

Frequency Synthesizer

KSN-EDR8979

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						VCO CURRENT (mA)			PLL CURRENT (mA)		
				(dBc)											
				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	
840	0.99	1.06	1.03	-26.25	-27.59	-29.39	-42.46	-45.13	-48.19	31.89	33.69	34.85	9.67	11.71	13.76
847	0.98	1.06	1.05	-25.57	-27.02	-28.49	-43.64	-46.26	-49.02	31.95	33.76	34.94	9.74	11.84	13.88
854	0.95	1.03	1.06	-26.04	-27.60	-28.78	-44.31	-47.04	-49.53	31.98	33.80	34.98	9.68	11.79	13.83
861	0.91	0.99	1.07	-26.41	-28.03	-29.17	-44.83	-47.63	-50.85	31.99	33.82	34.95	9.76	11.87	13.92
866	0.87	0.96	1.05	-26.86	-28.52	-29.52	-44.09	-47.00	-50.35	32.00	33.84	34.98	9.66	11.79	13.84
868	0.86	0.95	1.04	-27.10	-28.75	-29.74	-44.24	-47.07	-50.27	32.00	33.85	34.99	9.69	11.82	13.87
875	0.82	0.91	1.01	-27.41	-28.94	-30.10	-44.56	-47.51	-50.50	31.99	33.85	35.01	9.76	11.90	13.95
882	0.79	0.88	0.99	-26.99	-28.50	-29.59	-46.04	-49.01	-51.09	31.98	33.85	35.03	9.68	11.82	13.87
885	0.79	0.87	0.98	-27.06	-28.58	-29.58	-46.96	-49.79	-51.90	31.98	33.85	35.03	9.71	11.86	13.91
889	0.78	0.87	0.98	-27.40	-28.90	-29.84	-47.21	-49.95	-52.15	31.96	33.85	35.03	9.75	11.90	13.96
896	0.77	0.87	0.97	-27.54	-28.96	-30.08	-48.47	-51.47	-53.67	31.94	33.84	35.04	9.66	11.81	13.87
903	0.78	0.88	0.98	-27.54	-29.11	-29.90	-48.50	-51.29	-53.53	31.91	33.82	35.03	9.74	11.91	13.96
910	0.79	0.90	0.99	-29.08	-30.71	-31.23	-49.70	-52.23	-53.10	31.89	33.81	35.04	9.81	11.98	14.04

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
840	-88.97	-91.22	-104.52	-130.89	-151.15	-90.24	-92.30	-107.68	-133.79	-154.09	-89.47	-90.71	-106.54	-131.54	-151.52
847	-94.01	-90.83	-104.96	-131.80	-152.19	-91.59	-91.12	-108.62	-135.10	-155.11	-91.95	-91.46	-107.42	-132.44	-152.46
854	-90.92	-88.23	-105.55	-132.35	-152.53	-90.64	-91.85	-108.94	-135.89	-155.73	-88.28	-90.78	-107.64	-133.14	-153.13
861	-90.90	-89.72	-106.06	-132.68	-152.84	-90.42	-90.64	-109.08	-136.52	-156.38	-89.52	-92.87	-108.16	-134.16	-154.06
866	-93.32	-89.81	-106.17	-132.71	-152.88	-91.48	-91.64	-109.17	-136.71	-156.64	-89.29	-91.27	-107.58	-134.41	-154.12
868	-91.29	-88.93	-106.15	-132.63	-152.76	-90.28	-89.66	-109.24	-136.96	-156.75	-89.54	-92.01	-107.47	-134.48	-154.53
875	-89.70	-90.12	-105.69	-132.57	-152.74	-91.46	-93.06	-108.54	-137.28	-156.55	-91.46	-90.84	-106.70	-135.16	-154.74
882	-89.83	-91.09	-105.16	-132.10	-152.32	-90.30	-91.43	-107.47	-137.30	-156.30	-92.98	-91.75	-106.69	-135.14	-154.78
885	-88.13	-88.52	-105.80	-132.03	-152.23	-90.65	-91.54	-107.58	-137.25	-157.05	-90.74	-92.89	-106.52	-135.24	-155.03
889	-89.49	-87.62	-105.24	-131.80	-152.18	-91.40	-91.48	-107.55	-135.93	-156.99	-88.23	-93.19	-106.83	-135.17	-155.04
896	-89.11	-87.19	-105.37	-131.28	-151.62	-90.51	-92.16	-107.88	-137.50	-157.08	-91.83	-89.18	-107.27	-135.39	-155.37
903	-87.71	-87.64	-104.29	-131.01	-149.36	-87.50	-91.50	-107.72	-137.21	-157.03	-89.74	-90.17	-107.31	-135.61	-155.23
910	-89.78	-88.00	-103.58	-130.47	-150.82	-90.77	-91.27	-107.90	-137.25	-156.68	-92.29	-91.31	-107.53	-135.42	-155.07

Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"). Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCStore/terms.jsp



Frequency Synthesizer

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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 866 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 875 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 885 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
-5	-101.95	-101.97	-106.10	-102.73	-98.80	-96.38	-98.43	-104.07	-107.59
-4	-99.90	-95.91	-96.24	-100.81	-101.02	-103.85	-97.91	-101.65	-105.56
-3	-99.53	-101.91	-102.41	-100.54	-99.59	-105.38	-101.55	-99.23	-103.07
-2	-98.81	-97.06	-99.89	-97.38	-95.50	-103.61	-98.66	-92.22	-97.55
-1	-93.25	-90.79	-95.64	-89.82	-86.76	-92.05	-93.42	-85.27	-92.95
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-97.49	-98.16	-94.14	-106.28	-101.25	-98.91	-98.39	-102.61	-101.45
+2	-109.52	-108.10	-106.77	-106.90	-114.13	-107.78	-104.71	-115.86	-108.64
+3	-105.70	-113.39	-110.00	-104.08	-110.75	-109.35	-104.10	-110.69	-107.84
+4	-103.07	-111.77	-109.82	-103.91	-111.34	-110.19	-103.69	-109.46	-107.88
+5	-105.06	-110.79	-110.70	-104.26	-112.55	-108.20	-105.73	-112.01	-108.29

Note 1: Comparison frequency 1 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 866 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 875 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 885 MHz± (n*Freference) (dBc) NOTE 3		
	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
-5	-112.10	-117.81	-114.18	-108.06	-103.92	-104.69	-106.18	-108.38	-106.85
-4	-119.24	-124.25	-119.72	-104.30	-101.47	-101.90	-105.61	-102.45	-105.90
-3	-118.94	-120.90	-126.85	-98.07	-99.19	-98.60	-100.14	-97.14	-99.77
-2	-127.11	-120.26	-123.38	-90.55	-90.22	-90.81	-87.96	-92.60	-91.75
-1	-108.23	-107.15	-108.46	-76.85	-77.06	-79.28	-82.95	-85.51	-83.68
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-112.16	-109.84	-106.11	-75.64	-79.39	-78.98	-84.24	-86.53	-85.93
+2	-123.94	-116.79	-120.95	-88.22	-90.69	-92.62	-90.19	-88.71	-91.36
+3	-118.31	-120.88	-122.13	-100.52	-97.88	-95.62	-99.09	-99.73	-100.66
+4	-126.94	-120.76	-120.53	-102.39	-99.76	-103.51	-102.40	-104.85	-101.83
+5	-113.69	-121.48	-120.82	-107.42	-108.53	-107.93	-107.44	-109.23	-106.74

Note 3: Reference frequency 15 MHz

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

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