

Frequency Synthesizer

KSN-EDR10968

Typical Performance Data

FREQ.	POWER OUTPUT			HARMONICS						VCO CURRENT			PLL CURRENT		
	(dBm)			(dBc)						(mA)			(mA)		
(MHz)	-55 °C	+25 °C	+85 °C	F2			F3			-55 °C	+25 °C	+85 °C	-55 °C	+25 °C	+85 °C
4802.9	-2.26	-3.31	-3.47	-25.50	-29.49	-30.66	-32.14	-34.35	-29.49	49.52	51.98	53.60	20.51	23.42	27.14
4803.9	-2.25	-3.31	-3.48	-25.38	-29.39	-30.57	-32.14	-34.23	-29.46	49.54	51.98	53.61	20.61	23.50	27.23
4809.1	-2.29	-3.34	-3.52	-25.29	-29.32	-30.64	-32.46	-34.26	-29.39	49.59	52.02	53.64	20.83	23.73	27.48
4815.3	-2.46	-3.44	-3.65	-25.60	-29.34	-30.97	-31.63	-33.99	-29.44	49.64	52.05	53.67	20.67	23.54	27.31
4821.5	-2.51	-3.59	-3.82	-26.58	-29.92	-32.35	-31.74	-33.31	-29.00	49.69	52.09	53.70	20.45	23.32	27.07
4827.7	-2.57	-3.78	-4.03	-26.65	-30.97	-32.71	-31.83	-32.90	-28.75	49.75	52.12	53.74	20.78	23.68	27.42
4833.9	-2.69	-3.95	-4.21	-28.36	-31.85	-32.53	-32.29	-32.99	-28.77	49.76	52.16	53.78	20.69	23.61	27.34
4840.1	-2.94	-4.07	-4.38	-26.40	-31.91	-33.27	-31.83	-33.03	-28.97	49.80	52.20	53.81	20.20	23.17	26.83
4846.3	-3.14	-4.11	-4.50	-25.45	-31.31	-32.15	-32.03	-32.80	-28.67	49.84	52.23	53.84	20.65	23.64	27.30
4852.5	-3.17	-4.04	-4.62	-25.68	-30.67	-31.66	-30.94	-32.63	-27.97	49.89	52.26	53.87	20.74	23.73	27.41
4858.7	-3.06	-3.88	-4.66	-27.36	-31.00	-31.78	-32.76	-33.06	-27.85	49.93	52.30	53.91	20.42	23.40	27.11
4863.6	-2.86	-3.72	-4.61	-28.90	-31.91	-32.83	-34.04	-33.63	-28.48	49.95	52.32	53.93	20.54	23.49	27.25
4864.9	-2.80	-3.68	-4.58	-29.21	-32.22	-33.24	-34.27	-33.66	-28.45	49.97	52.33	53.94	20.63	23.57	27.36

FREQ.	PHASE NOISE (dBc/Hz)														
	@ OFFSETS														
(MHz)	-55 °C					+25 °C					+85 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
4802.9	-74.46	-83.56	-89.70	-115.65	-136.40	-74.99	-80.47	-89.34	-114.61	-134.96	-74.02	-82.42	-89.03	-113.64	-134.03
4803.9	-73.19	-82.05	-89.83	-115.80	-136.24	-74.51	-81.87	-89.85	-113.59	-134.99	-74.28	-80.45	-88.83	-112.46	-133.99
4809.1	-73.93	-81.95	-89.71	-114.12	-136.36	-76.03	-82.41	-89.82	-114.21	-134.98	-74.06	-83.32	-89.08	-113.36	-134.02
4815.3	-72.54	-81.42	-89.75	-115.69	-136.31	-72.22	-81.69	-89.58	-112.80	-134.85	-73.30	-81.77	-88.70	-113.06	-133.93
4821.5	-77.42	-82.59	-89.32	-115.54	-135.97	-73.89	-81.83	-89.28	-113.66	-134.88	-75.62	-81.80	-88.95	-113.36	-133.78
4827.7	-72.79	-84.11	-89.88	-115.52	-135.89	-74.39	-82.06	-89.02	-114.24	-134.63	-74.63	-82.86	-89.03	-113.44	-133.80
4833.9	-77.57	-80.81	-89.20	-113.92	-135.84	-76.33	-83.75	-89.17	-113.67	-134.69	-73.71	-82.41	-89.20	-112.23	-133.81
4840.1	-75.78	-82.18	-88.91	-115.26	-135.75	-73.25	-81.48	-89.16	-114.06	-134.50	-74.21	-81.38	-88.83	-113.30	-133.71
4846.3	-74.06	-82.58	-89.14	-115.25	-135.72	-73.86	-81.54	-89.25	-112.98	-134.40	-75.24	-81.94	-88.65	-112.29	-133.66
4852.5	-72.74	-81.02	-88.57	-113.62	-135.66	-75.82	-81.93	-89.09	-113.80	-134.35	-76.90	-83.92	-88.73	-113.21	-133.58
4858.7	-74.56	-82.16	-89.71	-113.81	-135.63	-73.43	-83.67	-89.18	-113.78	-134.27	-76.13	-82.19	-88.67	-112.76	-133.44
4863.6	-75.39	-80.76	-89.00	-115.03	-135.59	-73.90	-80.96	-88.96	-113.92	-134.23	-75.06	-80.38	-88.36	-111.97	-133.59
4864.9	-74.49	-81.23	-89.06	-113.99	-135.49	-74.76	-80.58	-88.91	-113.62	-134.37	-74.31	-81.88	-88.63	-112.38	-133.43

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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Frequency Synthesizer

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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 4803.9 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 4833.6 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 4863.6 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-55 °C	+25°C	+85 °C	-55 °C	+25°C	+85 °C	-55 °C	+25°C	+85 °C
-5	-100.35	-107.64	-89.69	-99.36	-106.43	-90.12	-95.26	-99.54	-89.97
-4	-106.49	-95.80	-88.91	-101.36	-98.51	-87.76	-110.01	-92.57	-90.81
-3	-84.90	-87.94	-92.00	-84.38	-89.41	-88.39	-83.75	-86.13	-94.83
-2	-77.24	-77.71	-90.80	-77.08	-77.71	-85.52	-78.78	-76.92	-85.63
-1	-69.87	-70.61	-78.49	-68.89	-70.98	-75.79	-68.90	-67.88	-84.50
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-70.63	-66.26	-78.87	-69.11	-66.74	-81.47	-69.92	-65.06	-80.89
+2	-99.18	-90.25	-87.84	-89.96	-94.42	-92.30	-87.00	-87.46	-88.23
+3	-99.64	-103.02	-106.61	-99.43	-99.35	-104.24	-104.94	-101.65	-101.88
+4	-100.93	-99.45	-105.89	-99.93	-99.52	-107.47	-99.12	-97.41	-102.59
+5	-99.11	-102.14	-101.67	-98.88	-105.45	-108.41	-96.91	-97.93	-98.23

Note 1: Comparison frequency 100 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 4803.9 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 4833.6 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 4863.6 MHz± (n*Freference) (dBc) NOTE 3		
	-55 °C	+25°C	+85 °C	-55 °C	+25°C	+85 °C	-55 °C	+25°C	+85 °C
-5	-69.89	-70.58	-78.60	-68.83	-70.83	-76.02	-68.70	-68.20	-85.26
-4	-76.08	-76.34	-86.80	-74.04	-76.38	-87.05	-75.70	-77.02	-87.69
-3	-77.97	-78.76	-91.98	-79.56	-78.25	-88.48	-76.78	-78.81	-89.04
-2	-83.86	-82.42	-95.88	-82.85	-81.48	-91.22	-84.19	-81.80	-94.86
-1	-93.65	-85.73	-100.25	-94.41	-87.70	-98.63	-91.22	-85.17	-104.05
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-85.81	-83.88	-89.89	-85.59	-83.22	-89.29	-84.07	-84.62	-90.47
+2	-83.02	-81.32	-87.32	-81.09	-81.03	-88.02	-82.00	-80.99	-88.94
+3	-81.89	-78.88	-87.45	-79.88	-80.68	-88.93	-80.37	-80.67	-91.32
+4	-79.56	-78.36	-89.63	-76.73	-76.62	-90.03	-79.33	-81.24	-94.70
+5	-71.29	-66.30	-78.79	-69.78	-66.60	-81.21	-69.21	-65.13	-80.99

Note 3: Reference frequency 20 MHz

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

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