

Frequency Synthesizer

KSN-960A-219+

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURENT (mA)		
				F2			F3								
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
900	4.34	4.65	4.67	-18.41	-19.00	-19.44	-30.94	-32.29	-33.94	18.41	19.63	20.25	4.80	6.90	7.48
910	4.41	4.69	4.68	-19.37	-19.74	-20.16	-30.95	-32.69	-34.63	18.38	19.62	20.24	4.80	6.90	7.49
920	4.38	4.63	4.59	-20.17	-20.66	-21.21	-30.26	-31.95	-34.10	18.29	19.55	20.20	4.79	6.89	7.48
930	4.25	4.47	4.41	-21.03	-21.69	-22.32	-32.23	-34.07	-36.26	18.13	19.44	20.13	4.79	6.90	7.49
940	4.03	4.27	4.25	-20.98	-21.80	-22.40	-31.94	-34.36	-36.76	17.98	19.34	20.07	4.80	6.90	7.49
950	3.79	4.09	4.14	-21.70	-22.34	-22.80	-33.31	-35.57	-37.99	17.86	19.25	20.02	4.81	6.91	7.50
960	3.60	3.97	4.07	-22.35	-22.85	-23.15	-34.79	-37.15	-39.64	17.78	19.18	19.97	4.80	6.91	7.50

FREQ. (MHz)	PHASE NOISE (dBc/Hz)														
	@ OFFSETS														
	-45°C					+25°C					+85°C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
900	-77.09	-77.23	-107.04	-133.04	-155.44	-79.56	-75.96	-107.27	-131.51	-154.25	-78.84	-74.65	-105.81	-130.52	-152.37
910	-80.68	-74.99	-105.95	-131.03	-154.95	-79.01	-74.92	-106.10	-129.49	-153.34	-76.83	-74.44	-104.67	-127.94	-151.09
920	-77.89	-74.96	-105.09	-133.25	-154.46	-77.44	-74.12	-105.02	-129.39	-152.33	-78.06	-74.82	-103.11	-128.22	-150.11
930	-77.23	-73.13	-103.48	-131.62	-153.11	-79.10	-74.40	-103.25	-128.69	-150.82	-76.86	-73.71	-102.37	-125.84	-149.01
940	-76.35	-73.20	-102.68	-130.30	-151.47	-78.10	-72.24	-102.69	-128.67	-149.66	-76.82	-73.18	-101.92	-123.73	-148.30
950	-77.38	-71.91	-102.28	-128.36	-149.58	-79.21	-72.21	-102.41	-127.42	-148.74	-77.26	-71.92	-101.62	-122.57	-147.84
960	-78.30	-72.39	-101.82	-128.37	-149.18	-77.30	-72.10	-102.17	-127.61	-148.50	-75.96	-72.43	-101.80	-124.53	-147.50

REV. X1

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Typical Performance Data

COMPARISON SPURIOUS ORDER n	COMPARISON SPURIOUS @Fcarrier 900MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 930MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 960MHz± (n*Fcomparison) (dBc) NOTE 1		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
-5	-103.92	-105.86	-116.05	-112.29	-107.14	-100.86	-106.18	-108.87	-102.59
-4	-97.76	-100.17	-110.87	-103.70	-104.46	-99.00	-102.87	-100.88	-96.79
-3	-96.56	-96.68	-106.20	-102.46	-100.66	-94.68	-105.97	-102.19	-94.40
-2	-99.70	-99.01	-104.31	-110.64	-98.98	-91.96	-104.66	-107.23	-93.53
-1	-90.07	-91.43	-97.79	-96.78	-94.54	-83.73	-92.33	-91.95	-80.15
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-90.17	-90.68	-100.25	-96.10	-94.51	-84.61	-93.33	-91.07	-80.40
+2	-98.46	-97.71	-108.56	-108.58	-98.92	-92.51	-103.18	-107.84	-92.83
+3	-94.74	-94.89	-103.29	-99.85	-98.54	-96.87	-111.61	-105.41	-95.97
+4	-95.94	-98.58	-108.45	-100.24	-104.50	-100.40	-105.37	-104.53	-98.22
+5	-102.48	-103.91	-114.28	-106.63	-105.98	-100.74	-110.25	-110.43	-104.79

Note 1: Comparison frequency 50 kHz

Note 2: All spurs are referenced to carrier signal (n=0).

REFERENCE SPURIOUS ORDER n	REFERENCE SPURIOUS @Fcarrier 900MHz± (n*Reference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 930MHz± (n*Reference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 960MHz± (n*Reference) (dBc) NOTE 3		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
-5	-128.62	-132.07	-130.43	-132.79	-131.92	-130.06	-128.15	-131.44	-131.03
-4	-132.72	-131.94	-130.65	-133.12	-131.01	-129.86	-124.84	-131.81	-131.13
-3	-130.11	-131.08	-132.14	-131.50	-131.80	-130.25	-123.33	-129.27	-123.88
-2	-126.64	-126.57	-131.25	-120.17	-121.53	-123.15	-109.10	-111.86	-114.02
-1	-116.43	-119.96	-121.50	-109.17	-105.88	-104.66	-103.75	-106.20	-106.21
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-115.23	-112.71	-117.92	-126.44	-116.59	-112.81	-108.62	-111.90	-111.86
+2	-125.64	-132.13	-130.30	-120.97	-119.65	-117.25	-110.92	-112.57	-116.50
+3	-130.83	-129.82	-130.74	-128.29	-125.44	-125.98	-124.34	-122.27	-120.53
+4	-130.60	-132.32	-130.55	-131.42	-132.62	-130.64	-116.71	-121.55	-125.36
+5	-127.11	-132.80	-131.67	-133.08	-133.03	-133.22	-121.58	-126.56	-123.42

Note 3: Reference frequency 8 MHz

Note 4: All spurs are referenced to carrier signal (n=0).