

Frequency Synthesizer

KSN-EDR9230/1

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
3210	0.26	0.18	-0.44	-26.62	-26.89	-28.83	-35.63	-34.90	-38.22	48.38	51.80	54.62	15.10	18.13	24.93
3237	1.06	0.99	0.14	-27.15	-28.37	-29.62	-34.01	-33.21	-34.71	48.58	52.02	54.83	17.29	20.39	27.31
3244	1.16	1.11	0.38	-25.84	-27.38	-30.26	-35.49	-33.87	-36.61	48.60	52.06	54.87	17.30	20.39	27.32
3264	1.08	1.06	0.82	-27.64	-27.86	-29.39	-37.75	-36.48	-33.90	48.68	52.13	54.99	17.54	20.62	27.99
3291	0.78	0.76	0.65	-27.29	-28.99	-31.80	-38.75	-36.61	-32.64	48.83	52.30	55.11	17.70	20.75	27.95
3318	0.90	0.82	0.13	-29.43	-30.83	-31.50	-36.50	-34.95	-32.23	49.10	52.54	55.27	17.66	20.74	28.12
3345	1.52	1.37	0.31	-31.46	-33.03	-35.62	-34.41	-32.87	-32.46	49.33	52.73	55.46	17.73	20.81	27.90
3372	1.40	1.27	0.96	-34.83	-35.74	-36.78	-35.19	-35.91	-34.63	49.39	52.80	55.58	17.74	20.78	27.62
3399	0.82	0.69	0.63	-37.18	-38.40	-43.12	-36.92	-37.75	-33.90	49.55	52.91	55.62	17.74	20.79	28.17
3426	0.96	0.76	-0.21	-41.93	-42.94	-44.31	-39.44	-38.14	-33.72	49.80	53.08	55.72	17.54	20.60	28.72
3444	1.41	1.20	-0.11	-42.83	-44.76	-48.18	-36.21	-35.37	-35.57	49.88	53.17	55.81	17.60	20.65	27.45
3453	1.52	1.31	0.18	-40.89	-44.14	-48.10	-38.85	-36.37	-36.06	49.88	53.16	55.83	17.42	20.44	27.31
3480	0.95	0.78	0.86	-44.82	-46.69	-48.17	-33.65	-32.51	-35.95	49.83	53.11	55.82	15.40	18.33	25.04

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
3210	-79.26	-91.61	-92.02	-117.81	-138.41	-77.97	-91.36	-90.76	-116.89	-137.53	-80.69	-89.35	-89.37	-115.62	-136.17
3237	-79.54	-90.57	-92.83	-118.40	-139.08	-80.51	-88.65	-91.63	-117.43	-137.98	-79.87	-87.92	-90.75	-116.16	-136.72
3244	-79.16	-89.91	-92.90	-118.46	-139.14	-78.54	-88.24	-91.84	-117.42	-138.00	-78.33	-86.75	-90.73	-116.22	-136.71
3264	-81.15	-89.42	-93.09	-118.57	-139.23	-78.79	-88.12	-91.79	-117.31	-137.98	-78.71	-86.23	-90.85	-116.12	-136.67
3291	-78.39	-89.22	-93.27	-118.77	-139.42	-78.36	-87.88	-92.05	-117.46	-138.06	-77.85	-84.99	-90.49	-116.14	-136.62
3318	-79.45	-88.40	-93.85	-118.93	-139.63	-78.35	-87.00	-92.51	-117.65	-138.18	-78.38	-84.87	-91.01	-116.35	-136.87
3345	-77.39	-86.89	-93.32	-118.91	-139.54	-78.93	-86.88	-92.30	-117.62	-138.15	-78.14	-84.14	-91.20	-116.52	-137.07
3372	-78.82	-87.59	-93.38	-118.70	-139.40	-77.85	-85.95	-92.20	-117.51	-138.02	-78.55	-83.36	-91.03	-116.37	-136.96
3399	-79.39	-87.29	-93.52	-118.75	-139.47	-77.36	-86.19	-92.28	-117.56	-138.10	-78.08	-83.18	-90.83	-116.19	-136.75
3426	-78.89	-86.87	-93.46	-118.78	-139.55	-78.40	-86.46	-92.29	-117.57	-138.15	-78.86	-83.82	-90.92	-116.26	-136.88
3444	-78.30	-86.14	-93.24	-118.59	-139.40	-78.70	-85.28	-92.06	-117.29	-137.87	-78.40	-83.30	-90.96	-116.27	-136.84
3453	-79.07	-86.82	-92.85	-118.36	-139.10	-76.90	-85.87	-91.71	-116.99	-137.64	-77.94	-83.61	-90.67	-116.09	-136.71
3480	-77.89	-87.59	-92.72	-118.32	-139.04	-78.55	-85.91	-91.20	-116.92	-137.55	-77.70	-82.28	-90.36	-115.58	-136.16

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-Circuit's 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



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Typical Performance Data

COMPARISON SPURIOUS ORDER	REFERENCE & COMPARISON SPURIOUS @Fcarrier 3244 MHz± (n*Fcomparison) (dBc) NOTE 1			REFERENCE & COMPARISON SPURIOUS @Fcarrier 3344 MHz± (n*Fcomparison) (dBc) NOTE 1			REFERENCE & COMPARISON SPURIOUS @Fcarrier 3444 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
n									
-5	-85.91	-88.10	-95.49	-86.87	-89.03	-95.39	-84.83	-87.18	-92.37
-4	-84.09	-85.46	-89.02	-84.97	-85.47	-89.57	-84.00	-84.00	-87.76
-3	-89.78	-90.72	-93.35	-91.54	-92.03	-96.51	-89.11	-90.04	-94.08
-2	-94.27	-94.77	-98.39	-95.21	-95.70	-98.07	-94.97	-94.44	-96.43
-1	-109.00	-109.81	-108.79	-103.70	-105.78	-105.54	-105.70	-105.35	-107.06
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-105.72	-112.51	-110.08	-108.24	-108.97	-111.13	-106.35	-109.52	-103.30
+2	-93.71	-93.43	-95.18	-96.62	-97.37	-101.40	-96.10	-97.46	-99.36
+3	-90.17	-92.00	-96.18	-92.94	-93.49	-97.96	-91.47	-92.90	-99.29
+4	-86.28	-87.14	-89.96	-88.97	-90.82	-93.01	-90.00	-92.31	-95.52
+5	-89.71	-93.76	-105.62	-92.41	-94.85	-101.82	-90.64	-93.91	-99.29

Note 1: Comparison & Reference frequency 30 MHz

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

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