

Frequency Synthesizer

KSN-EDR8493/3

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			
1830	0.49	0.62	0.70	-21.52	-23.28	-26.01	-25.89	-27.44	-30.37	42.02	43.97	45.29	12.05	13.83	16.49
1856	0.57	0.70	0.75	-22.44	-24.10	-26.42	-26.48	-28.31	-31.12	42.11	44.10	45.42	13.02	14.84	17.62
1860	0.58	0.71	0.75	-22.59	-24.19	-26.45	-26.53	-28.24	-31.18	42.13	44.11	45.43	12.05	13.84	16.60
1882	0.60	0.71	0.74	-22.61	-24.31	-26.69	-25.42	-27.11	-30.19	42.22	44.21	45.52	12.93	14.76	17.57
1908	0.54	0.68	0.70	-23.33	-24.96	-27.02	-26.29	-28.26	-31.44	42.27	44.29	45.59	12.96	14.79	17.61
1934	0.47	0.67	0.65	-24.00	-25.77	-27.98	-25.95	-27.87	-31.04	42.32	44.34	45.64	13.01	14.85	17.67
1960	0.51	0.65	0.58	-25.03	-26.59	-28.50	-27.60	-29.48	-33.10	42.48	44.38	45.69	12.05	13.85	16.64
1986	0.48	0.59	0.50	-26.85	-28.74	-30.33	-27.66	-29.54	-33.16	42.52	44.42	45.74	13.02	14.86	17.70
2012	0.46	0.54	0.43	-28.46	-29.99	-31.54	-28.52	-30.68	-34.42	42.53	44.45	45.77	12.93	14.77	17.59
2038	0.31	0.50	0.35	-30.05	-31.88	-33.37	-30.67	-32.73	-35.95	42.54	44.49	45.82	12.95	14.80	17.62
2060	0.25	0.40	0.24	-31.69	-33.61	-34.63	-31.24	-32.70	-35.71	42.57	44.54	45.88	12.05	13.86	16.65
2064	0.23	0.38	0.22	-31.99	-33.78	-34.95	-31.87	-33.30	-36.07	42.57	44.54	45.89	13.02	14.86	17.69
2090	0.14	0.27	0.10	-35.19	-37.41	-38.13	-30.44	-32.00	-34.87	42.63	44.62	45.95	12.06	13.86	16.65

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
1830	-78.72	-87.92	-94.99	-127.35	-148.69	-76.61	-86.70	-95.25	-126.74	-147.26	-78.98	-85.18	-95.30	-125.41	-146.00
1856	-76.90	-86.76	-93.84	-127.80	-149.04	-80.35	-84.70	-95.05	-127.00	-148.05	-78.20	-87.54	-94.95	-125.65	-146.45
1860	-76.62	-85.17	-94.47	-128.07	-149.06	-79.16	-86.45	-95.98	-127.35	-147.90	-77.51	-85.71	-96.45	-125.99	-146.25
1882	-77.26	-83.85	-94.38	-128.19	-149.16	-75.04	-86.69	-95.18	-127.13	-148.24	-77.24	-84.33	-94.69	-125.79	-146.83
1908	-79.34	-84.11	-94.21	-128.08	-149.11	-77.28	-85.37	-94.68	-127.29	-148.56	-80.75	-84.96	-95.19	-125.88	-146.69
1934	-77.31	-86.20	-94.20	-127.99	-149.07	-77.66	-84.73	-95.07	-127.07	-148.03	-77.88	-83.97	-95.17	-125.75	-146.76
1960	-77.42	-84.83	-95.19	-128.23	-149.73	-77.47	-87.27	-96.02	-127.34	-148.09	-78.54	-84.74	-95.79	-125.68	-146.39
1986	-80.72	-83.85	-94.66	-127.98	-149.18	-77.05	-84.92	-95.12	-127.03	-147.89	-76.24	-84.12	-94.98	-125.19	-146.15
2012	-78.16	-85.57	-94.74	-127.65	-148.85	-78.78	-83.81	-94.81	-126.86	-147.35	-75.88	-84.16	-95.00	-124.90	-145.73
2038	-77.14	-83.01	-94.66	-127.41	-148.40	-78.13	-84.06	-94.93	-126.33	-147.22	-78.70	-84.54	-94.82	-124.73	-145.51
2060	-76.37	-84.56	-95.20	-127.35	-148.22	-75.97	-83.83	-96.70	-126.24	-147.32	-78.35	-82.41	-96.85	-124.60	-145.13
2064	-81.07	-84.14	-94.59	-127.06	-148.38	-80.58	-84.38	-95.37	-126.22	-146.94	-76.24	-83.21	-95.85	-124.33	-145.10
2090	-78.01	-85.30	-95.91	-126.86	-147.95	-76.82	-83.05	-96.78	-125.79	-146.57	-76.46	-82.50	-96.43	-124.07	-144.63

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/MCLStore/terms.jsp



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

Rev. OR
 KSN-EDR8493/3
 150318
 Page 1 of 2

Frequency Synthesizer

KSN-EDR8493/3

Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 1860 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1960 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2060 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	-103.15	-119.91	-102.55	-100.32	-102.94	-104.76	-101.94	-103.93	-113.98
-4	-103.79	-110.86	-100.24	-99.57	-103.78	-102.73	-101.12	-101.85	-114.77
-3	-100.83	-100.25	-97.23	-97.03	-100.79	-97.55	-96.49	-98.57	-102.68
-2	-100.32	-100.93	-97.16	-95.66	-100.40	-98.36	-97.24	-100.47	-104.04
-1	-98.95	-98.28	-95.37	-93.67	-100.07	-95.28	-94.33	-100.08	-99.37
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-108.27	-99.31	-97.91	-101.67	-101.37	-97.42	-92.13	-99.88	-101.78
+2	-111.96	-101.31	-101.31	-106.38	-101.16	-101.87	-96.41	-103.51	-103.93
+3	-96.70	-96.28	-97.76	-103.47	-97.63	-98.90	-94.93	-98.91	-97.75
+4	-111.67	-102.43	-106.86	-115.15	-107.75	-109.62	-99.90	-120.22	-106.22
+5	-107.88	-102.79	-109.33	-105.82	-105.38	-110.74	-103.30	-115.26	-106.60

Note 1: Comparison frequency 10 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 1860 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1960 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2060 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	-	-	-	-	-	-	-	-	-
-4	-	-	-	-	-	-	-	-	-
-3	-104.54	-107.84	-109.78	-106.87	-107.00	-108.75	-111.11	-114.88	-112.63
-2	-107.27	-104.55	-104.34	-101.66	-98.96	-104.62	-102.24	-100.78	-108.97
-1	-104.21	-102.29	-101.89	-97.07	-100.93	-97.56	-96.51	-98.42	-102.78
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-116.09	-100.67	-99.99	-103.27	-97.62	-99.29	-94.84	-98.92	-97.73
+2	-105.89	-107.47	-106.05	-102.53	-102.31	-107.26	-106.67	-102.83	-108.34
+3	-121.18	-114.09	-113.67	-105.61	-114.46	-115.35	-120.57	-112.22	-113.50
+4	-	-	-	-	-	-	-	-	-
+5	-	-	-	-	-	-	-	-	-

Note 3: Reference frequency 30 MHz

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

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

