

Frequency Synthesizer

KSN-EDR9733/1MP

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				F2			F3								
	-40 °C	+25°C	+70 °C	-40 °C	+25°C	+70 °C	-40 °C	+25°C	+70 °C	-40 °C	+25°C	+70 °C	-40 °C	+25°C	+70 °C
2950	3.15	3.55	3.51	-50.09	-52.85	-52.14	-35.76	-38.37	-40.03	34.83	38.80	43.94	13.82	13.56	15.47
3000	3.53	3.86	3.76	-46.05	-48.44	-47.90	-36.23	-38.51	-41.01	34.83	38.87	44.02	13.82	13.61	15.48
3010	3.58	3.90	3.82	-50.73	-49.75	-47.97	-37.45	-39.63	-42.14	34.82	38.88	43.89	13.81	13.62	15.47
3070	3.71	4.02	3.94	-50.63	-52.65	-51.41	-38.38	-40.96	-43.75	34.85	38.91	44.02	13.81	13.62	15.48
3130	3.80	4.11	4.03	-49.07	-49.10	-51.37	-41.03	-43.44	-45.07	34.87	38.90	43.90	13.81	13.64	15.47
3190	3.85	4.15	4.07	-49.83	-49.87	-47.84	-44.06	-43.79	-43.97	34.73	38.83	43.79	13.81	13.64	15.48
3250	3.92	4.09	3.98	-41.57	-43.14	-43.41	-44.23	-42.60	-42.29	34.69	38.70	43.62	13.81	13.64	15.48
3310	4.05	4.08	3.90	-41.97	-43.90	-45.14	-44.13	-43.18	-42.85	34.52	38.51	43.52	13.81	13.64	15.47
3370	3.80	3.80	3.63	-34.87	-37.52	-39.35	-42.61	-41.20	-41.01	34.26	38.29	43.17	13.81	13.64	15.47
3430	3.21	3.20	3.09	-33.43	-35.90	-37.75	-40.72	-40.27	-40.30	34.07	38.05	43.01	13.81	13.64	15.48
3490	2.95	2.87	2.75	-32.54	-34.81	-37.00	-42.44	-43.30	-43.17	33.78	37.82	42.76	13.81	13.64	15.48
3500	2.85	2.54	2.61	-33.12	-35.24	-37.26	-41.49	-42.47	-42.90	33.73	37.79	42.71	13.80	13.64	15.48
3550	2.63	2.30	2.22	-33.48	-36.24	-38.52	-42.31	-42.38	-42.24	33.62	37.61	42.47	13.81	13.64	15.48

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-40 °C					+25°C					+70 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2950	-80.66	-87.56	-96.62	-95.96	-125.11	-82.29	-89.99	-96.29	-95.39	-124.86	-81.30	-93.00	-96.50	-95.20	-123.57
3000	-78.72	-88.88	-96.83	-95.79	-125.09	-83.84	-90.81	-96.21	-95.39	-124.84	-84.12	-92.36	-96.56	-95.03	-123.52
3010	-78.95	-89.48	-96.24	-95.91	-125.16	-83.93	-90.84	-95.83	-95.43	-124.91	-82.90	-92.50	-96.54	-95.08	-123.75
3070	-80.35	-89.80	-96.46	-95.78	-125.14	-84.81	-90.52	-95.98	-95.39	-124.97	-83.85	-92.09	-96.45	-95.10	-123.60
3130	-78.77	-89.83	-96.35	-95.69	-124.87	-82.72	-90.05	-95.77	-95.22	-124.59	-81.58	-91.83	-96.08	-94.80	-123.27
3190	-78.46	-88.97	-95.81	-95.38	-124.66	-83.19	-89.14	-96.04	-94.94	-124.33	-82.44	-91.35	-96.03	-94.57	-123.01
3250	-78.41	-89.66	-96.35	-95.47	-124.52	-85.22	-90.27	-96.08	-94.98	-124.32	-82.24	-90.93	-95.98	-94.77	-123.48
3310	-78.65	-88.49	-95.90	-95.51	-125.37	-82.73	-90.27	-95.94	-95.38	-125.46	-79.14	-91.03	-95.98	-95.22	-124.56
3370	-77.44	-89.56	-96.12	-95.82	-125.46	-82.38	-88.42	-95.57	-95.58	-125.67	-80.08	-92.67	-95.58	-95.52	-124.79
3430	-78.91	-87.16	-95.30	-96.32	-126.03	-80.94	-88.45	-95.58	-96.29	-126.37	-80.23	-91.79	-95.92	-96.18	-125.52
3490	-77.51	-87.49	-94.74	-97.84	-127.44	-80.50	-90.93	-94.21	-97.21	-127.46	-78.55	-91.84	-94.81	-97.91	-126.97
3500	-78.47	-87.74	-95.29	-97.70	-127.21	-81.17	-89.31	-94.64	-97.39	-127.37	-79.44	-90.27	-95.53	-98.03	-127.09
3550	-77.69	-89.13	-94.71	-99.78	-128.56	-80.22	-88.89	-95.21	-99.95	-128.88	-79.38	-90.24	-95.26	-100.58	-128.54

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/MCLStore/terms.jsp



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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON & REFERENCE SPURIOUS @Fcarrier 3001 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON & REFERENCE SPURIOUS @Fcarrier 3251 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON & REFERENCE SPURIOUS @Fcarrier 3499 MHz± (n*Fcomparison) (dBc) NOTE 1			
	n	-40 °C	+25°C	+70 °C	-40 °C	+25°C	+70 °C	-40 °C	+25°C	+70 °C
-5	-77.42	-111.42	-116.42	-111.71	-113.63	-115.14	-77.47	-115.33	-108.18	
-4	-85.21	-109.02	-115.47	-108.35	-109.91	-111.94	-85.19	-112.25	-108.49	
-3	-83.22	-102.72	-108.79	-115.30	-104.14	-102.51	-83.26	-106.29	-102.42	
-2	-74.21	-104.39	-98.86	-107.11	-97.54	-95.56	-74.13	-102.85	-97.27	
-1	-62.99	-77.35	-77.76	-79.84	-78.31	-78.54	-62.72	-84.26	-82.54	
0 ^{note 2}	-	-	-	-	-	-	-	-	-	
+1	-60.64	-77.85	-78.11	-80.15	-78.76	-78.59	-60.51	-83.60	-83.03	
+2	-73.77	-100.17	-98.51	-105.10	-98.19	-94.76	-73.80	-102.48	-99.13	
+3	-83.29	-118.33	-116.67	-110.66	-104.55	-100.63	-83.39	-102.48	-106.06	
+4	-82.26	-115.84	-116.05	-112.44	-110.79	-107.26	-82.41	-106.42	-114.22	
+5	-77.15	-114.37	-114.40	-111.80	-105.39	-112.23	-77.17	-109.08	-114.54	

Note 1: Comparison & Reference frequency 10 MHz

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

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