	-12.11	-11.40	-12.00	-11.69
100	-48.04	-50.33	-49.50	-10.80	-16.52	-11.44	-12.35	-11.90	-12.67	-12.74
200	-39.05	-45.63	-45.50	-11.19	-15.11	-10.96	-12.56	-12.24	-13.69	-14.07
400	-36.44	-36.49	-37.08	-19.41	-14.89	-8.26	-10.10	-11.26	-10.55	-12.48
600	-29.68	-31.89	-33.30	-22.84	-15.35	-10.57	-11.27	-12.68	-10.37	-13.47
800	-26.46	-26.75	-28.11	-17.02	-12.92	-9.68	-10.02	-11.37	-8.93	-11.96
1000	-23.89	-24.30	-24.81	-17.45	-13.25	-10.42	-10.15	-11.23	-9.81	-12.16
1200	-25.05	-22.59	-21.65	-20.40	-14.53	-11.53	-10.38	-9.60	-13.38	-11.64
1400	-8.66	-7.97	-6.87	-6.79	-7.79	-17.40	-17.89	-17.22	-21.67	-21.21
1600	-7.06	-7.35	-7.20	-9.02	-8.52	-16.58	-17.25	-17.50	-26.34	-19.82
1800	-6.45	-7.17	-7.23	-11.52	-9.35	-15.84	-17.19	-18.34	-20.68	-17.60
2000	-12.85	-14.42	-15.11	-14.88	-16.73	-10.08	-11.50	-12.51	-14.63	-12.12
2200	-12.88	-14.00	-14.53	-15.70	-16.96	-13.21	-13.50	-14.20	-15.30	-12.41
2400	-13.98	-14.35	-14.98	-17.48	-17.11	-11.29	-13.82	-15.57	-15.49	-12.60
2600	-13.70	-14.96	-15.83	-20.79	-16.29	-15.50	-15.83	-16.67	-15.04	-12.99
2800	-13.82	-15.21	-16.21	-23.62	-15.16	-14.12	-16.38	-18.12	-15.25	-13.42
3000	-14.32	-15.71	-16.74	-22.52	-14.69	-18.57	-19.50	-20.42	-15.72	-13.63
3250	-16.19	-16.37	-16.87	-22.32	-14.46	-22.55	-23.97	-24.75	-17.39	-13.77
3500	-13.13	-15.19	-16.92	-22.35	-15.33	-25.04	-26.65	-28.06	-18.47	-13.94
3750	-14.64	-15.73	-16.64	-19.60	-17.12	-26.35	-28.21	-30.00	-19.01	-13.42
4000	-18.70	-17.56	-16.11	-17.09	-17.90	-24.79	-28.05	-31.85	-21.77	-13.37
4250	-9.86	-12.96	-15.79	-18.24	-18.31	-37.02	-33.66	-34.31	-22.97	-13.17
4500	-16.31	-16.52	-16.81	-21.78	-18.24	-24.90	-29.05	-31.68	-21.10	-12.73
4750	-11.31	-14.32	-17.18	-26.05	-17.79	-20.90	-23.99	-26.40	-18.01	-12.18
5000	-17.07	-18.44	-20.23	-21.78	-16.71	-26.31	-27.59	-27.35	-21.97	-13.50
5200	-17.23	-17.11	-17.98	-21.56	-17.51	-23.60	-25.36	-26.11	-20.96	-13.37
5400	-18.93	-16.51	-16.61	-20.57	-17.86	-26.30	-25.84	-25.62	-21.29	-13.25
5600	-15.85	-15.40	-16.16	-20.33	-18.26	-20.79	-20.85	-20.07	-22.31	-13.06
5800	-11.94	-14.83	-16.91	-20.14	-19.09	-38.03	-34.66	-33.29	-24.35	-13.68
6000	-10.16	-15.03	-18.72	-20.50	-19.47	-27.82	-31.23	-34.20	-24.52	-13.51
6200	-18.60	-19.67	-19.86	-20.74	-18.73	-31.33	-33.34	-32.74	-24.99	-13.60
6400	-24.92	-22.22	-21.41	-21.26	-18.31	-39.56	-35.36	-36.05	-26.86	-14.69
6600	-24.20	-22.26	-22.64	-21.65	-17.72	-32.35	-36.30	-40.51	-27.43	-15.89
6800	-18.31	-19.79	-21.15	-20.50	-16.70	-40.30	-38.75	-42.67	-27.08	-16.32
7000	-12.99	-15.95	-18.60	-19.41	-15.83	-39.64	-35.59	-44.90	-27.54	-16.45
7200	-12.55	-15.89	-17.56	-18.54	-15.81	-35.49	-34.97	-45.35	-27.66	-17.51
7400	-19.08	-19.05	-18.89	-20.95	-15.52	-37.00	-35.44	-43.98	-27.84	-17.08
7600	-16.79	-16.94	-17.21	-22.64	-16.23	-32.94	-38.59	-45.86	-29.56	-18.53
7800	-12.43	-14.12	-14.93	-22.27	-15.28	-26.11	-31.29	-43.33	-30.06	-18.16
8000	-13.75	-15.33	-14.24	-21.60	-14.53	-42.17	-37.06	-46.70	-31.02	-19.25
8200	-18.96	-15.46	-12.96	-22.25	-15.12	-42.52	-35.85	-51.18	-31.24	-19.36
8400	-10.34	-8.64	-6.28	-22.99	-14.78	-35.85	-35.11	-48.37	-33.19	-19.58
8600	-20.91	-19.59	-15.69	-24.62	-15.07	-36.93	-37.30	-55.67	-35.94	-18.98
8800	-20.34	-22.87	-20.43	-25.64	-15.59	--	--	--	--	--
9000	-11.72	-17.17	-19.11	-28.16	-16.36	--	--	--	--	--

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 25°C.

Freq. (MHz)	Phase Noise vs. Output Frequency (dBc / Hz)			
	1 kHz	10 kHz	100 kHz	1 MHz
10	-121.00	-130.53	-133.69	-134.23
50	-128.38	-135.02	-137.27	-138.39
100	-128.06	-134.52	-137.53	-138.55
200	-126.26	-133.71	-137.82	-139.41
400	-122.34	-131.90	-135.70	-140.89
600	-119.29	-129.04	-133.90	-138.99
800	-117.63	-127.15	-132.19	-139.12
1000	-115.76	-126.13	-130.80	-138.07
1200	-114.63	-124.01	-129.33	-136.28
1400	-113.25	-123.40	-128.31	-135.37
1600	-112.26	-122.02	-126.65	-134.42
1800	-111.70	-121.12	-125.92	-131.60
2000	-110.19	-120.41	-125.86	-132.02
2200	-108.43	-118.97	-123.63	-133.09
2400	-109.20	-118.12	-123.60	-129.91
2600	-106.95	-118.07	-122.79	-129.71
2800	-106.44	-117.59	-122.24	-128.07
3000	-106.38	-116.64	-122.52	-125.05
3250	-104.86	-116.00	-120.96	-125.08
3500	-104.99	-115.54	-120.32	-123.95
3750	-103.43	-114.55	-119.88	-123.54
4000	-104.39	-114.30	-119.25	-126.07
4250	-102.09	-113.91	-118.59	-128.11
4500	-103.57	-113.54	-118.02	-126.34
4750	-103.89	-112.16	-117.78	-124.82
5000	-101.95	-112.21	-117.12	-125.42
5200	-101.56	-111.83	-116.97	-124.74
5400	-100.66	-111.35	-116.39	-123.22
5600	-100.21	-110.98	-116.57	-123.26
5800	-100.71	-110.81	-115.98	-121.37
6000	-100.02	-110.98	-115.69	-119.76
6200	-100.46	-110.48	-115.59	-118.65
6400	-99.89	-110.51	-115.43	-118.26
6600	-99.21	-109.66	-115.30	-118.90
6800	-99.93	-109.84	-114.81	-118.01
7000	-98.08	-109.47	-114.16	-118.20
7200	-99.59	-109.43	-114.14	-118.14
7400	-99.63	-109.10	-114.01	-117.13
7600	-97.45	-108.39	-113.67	-122.04
7800	-97.95	-108.22	-113.33	-122.36
8000	-97.51	-108.20	-113.87	-120.86
8200	-97.92	-107.66	-112.98	-119.87
8400	-96.68	-107.88	-113.13	-119.66
8600	-96.77	-107.67	-112.67	-121.28
8800	-97.60	-107.23	-112.55	-120.14
9000	-96.86	-106.73	-111.84	-120.07

Freq. (MHz)	Power (dBm) Max
10	23.28
50	23.83
100	23.71
200	23.56
400	22.83
600	23.23
800	22.28
1000	22.51
1200	22.66
1400	21.49
1600	21.60
1800	21.79
2000	22.78
2200	22.74
2400	22.72
2600	22.61
2800	22.43
3000	22.38
3250	22.26
3500	22.23
3750	22.13
4000	22.22
4250	22.11
4500	21.97
4750	21.67
5000	21.75
5200	21.71
5400	21.64
5600	21.65
5800	21.63
6000	21.57
6200	21.51
6400	21.58
6600	21.52
6800	21.43
7000	21.47
7200	21.58
7400	21.40
7600	21.61
7800	21.36
8000	21.43
8200	21.37
8400	21.23
8600	21.14
8800	20.99
9000	20.80

# Signal Generator

### Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 25°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Frequency (dBc / Hz)				
	1000 MHz	3000 MHz	5000 MHz	7000 MHz	9000 MHz
1	-115.76	-106.38	-101.95	-98.08	-96.86
10	-126.13	-116.64	-112.21	-109.47	-106.73
100	-130.80	-122.52	-117.12	-114.16	-111.84
1000	-138.07	-125.05	-125.42	-118.20	-120.07

Freq. (MHz)	Spurious (dBc)	
	Far	Near
10	-68.92	-79.02
50	-66.91	-79.61
100	-65.75	-80.07
200	-69.18	-79.75
400	-65.27	-80.03
600	-67.39	-78.52
800	-63.41	-79.29
1000	-68.76	-79.59
1200	-64.09	-77.85
1400	-68.75	-77.34
1600	-65.61	-76.32
1800	-67.60	-77.12
2000	-66.23	-76.36
2200	-65.89	-81.40
2400	-65.98	-79.20
2600	-65.20	-78.13
2800	-65.36	-78.62
3000	-65.06	-76.07
3250	-64.23	-71.74
3500	-67.33	-69.36
3750	-65.14	-71.11
4000	-67.46	-70.76
4250	-66.89	-71.55
4500	-67.95	-66.85
4750	-65.73	-71.55
5000	-66.52	-72.85
5200	-65.10	-65.20
5400	-65.06	-68.75
5600	-65.79	-72.19
5800	-65.86	-74.68
6000	-65.17	-64.53
6200	-65.14	-68.29
6400	-66.65	-77.02
6600	-67.02	-67.73
6800	-65.51	-73.74
7000	-66.36	-71.09
7200	-66.57	-67.42
7400	-67.12	-59.87
7600	-66.13	-62.06
7800	-67.28	-63.82
8000	-64.79	-72.16
8200	-64.63	-71.54
8400	-66.73	-67.37
8600	-66.54	-67.50
8800	-65.42	-66.35
9000	-65.37	-64.26

**Note:** Spurious was measured in Close offsets of 1 kHz to 100 kHz and Far offsets of 100 kHz to 150 MHz.

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 50°C.

Freq. (MHz)	Power deviation from nominal vs. Output Frequency (dB)									
	-50 dBm	-45 dBm	-40 dBm	-30 dBm	-20 dBm	-10 dBm	0 dBm	+10 dBm	+15 dBm	+20 dBm
10	-0.48	-0.21	-0.16	-0.11	-0.08	-0.02	0.24	0.20	0.46	0.15
50	-0.31	-0.03	-0.11	-0.05	-0.03	-0.12	0.36	0.31	0.30	0.07
100	-0.25	-0.16	-0.13	-0.09	-0.06	-0.02	0.16	0.15	0.24	0.11
200	-0.25	-0.31	-0.22	-0.13	-0.09	-0.03	-0.04	0.08	0.21	0.10
400	-0.09	0.03	0.01	0.09	0.15	0.40	0.07	0.21	0.31	0.26
600	-0.23	-0.14	-0.11	0.00	0.09	0.26	0.01	0.14	0.22	0.23
800	-0.43	-0.38	-0.33	-0.19	-0.16	0.03	-0.18	0.02	0.13	0.01
1000	-0.32	-0.22	-0.20	-0.07	-0.04	0.17	-0.10	0.12	0.24	0.13
1200	-0.28	-0.26	-0.25	-0.16	-0.07	0.29	-0.12	-0.05	0.00	0.03
1400	-0.20	-0.15	-0.10	0.01	0.07	0.05	-0.03	0.13	0.18	0.09
1600	-0.21	-0.18	-0.15	-0.11	0.03	0.03	-0.13	0.04	0.14	0.07
1800	-0.25	-0.23	-0.20	-0.10	0.00	0.05	-0.10	0.04	0.15	0.09
2000	-0.29	-0.26	-0.22	-0.05	-0.01	0.08	-0.11	0.00	0.04	0.03
2200	-0.30	-0.29	-0.27	-0.10	-0.09	0.02	-0.14	-0.08	-0.04	-0.04
2400	-0.21	-0.26	-0.26	-0.10	-0.09	0.05	-0.14	-0.09	-0.04	-0.01
2600	-0.24	-0.27	-0.22	-0.08	-0.06	0.07	-0.16	-0.06	-0.03	0.00
2800	-0.21	-0.19	-0.20	-0.09	-0.07	0.03	-0.21	-0.14	-0.08	-0.06
3000	-0.27	-0.26	-0.21	-0.08	-0.09	0.03	-0.15	-0.12	0.03	0.02
3250	-0.22	-0.18	-0.15	-0.05	0.00	0.05	-0.15	-0.10	0.04	-0.01
3500	-0.32	-0.27	-0.25	-0.14	-0.11	0.03	-0.29	-0.23	-0.04	-0.05
3750	-0.07	-0.04	0.00	0.09	0.13	0.17	-0.16	-0.02	0.13	0.06
4000	-0.25	-0.25	-0.22	-0.07	-0.04	0.02	-0.11	-0.02	0.08	0.03
4250	-0.31	-0.26	-0.22	-0.10	-0.10	-0.05	-0.23	-0.07	0.00	-0.04
4500	-0.27	-0.27	-0.20	-0.08	-0.08	-0.06	-0.09	-0.01	0.04	-0.04
4750	-0.33	-0.35	-0.31	-0.21	-0.21	-0.10	-0.34	-0.21	-0.14	-0.14
5000	-0.25	-0.23	-0.18	-0.09	-0.04	0.05	-0.15	0.02	-0.01	0.05
5200	-0.30	-0.26	-0.23	-0.17	-0.10	-0.04	-0.26	-0.10	-0.03	0.02
5400	-0.20	-0.20	-0.19	-0.07	-0.02	-0.01	-0.19	-0.18	-0.03	0.00
5600	-0.22	-0.19	-0.19	-0.04	0.04	0.10	-0.17	-0.11	0.10	0.05
5800	-0.33	-0.36	-0.30	-0.25	-0.10	-0.15	-0.11	-0.01	0.09	0.13
6000	-0.33	-0.34	-0.27	-0.12	-0.03	-0.06	-0.21	-0.06	-0.04	0.04
6200	-0.11	-0.07	-0.03	0.12	0.24	0.05	-0.05	0.04	0.01	0.06
6400	-0.31	-0.29	-0.23	-0.16	-0.07	0.00	-0.09	-0.03	0.04	0.10
6600	-0.41	-0.36	-0.32	-0.13	-0.05	-0.06	-0.17	-0.12	0.00	0.05
6800	-0.11	-0.10	-0.11	-0.07	0.03	0.04	-0.08	-0.09	0.06	0.01
7000	-0.22	-0.29	-0.24	-0.10	-0.03	0.03	-0.12	-0.11	0.06	0.06
7200	-0.27	-0.25	-0.21	-0.23	-0.14	0.06	-0.06	-0.03	0.11	0.13
7400	-0.26	-0.22	-0.21	-0.01	0.05	-0.13	-0.22	-0.16	-0.06	0.02
7600	-0.46	-0.39	-0.36	-0.24	-0.16	-0.06	-0.12	-0.05	0.04	0.08
7800	-0.17	-0.18	-0.13	-0.15	-0.04	-0.09	-0.20	-0.10	-0.13	-0.04
8000	-0.40	-0.34	-0.33	-0.20	-0.02	-0.04	-0.10	-0.03	-0.02	0.04
8200	-0.07	-0.14	-0.19	-0.12	-0.01	-0.13	-0.21	-0.08	-0.05	0.06
8400	-0.07	-0.10	-0.08	-0.04	0.13	0.01	-0.11	-0.01	0.03	0.07
8600	-0.19	-0.15	-0.07	0.05	0.24	0.05	-0.02	0.06	0.17	0.14
8800	-0.40	-0.37	-0.28	-0.12	0.03	-0.11	-0.17	-0.13	-0.06	0.04
9000	-0.34	-0.32	-0.32	-0.16	-0.10	-0.21	-0.25	-0.23	-0.11	0.03

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 50°C.

Power (dBm)	Power deviation from nominal vs. Output Power (dB)									
	500 MHz	1000 MHz	2000 MHz	3000 MHz	4000 MHz	5000 MHz	6000 MHz	7000 MHz	8000 MHz	9000 MHz
-50	0.16	-0.26	-0.23	-0.31	-0.17	-0.28	-0.31	-0.17	-0.48	-0.43
-49	0.19	-0.25	-0.22	-0.30	-0.17	-0.27	-0.32	-0.18	-0.46	-0.42
-48	0.22	-0.23	-0.21	-0.30	-0.17	-0.26	-0.32	-0.19	-0.45	-0.42
-47	0.25	-0.21	-0.20	-0.29	-0.17	-0.25	-0.33	-0.21	-0.43	-0.41
-46	0.28	-0.19	-0.19	-0.29	-0.17	-0.24	-0.33	-0.22	-0.41	-0.41
-45	0.31	-0.17	-0.18	-0.28	-0.17	-0.23	-0.34	-0.23	-0.40	-0.41
-44	0.30	-0.17	-0.18	-0.27	-0.17	-0.22	-0.33	-0.22	-0.39	-0.39
-43	0.30	-0.16	-0.18	-0.26	-0.16	-0.21	-0.32	-0.20	-0.38	-0.38
-42	0.29	-0.16	-0.17	-0.25	-0.15	-0.20	-0.30	-0.19	-0.37	-0.37
-41	0.28	-0.15	-0.17	-0.24	-0.14	-0.19	-0.29	-0.18	-0.35	-0.35
-40	0.27	-0.15	-0.16	-0.23	-0.14	-0.18	-0.28	-0.16	-0.34	-0.34
-38	0.28	-0.12	-0.13	-0.20	-0.11	-0.19	-0.25	-0.16	-0.32	-0.31
-36	0.29	-0.10	-0.09	-0.17	-0.08	-0.19	-0.23	-0.16	-0.30	-0.29
-34	0.31	-0.08	-0.06	-0.15	-0.05	-0.17	-0.20	-0.14	-0.27	-0.27
-32	0.32	-0.07	-0.04	-0.12	-0.02	-0.11	-0.18	-0.09	-0.25	-0.25
-30	0.34	-0.05	-0.02	-0.10	0.01	-0.05	-0.16	-0.05	-0.22	-0.24
-28	0.36	-0.06	0.00	-0.08	0.03	-0.04	-0.15	-0.04	-0.22	-0.22
-26	0.39	-0.06	0.01	-0.07	0.05	-0.03	-0.13	-0.03	-0.22	-0.20
-24	0.41	-0.06	0.02	-0.07	0.06	-0.03	-0.12	-0.02	-0.18	-0.18
-22	0.41	-0.04	0.02	-0.08	0.06	-0.03	-0.09	-0.01	-0.10	-0.16
-20	0.42	-0.03	0.02	-0.08	0.05	-0.03	-0.07	0.00	-0.03	-0.14
-18	0.44	0.00	0.04	-0.07	0.07	0.00	-0.02	0.06	-0.03	-0.15
-16	0.46	0.04	0.06	-0.05	0.08	0.03	0.04	0.11	-0.02	-0.16
-14	0.55	0.08	0.08	-0.02	0.09	0.04	0.05	0.12	-0.02	-0.19
-12	0.70	0.13	0.11	0.02	0.10	0.05	0.01	0.08	-0.01	-0.24
-10	0.86	0.19	0.13	0.06	0.11	0.05	-0.03	0.03	0.00	-0.29
-8	0.68	0.19	0.10	-0.01	0.07	-0.04	-0.09	-0.01	-0.01	-0.31
-6	0.50	0.18	0.08	-0.07	0.02	-0.13	-0.14	-0.05	-0.03	-0.33
-4	0.40	0.13	0.04	-0.11	-0.01	-0.17	-0.17	-0.08	-0.04	-0.33
-2	0.37	0.03	-0.01	-0.11	-0.03	-0.18	-0.18	-0.09	-0.05	-0.33
0	0.34	-0.07	-0.06	-0.11	-0.05	-0.19	-0.18	-0.10	-0.06	-0.32
+2	0.37	-0.07	-0.05	-0.12	-0.04	-0.18	-0.17	-0.09	-0.06	-0.32
+4	0.39	-0.06	-0.05	-0.12	-0.04	-0.17	-0.17	-0.09	-0.06	-0.32
+6	0.43	-0.02	-0.03	-0.12	-0.02	-0.13	-0.14	-0.09	-0.05	-0.32
+8	0.46	0.07	0.00	-0.11	0.01	-0.08	-0.10	-0.10	-0.02	-0.32
+10	0.50	0.16	0.03	-0.11	0.04	-0.03	-0.05	-0.12	0.01	-0.31
+11	0.52	0.18	0.04	-0.08	0.06	-0.03	-0.04	-0.08	0.01	-0.28
+12	0.54	0.20	0.06	-0.06	0.09	-0.03	-0.03	-0.04	0.00	-0.25
+13	0.56	0.22	0.07	-0.03	0.11	-0.04	-0.02	-0.01	-0.01	-0.22
+14	0.58	0.24	0.08	-0.01	0.13	-0.04	-0.01	0.03	-0.02	-0.19
+15	0.61	0.26	0.09	0.01	0.15	-0.04	0.00	0.06	-0.03	-0.16
+16	0.59	0.24	0.09	0.01	0.14	-0.03	0.01	0.06	-0.02	-0.13
+17	0.58	0.22	0.09	0.01	0.13	-0.01	0.03	0.05	-0.01	-0.11
+18	0.57	0.19	0.08	0.01	0.12	0.00	0.04	0.05	0.00	-0.08
+19	0.56	0.17	0.08	0.01	0.11	0.01	0.05	0.04	0.01	-0.05
+20	0.55	0.15	0.08	0.01	0.10	0.02	0.07	0.04	0.02	-0.02

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 50°C.

Freq. (MHz)	Harmonics levels vs. Output Frequency (dBc)									
	F2					F3				
	-50 dBm	-40 dBm	-20 dBm	0 dBm	+20 dBm	-50 dBm	-40 dBm	-20 dBm	0 dBm	+20 dBm
10	-40.29	-42.49	-40.33	-3.96	-10.78	-8.61	-8.26	-8.14	-7.58	-12.44
50	-46.34	-54.08	-52.66	-13.00	-18.53	-11.78	-12.24	-11.72	-12.10	-11.72
100	-48.80	-50.45	-49.14	-11.46	-16.86	-11.52	-12.47	-12.07	-12.96	-12.72
200	-40.47	-41.89	-43.84	-11.76	-15.46	-11.12	-12.61	-12.25	-14.12	-14.00
400	-36.41	-37.60	-36.23	-20.03	-15.23	-8.42	-10.21	-11.35	-10.88	-12.49
600	-29.98	-30.44	-32.81	-23.13	-15.69	-10.56	-11.35	-12.76	-10.51	-13.44
800	-25.84	-26.38	-27.66	-17.27	-13.23	-9.64	-9.99	-11.45	-9.06	-11.94
1000	-24.86	-23.71	-24.30	-17.53	-13.51	-10.33	-10.10	-11.19	-9.89	-12.02
1200	-23.55	-22.11	-21.18	-20.25	-14.84	-11.50	-10.33	-9.59	-13.57	-11.60
1400	-8.71	-7.93	-6.93	-7.39	-7.98	-17.07	-17.07	-16.64	-22.89	-20.70
1600	-7.34	-7.43	-7.25	-9.73	-8.68	-16.47	-16.89	-17.02	-26.29	-19.36
1800	-7.02	-7.38	-7.50	-12.34	-9.65	-15.72	-17.07	-17.99	-20.76	-17.44
2000	-12.94	-13.80	-14.51	-14.93	-17.09	-10.48	-11.77	-12.60	-14.91	-12.09
2200	-12.84	-13.51	-14.12	-15.87	-17.41	-13.26	-13.52	-14.26	-15.65	-12.40
2400	-13.70	-13.85	-14.55	-17.99	-17.43	-12.25	-14.13	-15.74	-15.95	-12.76
2600	-13.50	-14.17	-15.42	-21.82	-16.56	-16.42	-16.59	-17.07	-15.61	-13.29
2800	-13.65	-14.65	-15.75	-24.69	-15.65	-15.03	-17.00	-18.61	-15.74	-13.60
3000	-14.00	-15.08	-16.21	-23.27	-15.07	-19.66	-20.38	-21.29	-16.23	-13.81
3250	-15.55	-15.79	-16.60	-22.96	-15.12	-24.34	-24.61	-26.09	-17.97	-13.94
3500	-12.69	-14.71	-16.45	-22.86	-15.55	-27.23	-28.42	-29.77	-19.13	-14.08
3750	-14.71	-14.97	-15.99	-19.70	-17.34	-26.18	-28.62	-31.26	-19.73	-13.34
4000	-19.31	-16.52	-15.69	-17.34	-18.37	-28.09	-31.29	-33.61	-22.76	-13.59
4250	-10.76	-13.45	-15.55	-18.24	-18.64	-38.41	-33.02	-35.52	-23.86	-13.35
4500	-15.74	-15.71	-16.41	-21.59	-18.66	-27.28	-29.85	-32.94	-22.45	-12.93
4750	-11.82	-14.81	-16.82	-26.50	-17.45	-22.51	-25.58	-28.06	-19.44	-12.53
5000	-17.58	-18.57	-20.18	-22.82	-17.01	-27.95	-26.92	-29.19	-23.52	-13.89
5200	-16.73	-16.98	-18.18	-22.35	-17.53	-25.57	-27.08	-27.74	-22.10	-13.56
5400	-20.72	-17.43	-17.41	-21.44	-18.38	-29.37	-28.32	-27.98	-23.00	-14.05
5600	-14.76	-15.68	-16.93	-21.16	-18.87	-23.35	-24.50	-22.93	-24.22	-14.03
5800	-12.50	-15.49	-17.46	-20.64	-18.72	-38.14	-41.14	-34.97	-25.26	-13.91
6000	-11.96	-16.64	-19.28	-20.96	-19.03	-30.14	-34.68	-35.44	-25.81	-14.10
6200	-22.55	-21.24	-21.11	-21.71	-19.62	-36.94	-38.57	-34.59	-26.77	-14.29
6400	-23.71	-21.37	-21.69	-21.76	-18.15	-40.63	-41.90	-37.35	-28.30	-15.32
6600	-21.69	-21.77	-22.55	-22.02	-17.30	-36.13	-38.31	-41.56	-29.10	-16.49
6800	-18.66	-19.82	-21.06	-20.71	-16.83	-43.99	-41.78	-44.55	-28.72	-16.55
7000	-13.54	-16.57	-18.73	-19.74	-15.85	-44.50	-36.30	-46.34	-29.23	-17.20
7200	-14.41	-16.90	-17.98	-19.50	-15.87	-38.03	-35.99	-46.90	-29.57	-18.26
7400	-20.45	-20.31	-19.85	-22.49	-16.18	-45.26	-39.59	-49.09	-30.52	-18.54
7600	-16.50	-17.51	-17.46	-23.31	-15.41	-34.35	-34.04	-49.93	-30.42	-18.66
7800	-13.81	-15.51	-15.71	-23.25	-15.00	-31.24	-32.88	-45.97	-31.55	-18.54
8000	-16.60	-17.39	-15.86	-23.57	-15.53	-48.43	-36.18	-49.08	-33.19	-19.72
8200	-18.91	-16.35	-13.88	-23.73	-15.35	-45.84	-40.01	-52.49	-32.98	-20.01
8400	-11.16	-10.22	-7.76	-24.67	-15.66	-38.46	-35.52	-55.21	-34.67	-19.44
8600	-22.50	-20.54	-17.27	-26.73	-16.13	-40.18	-41.60	-56.33	-37.40	-18.85
8800	-22.01	-22.57	-21.59	-27.72	-15.96	--	--	--	--	--
9000	-14.68	-20.46	-19.98	-30.23	-16.96	--	--	--	--	--

# Signal Generator

**SSG-9GD-RC**

## Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 50°C.

Freq. (MHz)	Phase Noise vs. Output Frequency (dBc / Hz)			
	1 kHz	10 kHz	100 kHz	1 MHz
10	-120.91	-130.03	-133.31	-134.65
50	-126.28	-135.26	-137.08	-137.50
100	-127.11	-135.04	-137.21	-137.54
200	-127.28	-134.38	-137.16	-138.81
400	-121.99	-132.17	-136.47	-140.98
600	-120.16	-129.25	-134.03	-138.90
800	-117.90	-127.39	-132.62	-137.61
1000	-115.37	-125.57	-130.43	-138.26
1200	-113.84	-124.32	-129.51	-136.70
1400	-114.66	-123.53	-127.89	-134.15
1600	-111.92	-121.96	-126.95	-135.19
1800	-109.87	-121.41	-126.14	-133.85
2000	-110.51	-120.46	-125.00	-132.95
2200	-108.23	-119.52	-124.05	-131.26
2400	-109.41	-118.55	-123.49	-131.38
2600	-107.53	-118.12	-122.65	-130.12
2800	-108.46	-117.22	-121.90	-130.88
3000	-106.20	-116.43	-121.53	-128.62
3250	-106.88	-116.08	-121.18	-124.93
3500	-105.25	-115.31	-120.64	-125.04
3750	-106.01	-113.97	-119.46	-123.81
4000	-104.37	-113.99	-119.18	-127.28
4250	-104.72	-113.00	-118.16	-124.36
4500	-102.80	-112.83	-117.75	-126.81
4750	-104.27	-112.45	-117.40	-124.43
5000	-101.74	-112.46	-116.29	-126.45
5200	-101.78	-112.01	-116.17	-123.82
5400	-101.80	-111.27	-116.61	-125.40
5600	-101.19	-111.59	-116.05	-124.57
5800	-100.74	-110.71	-115.86	-123.23
6000	-101.46	-110.82	-115.87	-120.53
6200	-100.01	-110.55	-115.30	-119.15
6400	-100.14	-110.14	-115.48	-118.51
6600	-99.03	-109.41	-114.81	-120.26
6800	-99.77	-109.71	-114.42	-119.14
7000	-98.37	-109.12	-113.74	-120.35
7200	-100.29	-108.93	-113.76	-118.77
7400	-99.05	-109.08	-114.43	-118.33
7600	-97.09	-108.56	-113.66	-122.54
7800	-97.91	-108.27	-113.57	-121.82
8000	-97.36	-107.99	-113.78	-121.77
8200	-98.07	-107.89	-112.33	-120.22
8400	-97.70	-107.40	-112.63	-120.13
8600	-98.63	-107.07	-112.56	-120.71
8800	-97.46	-106.58	-111.88	-121.24
9000	-97.54	-106.42	-111.92	-120.91

Freq. (MHz)	Power (dBm) Max
10	23.07
50	23.77
100	23.65
200	23.49
400	22.77
600	23.16
800	22.20
1000	22.43
1200	22.57
1400	21.45
1600	21.54
1800	21.74
2000	22.70
2200	22.66
2400	22.65
2600	22.55
2800	22.37
3000	22.31
3250	22.18
3500	22.16
3750	22.03
4000	22.12
4250	21.98
4500	21.88
4750	21.59
5000	21.65
5200	21.62
5400	21.56
5600	21.57
5800	21.54
6000	21.49
6200	21.43
6400	21.48
6600	21.44
6800	21.35
7000	21.37
7200	21.49
7400	21.29
7600	21.50
7800	21.26
8000	21.31
8200	21.24
8400	21.11
8600	21.02
8800	20.87
9000	20.66

# Signal Generator

## SSG-9GD-RC

### Typical Performance Data

Test Conditions: Channel 1 @ Temperature = 50°C.

Freq. Offsets (kHz)	Phase Noise vs. Offset Frequency (dBc / Hz)				
	1000 MHz	3000 MHz	5000 MHz	7000 MHz	9000 MHz
1	-115.37	-106.20	-101.74	-98.37	-97.54
10	-125.57	-116.43	-112.46	-109.12	-106.42
100	-130.43	-121.53	-116.29	-113.74	-111.92
1000	-138.26	-128.62	-126.45	-120.35	-120.91

Freq. (MHz)	Spurious (dBc)	
	Far	Near
10	-70.13	-78.66
50	-69.73	-80.22
100	-69.84	-79.69
200	-69.31	-79.42
400	-68.65	-78.49
600	-68.58	-77.99
800	-67.41	-76.94
1000	-67.77	-79.36
1200	-67.48	-78.85
1400	-67.67	-78.40
1600	-67.32	-78.01
1800	-66.97	-77.85
2000	-65.96	-77.41
2200	-65.46	-77.86
2400	-66.21	-75.92
2600	-65.05	-76.98
2800	-65.37	-77.52
3000	-65.11	-77.00
3250	-65.21	-73.27
3500	-65.06	-73.50
3750	-64.89	-70.82
4000	-65.07	-71.59
4250	-65.11	-68.32
4500	-65.83	-71.29
4750	-65.27	-72.96
5000	-65.40	-70.39
5200	-65.63	-68.95
5400	-65.55	-70.54
5600	-65.11	-70.23
5800	-65.03	-66.52
6000	-66.83	-70.17
6200	-65.12	-69.79
6400	-65.50	-69.52
6600	-65.36	-68.68
6800	-65.22	-69.23
7000	-64.87	-67.92
7200	-65.60	-67.61
7400	-65.09	-68.18
7600	-64.83	-69.26
7800	-66.25	-68.77
8000	-65.72	-68.39
8200	-66.04	-68.78
8400	-65.60	-69.11
8600	-66.11	-68.07
8800	-66.03	-66.66
9000	-65.18	-66.91

**Note:** Spurious was measured in Close offsets of 1 kHz to 100 kHz and Far offsets of 100 kHz to 150 MHz.