

Frequency Synthesizer

KSN-EDR8034/2

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	
1650	-0.13	0.02	-0.11	-36.49	-37.15	-35.67	-46.79	-45.99	-46.41	28.05	29.78	31.19	12.75	13.18	16.78
1670	-0.02	0.18	0.04	-34.56	-34.89	-34.43	-49.69	-47.68	-48.32	28.07	29.82	31.21	11.76	13.23	15.70
1675	-0.02	0.21	0.06	-34.36	-34.81	-34.48	-49.28	-47.89	-47.27	28.09	29.84	31.22	11.76	14.29	15.70
1700	-0.12	0.08	-0.03	-32.99	-34.53	-34.67	-48.84	-47.95	-46.44	28.10	29.84	31.22	12.77	13.27	16.79
1725	-0.23	-0.01	-0.10	-30.34	-31.54	-32.33	-47.41	-47.15	-45.30	28.10	29.84	31.22	11.77	14.32	15.71
1750	-0.27	-0.14	-0.18	-30.30	-32.36	-33.38	-49.74	-47.66	-46.30	28.09	29.84	31.22	12.75	13.29	16.79
1775	0.08	0.18	0.15	-28.56	-29.81	-31.56	-47.26	-47.50	-46.76	28.08	29.83	31.21	11.77	14.32	15.72
1800	-0.07	0.19	0.08	-28.30	-30.94	-32.43	-46.21	-45.34	-46.51	28.07	29.82	31.20	12.77	13.29	16.80
1825	-0.22	-0.02	-0.10	-27.66	-28.75	-31.27	-48.93	-47.75	-49.42	28.05	29.80	31.17	11.77	14.33	15.72
1850	-0.17	0.00	-0.08	-28.81	-30.96	-33.05	-48.44	-50.00	-49.73	28.03	29.78	31.16	12.76	13.30	16.80
1860	-0.17	-0.01	-0.08	-28.29	-30.55	-32.89	-48.57	-49.24	-49.39	28.02	29.77	31.15	11.77	13.30	15.73
1875	0.07	0.14	0.13	-29.49	-30.50	-33.93	-50.70	-51.22	-52.17	28.00	29.76	31.14	11.77	14.34	15.73
1900	0.23	0.40	0.34	-30.61	-32.72	-36.15	-50.84	-51.87	-54.48	27.99	29.75	31.12	12.76	13.30	16.80

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
1650	-82.60	-86.34	-95.58	-123.83	-144.49	-83.16	-87.86	-100.31	-124.97	-145.28	-84.57	-89.69	-97.17	-123.52	-143.72
1670	-81.00	-92.84	-99.57	-125.50	-146.06	-82.56	-86.02	-100.08	-124.93	-145.31	-82.58	-89.99	-99.32	-124.06	-144.43
1675	-80.38	-91.49	-99.37	-125.58	-146.35	-80.94	-83.66	-96.32	-124.08	-144.81	-84.85	-90.20	-98.88	-124.07	-144.47
1700	-81.53	-86.71	-94.00	-123.29	-144.64	-78.72	-85.61	-98.68	-124.85	-145.53	-84.31	-88.06	-95.61	-123.32	-143.76
1725	-82.48	-93.58	-97.92	-125.27	-146.31	-78.95	-84.21	-94.17	-123.64	-144.53	-82.07	-92.27	-96.93	-123.98	-144.55
1750	-82.58	-86.62	-92.65	-121.72	-142.60	-81.65	-87.17	-97.33	-124.59	-145.70	-84.69	-86.99	-93.37	-122.90	-143.55
1775	-84.50	-91.70	-96.04	-124.49	-146.64	-80.64	-85.27	-93.37	-123.24	-144.04	-84.22	-91.04	-94.99	-123.57	-144.49
1800	-80.87	-86.84	-90.48	-118.64	-140.93	-79.56	-85.42	-96.09	-124.29	-145.46	-80.24	-86.78	-92.16	-122.10	-143.26
1825	-82.53	-93.23	-95.34	-123.56	-146.00	-77.21	-83.28	-92.30	-121.78	-142.89	-83.04	-92.66	-94.67	-122.98	-144.38
1850	-82.19	-90.77	-93.98	-120.88	-140.89	-78.12	-83.61	-95.45	-123.28	-144.42	-83.49	-88.15	-92.05	-121.62	-142.42
1860	-83.76	-91.16	-95.12	-123.00	-144.46	-80.66	-85.07	-95.33	-123.27	-144.22	-83.60	-88.64	-94.16	-122.52	-143.49
1875	-80.54	-90.59	-95.08	-122.37	-142.99	-78.43	-85.39	-93.33	-121.39	-141.71	-83.88	-89.47	-94.40	-122.20	-142.79
1900	-81.57	-89.34	-93.35	-120.46	-140.16	-80.20	-87.32	-94.79	-122.04	-142.02	-83.68	-88.35	-93.46	-121.19	-141.02

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



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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 1670 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1765 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1860 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	-93.94	-88.04	-88.60	-91.47	-87.61	-87.36	-89.84	-98.77	-94.29
-4	-91.27	-93.86	-89.86	-90.57	-95.41	-91.75	-90.36	-98.79	-93.34
-3	-91.03	-90.44	-94.38	-91.60	-93.36	-97.82	-89.58	-94.92	-89.63
-2	-88.60	-82.75	-88.57	-90.00	-83.64	-93.10	-84.32	-87.96	-83.24
-1	-86.91	-84.23	-90.73	-88.90	-85.46	-92.83	-82.73	-85.51	-84.41
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-87.30	-92.79	-88.88	-87.20	-92.29	-88.26	-87.60	-89.86	-89.50
+2	-90.18	-89.58	-89.50	-91.05	-93.23	-91.38	-89.46	-94.78	-91.95
+3	-90.73	-90.05	-92.83	-89.04	-91.46	-90.61	-91.93	-100.32	-94.17
+4	-92.15	-88.08	-92.66	-87.08	-86.65	-87.91	-92.56	-99.08	-95.63
+5	-91.38	-89.20	-92.41	-87.72	-86.29	-87.79	-93.49	-101.86	-96.99

Note 1: Comparison frequency 10 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 1670 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1765 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1860 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	-86.42	-85.24	-86.69	-80.44	-81.15	-82.81	-83.53	-84.96	-86.94
-4	-94.12	-92.84	-92.88	-86.13	-87.45	-94.99	-89.61	-92.27	-89.80
-3	-93.91	-98.82	-95.40	-96.11	-97.67	-96.79	-93.43	-96.40	-95.88
-2	-97.48	-92.03	-91.84	-88.67	-86.42	-88.82	-91.48	-97.03	-92.70
-1	-89.30	-86.91	-89.99	-91.26	-90.31	-96.60	-92.27	-90.69	-88.88
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-95.51	-92.16	-92.51	-88.52	-88.81	-89.30	-92.09	-97.95	-93.05
+2	-101.47	-99.29	-104.80	-89.65	-89.24	-88.51	-100.31	-100.86	-104.17
+3	-96.74	-100.35	-106.12	-90.91	-90.96	-91.23	-99.96	-96.17	-99.50
+4	-95.94	-101.07	-100.90	-84.05	-86.62	-87.04	-95.06	-94.64	-99.19
+5	-94.07	-95.54	-100.00	-83.24	-83.56	-85.39	-95.08	-94.40	-98.16

Note 3: Reference frequency 30 MHz

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

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