

Frequency Synthesizer

KSN-EDR10900F1

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	-5 °C	+25°C	+75 °C				
1940	5.62	5.65	6.11	-19.51	-20.00	-21.13	-12.89	-13.48	-14.64	105.30	110.90	112.69
1960	5.64	5.77	6.12	-18.90	-19.75	-20.19	-13.18	-13.82	-14.66	105.24	110.84	112.62
2000	5.98	6.10	6.45	-19.01	-19.80	-20.44	-14.17	-14.69	-15.96	104.44	109.95	111.68
2100	6.09	6.01	6.49	-19.24	-20.18	-21.02	-15.04	-15.52	-16.89	102.93	108.28	109.73
2203	6.05	5.97	6.47	-15.85	-16.76	-17.78	-15.26	-15.87	-16.86	100.22	105.48	107.37
2400	5.47	5.65	5.83	-16.45	-17.00	-18.64	-16.22	-17.20	-18.44	96.29	101.27	103.21
2600	4.89	5.19	5.22	-15.18	-15.73	-16.68	-22.01	-23.34	-23.10	94.28	99.06	100.81
2700	4.82	4.99	5.12	-14.89	-15.33	-16.30	-23.19	-24.97	-24.86	93.18	97.91	99.52
2800	4.48	4.39	4.77	-14.58	-15.15	-16.02	-17.15	-17.90	-18.94	92.21	96.83	98.34
2900	4.40	4.52	4.63	-13.19	-14.31	-15.29	-15.16	-16.28	-17.38	99.69	104.94	107.06
3000	4.39	4.76	4.59	-13.87	-15.15	-16.22	-16.40	-17.25	-18.91	98.48	103.60	105.64
3200	4.75	4.53	4.98	-17.06	-18.23	-19.20	-22.60	-23.45	-24.64	96.76	101.50	103.36
3400	4.57	4.86	4.83	-19.88	-20.66	-22.00	-22.23	-23.87	-24.68	94.67	99.47	101.10
3500	4.83	5.00	5.06	-19.16	-19.98	-21.79	-21.99	-22.71	-24.02	93.67	98.43	100.00
3600	4.90	5.00	5.09	-19.97	-21.46	-24.08	-22.24	-23.67	-24.31	92.69	97.38	98.88

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
1940	-85.14	-92.77	-94.87	-113.80	-140.14	-83.02	-93.07	-94.90	-112.65	-138.56	-85.17	-93.64	-96.01	-110.99	-136.88
1960	-83.97	-91.40	-94.54	-113.49	-139.55	-84.00	-93.55	-93.32	-112.66	-137.99	-83.96	-92.97	-94.20	-111.50	-136.41
2000	-85.71	-92.21	-94.95	-113.33	-139.92	-86.19	-93.93	-94.46	-112.34	-138.38	-84.62	-92.20	-96.08	-110.74	-136.78
2100	-82.79	-91.66	-95.02	-111.77	-138.91	-82.51	-92.72	-94.38	-110.83	-137.56	-83.87	-91.98	-94.33	-110.14	-136.51
2203	-83.88	-90.96	-95.78	-112.70	-138.27	-82.13	-92.14	-94.92	-110.91	-136.07	-85.39	-91.29	-96.27	-109.60	-134.64
2400	-79.64	-88.55	-93.56	-110.57	-136.77	-81.31	-90.36	-92.33	-109.71	-134.88	-84.95	-89.80	-94.49	-108.94	-133.98
2600	-80.28	-87.59	-90.63	-108.03	-134.75	-83.32	-89.21	-92.28	-109.25	-135.00	-82.70	-88.25	-90.53	-106.62	-132.30
2700	-82.65	-90.20	-90.47	-107.46	-134.43	-82.03	-90.42	-91.09	-108.34	-134.83	-80.75	-88.75	-90.06	-105.82	-132.23
2800	-79.46	-87.51	-88.79	-106.58	-134.02	-81.76	-88.16	-90.62	-106.81	-134.25	-80.81	-90.20	-89.22	-104.87	-131.76
2900	-83.11	-89.14	-88.95	-109.25	-135.38	-84.53	-88.25	-90.20	-109.87	-135.15	-82.39	-89.23	-88.02	-106.99	-131.78
3000	-80.47	-88.03	-89.84	-109.33	-135.78	-81.13	-88.68	-91.51	-109.52	-135.25	-81.36	-89.77	-90.03	-106.19	-132.49
3200	-79.65	-87.25	-88.55	-108.54	-134.60	-79.47	-87.97	-89.17	-108.49	-133.98	-83.08	-87.48	-90.73	-105.96	-132.36
3400	-79.17	-87.35	-89.78	-107.29	-134.72	-77.94	-87.32	-89.47	-106.83	-133.57	-79.27	-85.91	-89.20	-105.63	-132.02
3500	-78.59	-87.32	-89.16	-106.53	-134.52	-79.43	-86.88	-89.11	-105.94	-133.31	-80.42	-85.53	-89.52	-104.81	-131.94
3600	-75.17	-86.16	-88.43	-105.73	-133.82	-78.77	-86.72	-87.77	-104.91	-132.61	-77.10	-82.92	-88.48	-103.9	-131.24

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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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 1960 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2730 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 3500 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	-69.33	-69.18	-80.01	-64.39	-66.89	-85.08	-68.63	-69.76	-81.98
-4	-73.12	-74.38	-83.41	-67.06	-68.60	-102.43	-72.31	-75.00	-88.57
-3	-74.34	-72.80	-80.55	-75.03	-76.14	-79.29	-71.50	-71.30	-78.32
-2	-78.48	-75.26	-79.81	-73.10	-73.73	-75.64	-73.57	-72.71	-76.74
-1	-85.04	-88.76	-88.81	-78.23	-77.59	-80.44	-77.71	-75.97	-80.02
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-77.22	-81.27	-85.98	-73.52	-73.00	-77.71	-73.47	-72.89	-79.29
+2	-75.72	-75.17	-82.44	-70.03	-70.43	-75.92	-71.30	-71.24	-77.82
+3	-84.09	-77.85	-90.68	-73.70	-74.25	-83.04	-74.70	-74.66	-83.68
+4	-81.05	-85.88	-88.05	-72.75	-73.32	-84.59	-89.37	-81.99	-87.36
+5	-75.49	-76.81	-84.94	-69.80	-71.22	-83.22	-79.63	-76.89	-83.17

Note 1: Comparison frequency 20 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 1960 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2730 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 3500 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	-95.32	-102.96	-79.17	-83.94	-92.60	-75.89	-91.04	-97.20	-76.94
-4	-78.54	-75.21	-79.81	-73.07	-73.60	-75.69	-73.55	-72.42	-76.80
-3	-100.89	-104.10	-84.64	-88.35	-99.43	-78.10	-89.47	-96.85	-79.12
-2	-85.18	-88.72	-88.72	-78.24	-77.55	-80.48	-77.70	-75.71	-80.18
-1	-93.26	-102.27	-94.26	-85.37	-94.60	-81.74	-86.71	-95.63	-82.28
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-93.84	-104.42	-91.27	-85.69	-95.29	-81.54	-87.63	-96.87	-82.62
+2	-77.23	-81.19	-86.07	-73.52	-72.96	-77.72	-73.49	-72.64	-79.35
+3	-92.66	-100.19	-83.58	-84.59	-94.33	-75.82	-87.13	-93.87	-78.32
+4	-75.71	-75.11	-82.59	-70.02	-70.31	-75.93	-71.29	-71.01	-77.84
+5	-90.65	-99.33	-84.51	-83.10	-92.44	-78.08	-86.73	-93.26	-79.12

Note 3: Reference frequency 10 MHz

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

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