

Frequency Synthesizer

KSN-EDR8000/3

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (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
2910	4.07	4.05	3.81	-25.40	-27.33	-29.18	-30.69	-31.89	-32.38	32.29	34.45	35.67	17.14	19.05	21.61
2932	3.79	3.71	3.35	-23.22	-24.67	-26.02	-30.79	-31.24	-31.26	32.30	34.44	35.65	17.11	19.09	21.58
2934	3.79	3.72	3.35	-23.65	-24.94	-26.14	-31.13	-31.68	-31.67	32.30	34.44	35.65	17.11	19.12	21.57
2958	4.15	4.02	3.57	-26.76	-28.40	-29.78	-31.76	-33.01	-33.01	32.34	34.48	35.67	16.90	18.91	21.36
2982	4.69	4.50	4.08	-25.20	-26.92	-28.15	-37.27	-38.59	-39.44	32.39	34.54	35.73	16.85	18.88	21.31
3006	4.37	4.31	4.06	-27.41	-29.12	-30.40	-43.21	-44.24	-45.25	32.39	34.55	35.74	17.08	19.11	21.55
3030	3.77	3.60	3.33	-24.27	-26.65	-28.49	-43.01	-44.35	-47.50	32.36	34.48	35.68	17.14	19.15	21.62
3054	3.64	3.51	3.12	-28.20	-29.49	-30.41	-39.11	-40.48	-43.66	32.40	34.51	35.69	17.10	19.11	21.57
3078	4.04	3.84	3.36	-27.43	-29.58	-31.52	-45.13	-43.64	-44.72	32.41	34.54	35.71	16.90	18.90	21.36
3102	4.34	4.16	3.87	-30.18	-31.65	-33.14	-42.06	-39.31	-40.03	32.45	34.57	35.76	16.85	18.85	21.31
3126	3.24	3.21	2.97	-27.41	-29.83	-32.56	-32.39	-32.30	-34.19	32.41	34.52	35.71	17.08	19.09	21.56
3127	3.19	3.15	2.91	-27.11	-29.53	-32.33	-32.24	-32.04	-33.87	32.42	34.52	35.70	17.15	19.17	21.64
3150	2.72	2.37	1.93	-29.67	-31.09	-33.06	-38.74	-37.46	-38.41	32.41	34.49	35.66	17.14	19.16	21.62

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
2910	-79.69	-88.98	-90.21	-119.89	-146.11	-81.57	-88.84	-88.33	-120.06	-144.87	-78.84	-89.11	-87.36	-119.03	-143.97
2932	-80.65	-90.12	-90.29	-120.17	-145.86	-76.98	-89.50	-89.35	-120.46	-145.13	-80.81	-88.74	-87.82	-119.09	-143.96
2934	-82.18	-89.76	-90.17	-120.32	-146.16	-81.98	-90.13	-89.52	-120.59	-144.77	-80.57	-89.99	-88.56	-119.31	-143.60
2958	-80.03	-88.45	-90.01	-119.71	-145.25	-79.27	-89.11	-89.64	-119.81	-144.43	-80.67	-89.56	-88.41	-118.68	-143.58
2982	-81.82	-88.78	-89.75	-120.02	-146.25	-79.70	-90.98	-89.58	-120.22	-145.09	-79.90	-88.19	-88.31	-118.91	-144.30
3006	-79.87	-88.11	-89.61	-119.49	-145.29	-78.26	-90.99	-89.52	-119.82	-144.20	-80.38	-88.90	-88.49	-118.52	-143.16
3030	-78.79	-89.96	-90.09	-118.42	-144.82	-80.04	-89.36	-89.32	-118.92	-143.87	-80.28	-89.11	-88.16	-117.17	-142.17
3054	-80.22	-88.55	-89.38	-118.77	-144.72	-78.87	-89.90	-89.45	-119.50	-143.97	-80.33	-88.57	-88.45	-118.19	-142.74
3078	-80.36	-88.08	-89.07	-118.38	-144.10	-80.50	-89.68	-89.75	-118.97	-143.14	-82.12	-88.91	-89.06	-117.06	-141.40
3102	-78.67	-86.91	-88.47	-118.59	-144.38	-79.30	-88.69	-89.27	-119.37	-143.26	-80.55	-88.67	-88.41	-118.19	-142.34
3126	-78.94	-87.78	-88.84	-118.14	-142.87	-79.37	-90.56	-89.52	-119.16	-142.49	-81.32	-89.71	-89.23	-117.91	-141.09
3127	-80.73	-88.45	-89.07	-118.01	-142.60	-79.23	-88.98	-89.49	-119.25	-142.74	-80.56	-88.62	-89.02	-117.98	-140.33
3150	-80.44	-89.33	-89.22	-117.89	-142.45	-79.72	-88.49	-88.95	-116.99	-139.95	-81.26	-88.94	-89.65	-116.74	-139.36

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

KSN-EDR8000/3

Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 2932 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 3029.5 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 3127 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	-96.07	-93.28	-97.13	-94.11	-99.15	-91.90	-100.43	-94.69	-94.40
-4	-96.16	-96.70	-93.17	-98.37	-92.33	-91.97	-91.89	-92.45	-92.25
-3	-105.92	-100.75	-108.30	-105.33	-106.51	-100.45	-98.20	-98.42	-103.36
-2	-90.60	-88.05	-87.62	-86.97	-84.55	-84.08	-86.25	-89.74	-83.58
-1	-96.18	-92.79	-97.35	-95.37	-94.97	-92.25	-88.35	-88.12	-90.81
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-97.07	-91.38	-98.25	-96.13	-91.80	-93.60	-88.74	-86.93	-91.39
+2	-88.99	-88.53	-90.85	-99.79	-89.68	-91.68	-89.08	-95.31	-97.82
+3	-102.57	-99.56	-98.51	-103.19	-99.94	-99.92	-95.87	-93.39	-102.35
+4	-104.98	-105.66	-104.57	-100.18	-99.78	-99.53	-91.96	-96.65	-102.20
+5	-97.54	-95.46	-97.22	-93.53	-103.76	-96.76	-96.56	-93.06	-98.86

Note 1: Comparison frequency 26 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 2932 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 3029.5 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 3127 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	-84.39	-85.82	-84.09	-90.48	-92.99	-89.81	-93.98	-91.86	-93.97
-4	-96.44	-95.62	-102.14	-100.59	-106.27	-97.96	-98.20	-95.47	-96.30
-3	-92.63	-92.36	-94.71	-88.61	-90.65	-90.53	-88.68	-90.78	-93.94
-2	-95.94	-95.73	-93.26	-97.08	-91.98	-92.07	-92.37	-93.54	-92.19
-1	-89.81	-88.66	-87.61	-86.04	-85.13	-84.13	-85.38	-93.73	-83.85
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-88.47	-89.66	-90.94	-96.62	-87.67	-90.54	-88.84	-92.20	-97.84
+2	-103.76	-107.38	-104.45	-97.56	-99.06	-99.47	-92.88	-98.94	-99.06
+3	-95.03	-92.36	-99.71	-90.47	-92.73	-92.03	-87.04	-95.40	-94.82
+4	-99.73	-95.17	-95.05	-93.27	-99.80	-101.97	-97.00	-94.02	-103.93
+5	-84.96	-88.59	-85.84	-87.06	-90.07	-89.47	-91.39	-93.32	-98.27

Note 3: Reference frequency 52 MHz

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

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