

Frequency Synthesizer

KSN-EDR9435/2

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
2100	4.87	5.36	5.29	-28.49	-32.76	-36.92	-30.34	-32.47	-34.62	42.15	44.04	45.37	38.63	39.29	41.21
2123	4.62	5.20	5.10	-31.39	-36.31	-37.31	-33.88	-36.30	-37.88	42.33	44.06	45.41	38.64	39.36	41.30
2146	4.59	5.23	5.12	-37.43	-42.34	-36.54	-35.90	-38.02	-40.00	42.31	44.11	45.46	38.65	39.39	41.35
2152	4.64	5.26	5.15	-35.62	-42.67	-37.97	-34.64	-36.69	-38.83	42.33	44.13	45.48	38.53	39.27	41.24
2169	4.83	5.29	5.18	-31.21	-36.15	-42.31	-33.09	-34.86	-37.08	42.39	44.19	45.53	38.62	39.37	41.35
2192	5.05	5.32	5.19	-34.26	-39.39	-38.83	-36.38	-38.75	-41.36	42.51	44.28	45.60	38.60	39.36	41.34
2215	5.04	5.31	5.17	-30.75	-36.25	-41.25	-33.98	-37.20	-39.95	42.63	44.37	45.66	38.62	39.38	41.37
2238	4.96	5.28	5.09	-31.09	-35.69	-38.64	-37.04	-40.36	-43.11	42.71	44.43	45.72	38.66	39.43	41.42
2261	5.06	5.31	5.10	-32.11	-37.51	-38.33	-38.69	-42.38	-45.04	42.78	44.50	45.77	38.63	39.40	41.39
2284	5.19	5.32	5.11	-30.38	-35.00	-38.48	-38.74	-41.94	-44.10	42.84	44.55	45.83	38.65	39.42	41.42
2303	5.20	5.30	5.09	-32.28	-36.20	-36.89	-41.63	-44.67	-46.30	42.90	44.60	45.87	38.57	39.35	41.35
2307	5.18	5.29	5.08	-32.28	-36.45	-37.07	-41.31	-44.59	-46.32	42.90	44.62	45.88	38.63	39.40	41.41
2330	5.10	5.25	5.04	-29.11	-33.48	-38.03	-37.76	-40.81	-42.67	42.97	44.67	45.93	38.66	39.44	41.43

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
2100	-67.80	-68.31	-99.97	-127.52	-148.03	-77.28	-80.31	-99.53	-126.75	-147.04	-84.16	-85.73	-98.58	-125.32	-145.58
2123	-76.38	-77.53	-97.08	-126.71	-147.49	-76.40	-83.16	-98.89	-126.19	-146.32	-81.16	-82.25	-97.94	-124.96	-145.18
2146	-74.19	-78.86	-95.55	-126.54	-146.81	-77.23	-83.53	-98.62	-126.30	-146.69	-79.36	-83.69	-96.50	-125.09	-145.64
2152	-74.54	-78.34	-95.31	-126.55	-147.07	-76.26	-80.94	-98.81	-126.41	-146.65	-81.42	-82.89	-96.63	-125.36	-145.63
2169	-74.19	-79.06	-96.72	-126.70	-147.63	-75.36	-81.67	-98.89	-126.64	-147.14	-81.75	-83.74	-98.26	-125.51	-146.13
2192	-73.16	-76.74	-97.25	-127.29	-148.01	-79.35	-82.56	-98.87	-127.18	-147.35	-79.62	-81.91	-98.09	-125.87	-146.28
2215	-74.86	-76.34	-96.67	-127.77	-148.62	-77.22	-83.70	-98.44	-127.34	-147.72	-82.03	-82.63	-97.47	-125.94	-146.29
2238	-72.49	-77.34	-97.08	-127.52	-148.36	-75.80	-81.68	-98.34	-127.31	-147.72	-78.78	-81.46	-97.88	-125.98	-146.33
2261	-74.31	-76.59	-96.31	-127.60	-148.57	-77.01	-84.65	-98.08	-127.21	-147.79	-79.59	-82.39	-97.16	-126.00	-146.64
2284	-75.12	-78.73	-96.56	-127.14	-148.07	-75.44	-83.83	-98.57	-126.88	-147.70	-79.26	-80.72	-97.25	-125.78	-146.28
2303	-74.39	-77.84	-95.73	-126.35	-147.25	-74.20	-81.17	-98.40	-126.54	-147.02	-77.07	-81.43	-97.26	-125.53	-146.09
2307	-73.89	-78.01	-96.33	-126.38	-147.23	-73.86	-81.87	-98.72	-126.50	-146.95	-77.66	-81.98	-97.96	-125.47	-145.83
2330	-73.86	-75.89	-95.77	-125.47	-146.31	-75.68	-81.30	-98.48	-125.72	-146.38	-78.02	-80.83	-97.39	-125.19	-145.66

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

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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 2721.52 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2729.52 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2737.52 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	-110.15	-112.51	-103.43	-111.01	-105.51	-108.74	-112.93	-107.81	-117.32
-4	-106.29	-100.33	-99.96	-100.07	-100.41	-99.86	-100.71	-100.07	-101.75
-3	-103.03	-101.99	-110.12	-102.04	-102.44	-107.00	-102.75	-107.85	-104.45
-2	-99.03	-98.29	-103.43	-99.63	-102.89	-107.63	-99.97	-96.77	-99.61
-1	-100.93	-98.51	-101.40	-99.95	-97.27	-104.58	-100.16	-98.20	-100.60
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-100.31	-98.39	-95.22	-99.23	-98.39	-98.61	-102.06	-97.59	-102.80
+2	-97.27	-92.48	-92.92	-95.96	-95.20	-94.60	-102.88	-108.68	-105.14
+3	-104.51	-105.02	-97.96	-106.75	-105.28	-98.87	-110.06	-106.26	-105.96
+4	-102.96	-98.27	-105.64	-103.06	-100.29	-99.61	-105.99	-112.80	-102.44
+5	-110.32	-102.35	-104.06	-102.67	-101.45	-109.64	-112.15	-107.38	-110.54

Note 1: Comparison frequency 15.36 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 2721.52 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2729.52 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2737.52 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	-89.56	-90.26	-91.90	-96.25	-93.48	-97.11	-95.40	-95.85	-100.57
-4	-95.02	-94.27	-98.75	-94.67	-92.90	-95.97	-92.76	-93.85	-93.83
-3	-108.76	-127.34	-108.43	-104.29	-106.68	-115.55	-105.86	-102.51	-119.71
-2	-103.12	-100.21	-99.76	-99.03	-100.29	-99.12	-100.54	-100.27	-101.21
-1	-98.93	-98.31	-103.94	-99.27	-103.14	-107.18	-100.30	-97.00	-99.17
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-96.86	-92.54	-92.96	-95.63	-95.33	-94.51	-100.95	-108.20	-105.02
+2	-101.13	-98.34	-105.72	-103.16	-100.05	-99.36	-106.24	-112.76	-102.47
+3	-111.32	-113.36	-103.45	-106.84	-102.87	-110.09	-112.64	-110.18	-120.06
+4	-95.97	-97.53	-98.43	-96.59	-98.52	-104.57	-100.05	-97.88	-104.03
+5	-90.68	-90.50	-93.86	-97.57	-99.96	-100.65	-111.17	-100.98	-106.57

Note 3: Reference frequency 30.72 MHz

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

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