

Frequency Synthesizer

KSN-1050A-119+

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
970.0	0.03	0.00	-0.03	-33.87	-36.66	-40.60	-47.91	-50.89	-53.08	23.46	24.46	25.28	6.77	8.19	9.51
980.0	-0.01	-0.02	-0.03	-33.98	-36.28	-39.75	-48.48	-50.54	-51.65	23.49	24.49	25.32	6.80	8.19	9.52
990.0	-0.03	-0.04	-0.03	-34.48	-36.61	-39.76	-48.65	-51.51	-52.79	23.52	24.51	25.36	6.81	8.21	9.52
1000.0	-0.04	-0.03	-0.02	-35.19	-37.42	-40.06	-47.40	-50.69	-51.66	23.54	24.54	25.39	6.82	8.22	9.54
1010.0	-0.04	-0.02	-0.02	-35.13	-37.09	-39.63	-47.17	-49.84	-51.45	23.55	24.56	25.41	6.83	8.23	9.54
1020.0	-0.07	-0.04	-0.04	-35.44	-37.30	-39.70	-46.79	-48.37	-50.78	23.58	24.57	25.43	6.84	8.24	9.56
1030.0	-0.12	-0.08	-0.10	-36.04	-37.61	-39.88	-45.54	-48.59	-49.98	23.59	24.59	25.45	6.85	8.24	9.57
1040.0	-0.17	-0.15	-0.16	-36.35	-38.26	-39.96	-44.16	-47.24	-47.03	23.61	24.61	25.47	6.82	8.23	9.55
1050.0	-0.27	-0.23	-0.24	-36.25	-37.85	-39.94	-43.18	-46.46	-47.22	23.63	24.62	25.49	6.83	8.23	9.56

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
970.0	-82.06	-80.36	-94.50	-125.19	-148.05	-84.42	-82.31	-94.49	-125.67	-146.68	-81.46	-80.87	-94.29	-123.26	-143.20
980.0	-83.34	-82.15	-94.13	-126.98	-148.61	-86.62	-80.81	-94.94	-126.21	-147.08	-80.93	-79.91	-94.60	-123.78	-142.50
990.0	-81.63	-81.63	-94.20	-127.34	-149.22	-83.71	-82.36	-94.21	-126.40	-147.39	-82.99	-82.44	-93.51	-124.09	-142.99
1000.0	-81.57	-80.44	-94.19	-127.40	-147.20	-84.14	-83.64	-93.26	-125.98	-147.13	-82.38	-80.67	-93.10	-124.17	-144.12
1010.0	-82.92	-83.31	-93.22	-127.28	-148.87	-83.38	-81.96	-94.27	-125.50	-146.51	-81.51	-81.68	-93.97	-124.43	-144.93
1020.0	-83.83	-80.75	-95.01	-127.55	-148.89	-81.90	-80.90	-94.80	-126.41	-146.39	-81.61	-80.38	-93.55	-124.57	-144.83
1030.0	-81.97	-80.90	-94.13	-127.35	-149.08	-85.71	-81.04	-93.73	-126.28	-147.20	-81.71	-81.89	-93.84	-124.51	-144.52
1040.0	-81.16	-81.28	-93.99	-127.27	-147.44	-83.28	-82.61	-93.88	-126.20	-146.29	-82.44	-82.09	-93.25	-124.41	-145.25
1050.0	-83.16	-81.47	-94.47	-127.25	-145.67	-84.98	-80.77	-93.65	-126.26	-146.88	-85.11	-80.97	-93.33	-124.38	-145.16

REV. X1

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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 970MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1010MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1050MHz± (n*Fcomparison) (dBc) NOTE 1			
	n	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
	-5	-106.67	-104.22	-97.73	-97.21	-104.79	-95.13	-96.59	-95.73	-101.22
-4	-107.41	-106.08	-94.36	-96.65	-103.50	-91.38	-95.03	-92.36	-104.31	
-3	-103.51	-101.28	-94.63	-92.24	-102.07	-89.14	-89.90	-88.76	-98.20	
-2	-95.00	-96.65	-90.56	-89.84	-95.43	-84.24	-86.64	-85.79	-92.48	
-1	-88.35	-85.57	-81.33	-83.70	-84.96	-78.22	-79.80	-81.38	-82.43	
0 ^{note 2}	-	-	-	-	-	-	-	-	-	
+1	-86.53	-87.12	-82.76	-81.10	-84.96	-78.79	-82.84	-83.46	-82.83	
+2	-95.28	-96.08	-88.72	-87.09	-94.43	-84.50	-90.28	-88.51	-93.90	
+3	-101.88	-99.70	-93.69	-90.76	-104.26	-89.67	-91.18	-87.96	-101.65	
+4	-107.58	-105.35	-96.50	-93.79	-103.21	-91.00	-94.27	-94.17	-103.41	
+5	-111.85	-103.02	-97.82	-95.75	-100.10	-95.04	-97.20	-94.56	-103.03	

Note 1: Comparison frequency 100 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 970MHz± (n*Reference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1010MHz± (n*Reference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1050MHz± (n*Reference) (dBc) NOTE 3			
	n	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
	-5	-125.32	-108.38	-112.03	-109.11	-110.81	-109.81	-121.51	-107.01	-111.73
-4	-102.94	-110.11	-114.42	-107.45	-118.18	-123.47	-103.87	-110.56	-115.80	
-3	-116.07	-110.77	-112.90	-118.88	-112.05	-109.49	-114.85	-110.00	-110.93	
-2	-103.97	-112.26	-113.25	-109.08	-113.92	-118.93	-101.78	-108.95	-113.42	
-1	-108.65	-107.04	-104.69	-110.29	-103.69	-110.59	-110.13	-107.25	-110.91	
0 ^{note 4}	-	-	-	-	-	-	-	-	-	
+1	-106.35	-107.17	-103.05	-104.55	-103.13	-108.04	-105.81	-110.77	-112.40	
+2	-109.33	-110.68	-109.10	-105.29	-111.86	-110.12	-109.11	-109.98	-108.38	
+3	-112.93	-110.46	-116.62	-112.42	-108.99	-107.92	-114.60	-111.42	-112.65	
+4	-104.86	-108.58	-113.55	-107.21	-119.35	-112.41	-104.99	-108.85	-111.67	
+5	-115.59	-110.19	-109.07	-111.63	-114.70	-110.85	-111.17	-108.70	-113.34	

Note 3: Reference frequency 10 MHz

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