

Frequency Synthesizer

KSN-EDR108021SA

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						VCO CURRENT (mA)			PLL CURRENT (mA)		
				(dBc)											
	F2			F3											
-15 °C	+25°C	+75 °C	-15 °C	+25°C	+75 °C	-15 °C	+25°C	+75 °C	-15 °C	+25°C	+75 °C	-15 °C	+25°C	+75 °C	
830	3.02	3.00	3.04	-33.10	-34.66	-37.21	-48.67	-48.52	-49.22	41.21	42.51	43.65	8.21	9.01	10.14
840	2.94	2.93	2.95	-34.31	-35.85	-38.49	-46.72	-47.26	-48.43	41.06	42.40	43.58	8.24	8.94	10.21
850	2.85	2.84	2.86	-36.74	-38.41	-41.39	-46.10	-46.94	-48.09	40.90	42.26	43.48	8.27	9.01	10.28
860	2.75	2.74	2.75	-40.77	-43.03	-47.20	-46.78	-47.21	-48.68	40.73	42.13	43.37	8.30	9.05	10.33
870	2.62	2.58	2.60	-45.59	-49.68	-55.66	-46.42	-47.32	-48.43	40.58	42.00	43.26	8.33	9.08	10.39

FREQ. (MHz)	PHASE NOISE (dBc/Hz)														
	@ OFFSETS														
	-15°C					+25°C					+75°C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
830	-102.85	-78.51	-108.95	-125.92	-153.93	-96.73	-109.17	-109.24	-126.01	-156.04	-97.23	-109.47	-109.01	-125.28	-155.50
840	-102.15	-79.57	-109.86	-124.85	-154.73	-100.00	-110.27	-110.13	-125.11	-156.06	-99.03	-108.34	-109.50	-124.68	-155.77
850	-99.77	-81.48	-110.75	-123.54	-154.57	-101.84	-110.18	-109.77	-125.01	-156.01	-100.25	-107.02	-108.39	-125.50	-155.34
860	-99.01	-81.41	-109.81	-124.61	-154.61	-100.55	-108.87	-108.20	-126.58	-155.55	-96.75	-105.90	-106.16	-126.95	-154.96
870	-100.57	-80.39	-108.41	-126.62	-154.14	-93.65	-107.58	-105.15	-128.14	-155.08	-97.71	-106.90	-103.71	-127.65	-154.13

Frequency Synthesizer

KSN-EDR108021SA

Typical Performance Data

COMPARISON & REFERENCE SPURIOUS ORDER n	COMPARISON & REFERENCE SPURIOUS @Fcarrier 830 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON & REFERENCE SPURIOUS @Fcarrier 855 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON & REFERENCE SPURIOUS @Fcarrier 870 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-15°C	+25°C	+75°C	-15°C	+25°C	+75°C	-15°C	+25°C	+75°C
-5	-95.71	-87.37	-87.86	-94.49	-88.35	-86.17	-99.21	-88.15	-87.88
-4	-98.34	-88.16	-91.40	-92.88	-87.92	-87.24	-95.88	-91.24	-90.22
-3	-99.05	-87.36	-94.10	-93.50	-87.83	-88.48	-96.14	-92.60	-92.91
-2	-94.36	-87.05	-95.80	-90.35	-87.78	-89.73	-93.86	-97.94	-95.02
-1	-88.63	-85.89	-108.57	-89.14	-89.94	-95.16	-102.04	-92.68	-94.45
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-86.88	-86.58	-85.76	-84.44	-83.54	-85.90	-94.81	-80.13	-88.78
+2	-85.51	-85.32	-88.68	-83.89	-82.55	-85.64	-90.42	-82.96	-87.96
+3	-85.41	-83.53	-87.54	-85.36	-82.52	-85.34	-86.93	-82.68	-87.85
+4	-84.10	-82.47	-85.07	-83.27	-81.03	-84.01	-85.43	-82.86	-87.77
+5	-86.25	-83.15	-84.48	-84.73	-81.50	-84.46	-85.74	-82.94	-88.02

Note 1: Comparison & Reference frequency 10 MHz

Note 2: 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

