

Frequency Synthesizer

KSN-1850A-219+

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				F2			F3								
	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C
1540	6.40	6.62	6.07	-22.91	-26.19	-31.31	-42.21	-42.39	-45.08	20.48	22.30	22.94	9.65	11.85	13.45
1556	6.32	6.55	6.02	-24.66	-28.03	-33.23	-42.13	-42.15	-45.38	20.51	22.29	22.93	9.68	11.88	13.47
1592	6.28	6.53	6.02	-28.61	-32.23	-37.54	-42.43	-42.13	-46.91	20.42	22.20	22.87	9.73	11.90	13.49
1628	6.08	6.34	5.84	-33.84	-37.94	-43.19	-41.49	-41.41	-47.25	20.44	22.18	22.86	9.76	11.93	13.52
1664	6.07	6.34	5.84	-40.99	-45.97	-50.86	-40.28	-39.60	-46.85	20.37	22.10	22.81	9.78	11.95	13.53
1670	6.05	6.33	5.83	-42.58	-46.57	-50.73	-40.07	-39.42	-46.54	20.36	22.09	22.80	9.79	11.96	13.54
1700	5.96	6.25	5.76	-50.51	-49.58	-50.06	-39.00	-38.49	-44.98	20.31	22.02	22.77	9.81	11.98	13.56
1736	5.98	6.25	5.80	-44.36	-44.93	-48.19	-37.17	-35.81	-43.32	20.35	22.05	22.81	9.82	11.99	13.58
1772	5.91	6.19	5.75	-40.86	-41.75	-45.25	-35.21	-34.84	-41.82	20.16	21.89	22.72	9.85	12.02	13.61
1800	5.82	6.10	5.69	-39.88	-40.69	-44.52	-34.41	-33.32	-40.59	20.19	21.93	22.76	9.86	12.03	13.61

FREQ. (MHz)	PHASE NOISE (dBc/Hz)														
	@ OFFSETS														
	-35°C					+25°C					+85°C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
1540	-61.33	-66.45	-94.22	-115.67	-135.05	-55.33	-64.38	-93.04	-112.29	-134.64	-59.32	-63.26	-90.68	-112.07	-132.80
1556	-59.74	-63.50	-94.52	-116.01	-135.70	-56.91	-62.99	-93.40	-114.15	-135.19	-60.29	-63.20	-92.11	-112.47	-133.38
1592	-57.52	-65.31	-94.05	-115.71	-135.85	-56.40	-64.66	-94.44	-114.84	-135.31	-58.34	-62.96	-91.72	-112.35	-133.35
1628	-60.11	-66.20	-95.26	-114.74	-136.33	-54.40	-64.75	-94.18	-115.13	-135.83	-57.30	-63.71	-92.24	-112.21	-133.99
1664	-55.40	-63.89	-94.12	-116.18	-136.48	-55.70	-64.18	-93.97	-115.70	-136.08	-60.32	-62.77	-91.89	-112.56	-134.12
1670	-55.49	-64.05	-93.99	-116.09	-136.31	-55.24	-64.19	-93.79	-115.38	-135.99	-60.07	-62.68	-91.83	-112.35	-134.06
1700	-55.92	-64.83	-93.32	-115.62	-135.43	-52.95	-64.23	-92.90	-113.78	-135.53	-58.84	-62.22	-91.53	-111.28	-133.75
1736	-55.34	-63.30	-95.07	-116.98	-137.24	-56.57	-63.91	-94.51	-116.18	-136.71	-55.36	-63.73	-93.44	-114.56	-135.04
1772	-53.52	-63.82	-93.44	-115.25	-135.90	-54.53	-60.41	-92.72	-114.03	-135.50	-52.31	-61.88	-91.25	-113.61	-133.91
1800	-55.02	-64.05	-93.92	-116.04	-136.02	-55.27	-62.96	-93.49	-115.35	-135.98	-53.71	-62.15	-91.58	-114.10	-134.35

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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 1540MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1670MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1800MHz± (n*Fcomparison) (dBc) NOTE 1			
	n	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C
	-5	-84.46	-88.68	-92.99	-85.69	-87.24	-98.94	-89.43	-98.07	-97.91
-4	-82.83	-89.40	-90.67	-84.12	-86.92	-93.44	-92.19	-87.83	-94.98	
-3	-81.85	-85.44	-89.14	-80.58	-81.75	-90.57	-85.93	-87.14	-84.98	
-2	-75.69	-81.78	-85.91	-76.31	-78.57	-84.50	-81.35	-80.85	-84.32	
-1	-71.24	-71.22	-81.14	-70.67	-71.50	-79.93	-77.24	-77.34	-77.22	
0 ^{note 2}	-	-	-	-	-	-	-	-	-	
+1	-71.44	-72.35	-79.65	-72.01	-74.36	-80.87	-78.90	-77.89	-76.18	
+2	-75.54	-81.88	-85.67	-75.58	-78.55	-84.76	-82.73	-86.00	-82.37	
+3	-81.92	-82.10	-90.06	-80.44	-82.63	-88.18	-89.28	-83.88	-86.24	
+4	-82.77	-89.21	-92.32	-84.68	-86.40	-92.24	-92.13	-93.87	-91.82	
+5	-84.49	-89.59	-94.93	-86.15	-88.74	-99.08	-91.24	-95.81	-98.01	

Note 1: Comparison frequency 50 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 1540MHz± (n*Reference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1670MHz± (n*Reference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1800MHz± (n*Reference) (dBc) NOTE 3			
	n	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C	-35°C	+25°C	+85°C
	-5	-127.60	-132.06	-129.45	-129.52	-130.09	-128.83	-131.89	-120.53	-129.22
-4	-121.53	-122.75	-121.88	-116.90	-118.66	-117.63	-120.68	-120.14	-115.56	
-3	-132.31	-130.91	-128.69	-130.38	-131.84	-128.25	-130.46	-123.38	-124.45	
-2	-125.40	-127.15	-126.09	-119.90	-123.33	-123.49	-121.02	-120.04	-119.09	
-1	-114.93	-112.97	-111.94	-112.19	-111.82	-110.41	-109.21	-109.44	-109.60	
0 ^{note 4}	-	-	-	-	-	-	-	-	-	
+1	-111.86	-112.47	-111.68	-112.37	-110.12	-109.82	-108.86	-107.64	-108.32	
+2	-123.14	-123.58	-125.87	-118.25	-121.02	-122.96	-122.09	-120.85	-118.97	
+3	-132.74	-126.13	-132.12	-132.58	-132.72	-128.87	-129.94	-126.53	-132.78	
+4	-118.72	-120.10	-120.34	-118.23	-119.27	-120.24	-120.66	-117.39	-115.45	
+5	-127.72	-128.54	-129.35	-127.72	-129.74	-129.68	-129.39	-124.85	-126.99	

Note 3: Reference frequency 14.4 MHz

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