

Frequency Synthesizer

KSN-EDR10900F2

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						CURRENT (mA)		
				(dBc)								
	-5 °C	+25°C	+75 °C	F2			F3			-5 °C	+25°C	+75 °C
2040	5.77	5.62	6.20	-18.67	-19.43	-20.25	-14.15	-14.43	-15.83	103.92	109.36	111.53
2085	5.78	6.04	6.10	-18.33	-19.57	-19.95	-14.68	-15.44	-16.42	105.51	111.04	113.07
2101	6.10	6.01	6.35	-19.42	-20.07	-20.99	-15.12	-15.56	-16.81	104.60	110.01	112.00
2300	5.87	5.91	6.12	-16.65	-17.09	-18.46	-15.99	-16.54	-17.25	97.33	102.45	104.95
2500	5.16	5.45	5.33	-15.86	-16.14	-17.52	-20.33	-22.01	-23.23	95.21	100.17	102.49
3101	4.73	4.81	4.93	-15.79	-16.98	-18.19	-21.23	-21.43	-23.50	99.25	104.44	106.82
3300	4.63	4.62	4.90	-18.12	-19.18	-20.04	-23.26	-24.46	-24.37	95.74	100.67	102.96
3550	4.90	4.79	5.08	-19.40	-20.11	-23.70	-21.61	-24.57	-23.96	95.43	100.34	102.30
3601	4.89	4.98	5.11	-20.12	-21.67	-24.19	-22.23	-23.82	-24.37	94.33	99.16	101.09
3650	5.13	5.21	5.07	-25.96	-26.48	-27.46	-22.34	-23.76	-24.85	105.26	110.94	113.33
3700	4.87	4.98	4.88	-28.46	-28.32	-29.64	-22.19	-24.21	-24.82	102.62	108.13	110.64
3800	4.93	4.80	4.87	-32.24	-32.51	-34.74	-23.07	-24.71	-27.23	101.57	107.01	109.51
3900	4.90	4.80	4.76	-34.31	-35.90	-36.03	-25.11	-27.25	-31.43	100.71	106.04	108.50
4000	4.85	4.75	4.64	-32.60	-34.27	-37.68	-30.31	-30.53	-31.49	99.72	104.95	107.35
4080	5.02	4.76	4.77	-36.55	-37.13	-42.73	-27.08	-28.78	-31.06	99.13	104.29	106.62
4100	4.63	4.57	4.42	-36.51	-36.83	-40.07	-26.2	-28.17	-30.81	99.04	104.19	106.54

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-5 °C					+25°C					+75 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2040	-82.11	-91.52	-94.55	-112.56	-139.22	-84.02	-90.95	-94.07	-111.51	-137.75	-85.37	-92.60	-94.95	-110.55	-136.44
2085	-81.26	-90.59	-93.51	-112.12	-138.12	-86.71	-92.15	-93.22	-111.47	-136.86	-84.54	-89.48	-93.35	-110.84	-135.96
2101	-85.78	-90.82	-94.40	-111.60	-138.60	-85.33	-91.45	-93.75	-111.03	-137.46	-83.22	-92.20	-95.03	-110.30	-136.45
2300	-81.09	-89.53	-93.84	-111.69	-137.38	-86.01	-89.88	-94.15	-110.88	-135.83	-82.63	-92.15	-94.90	-109.50	-134.52
2500	-81.34	-88.33	-91.92	-109.59	-135.59	-81.42	-90.00	-92.77	-109.60	-134.97	-83.39	-90.17	-92.22	-108.02	-133.24
3101	-79.70	-89.08	-90.52	-108.81	-135.24	-81.33	-88.08	-91.12	-108.70	-134.34	-80.81	-87.11	-90.66	-105.93	-131.65
3300	-77.93	-86.63	-89.72	-107.64	-134.82	-80.54	-87.22	-90.06	-107.62	-133.73	-80.71	-85.66	-89.39	-106.09	-131.95
3550	-75.07	-85.67	-88.50	-105.95	-133.58	-80.71	-86.72	-88.05	-105.37	-132.47	-80.53	-86.32	-88.02	-104.75	-130.49
3601	-75.75	-86.79	-88.03	-105.51	-133.54	-80.08	-87.81	-87.70	-104.92	-132.49	-79.60	-82.50	-88.42	-103.98	-131.09
3650	-78.86	-86.68	-87.09	-108.24	-132.90	-78.32	-87.06	-87.09	-107.44	-132.21	-79.10	-84.04	-85.42	-105.16	-129.40
3700	-78.83	-86.29	-87.62	-107.78	-133.70	-78.96	-87.05	-87.23	-107.14	-132.42	-79.90	-85.82	-85.50	-104.99	-129.75
3800	-80.49	-85.31	-88.08	-107.39	-133.49	-79.08	-85.94	-87.58	-106.67	-132.26	-85.52	-84.81	-87.06	-104.53	-129.88
3900	-81.13	-85.64	-88.15	-106.65	-133.52	-76.18	-85.57	-88.41	-106.24	-132.27	-78.17	-87.27	-88.17	-104.32	-130.21
4000	-79.03	-85.86	-88.51	-106.8	-133.49	-81.72	-86.5	-88.73	-106.21	-132.28	-78.72	-84.21	-88.80	-104.29	-130.57
4080	-78.82	-87.9	-88.03	-106.04	-133.03	-80.83	-85.82	-88.5	-105.73	-131.92	-79.82	-86.90	-88.20	-104.1	-130.2
4100	-76.59	-85.47	-87.39	-106.13	-132.76	-78.45	-86.14	-87.61	-105.73	-131.56	-78.44	-86.10	-87.20	-104.41	-130.00

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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KSN-EDR10900F2

Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 2085 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 3083 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 4080 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-5 °C	+25°C	+75 °C	-5 °C	+25°C	+75 °C	-5 °C	+25°C	+75 °C
-5	-61.28	-62.84	-80.46	-61.24	-62.35	-80.50	-68.51	-69.59	-81.61
-4	-65.88	-66.60	-83.57	-65.93	-66.23	-83.57	-72.24	-75.74	-88.74
-3	-76.45	-78.03	-79.64	-76.73	-77.99	-79.64	-70.73	-70.80	-77.74
-2	-83.41	-84.54	-81.09	-83.35	-84.09	-81.04	-72.13	-71.42	-76.67
-1	-81.50	-81.93	-89.67	-80.90	-80.94	-89.74	-73.64	-73.34	-80.91
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-76.36	-76.96	-83.21	-76.25	-76.41	-83.17	-71.78	-72.50	-79.09
+2	-74.29	-75.34	-81.78	-74.03	-74.62	-81.80	-71.59	-71.61	-78.03
+3	-80.01	-81.12	-90.15	-79.90	-80.80	-90.26	-76.29	-75.53	-84.21
+4	-74.11	-74.58	-86.77	-74.12	-74.27	-86.74	-83.17	-79.98	-86.72
+5	-70.33	-71.14	-84.45	-70.17	-70.64	-84.25	-78.35	-76.93	-83.50

Note 1: Comparison frequency 20 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 2085 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 3083 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 4080 MHz± (n*Freference) (dBc) NOTE 3		
	-5 °C	+25°C	+75 °C	-5 °C	+25°C	+75 °C	-5 °C	+25°C	+75 °C
-5	-98.06	-99.51	-79.50	-86.82	-96.04	-82.98	-89.80	-97.18	-76.29
-4	-83.39	-84.13	-80.99	-80.43	-80.15	-81.59	-72.08	-71.33	-76.60
-3	-107.13	-110.68	-86.53	-89.10	-109.52	-85.61	-89.86	-96.79	-79.64
-2	-81.52	-81.45	-89.52	-80.91	-81.44	-88.70	-73.62	-73.29	-80.93
-1	-96.39	-102.53	-88.13	-87.98	-98.30	-86.65	-86.37	-94.36	-80.69
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-96.11	-103.04	-86.60	-88.60	-100.02	-86.10	-87.11	-96.22	-81.16
+2	-76.29	-76.55	-83.11	-75.60	-76.25	-82.62	-71.78	-72.43	-79.12
+3	-92.32	-99.84	-81.68	-87.83	-100.95	-80.06	-87.21	-94.98	-78.35
+4	-74.30	-74.91	-81.71	-72.94	-72.76	-79.34	-71.58	-71.62	-78.03
+5	-89.21	-95.65	-84.13	-86.56	-100.85	-81.99	-88.22	-97.03	-79.75

Note 3: Reference frequency 10 MHz

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

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