

Frequency Synthesizer

KSN-EDR9694

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						VCO CURRENT (mA)			PLL CURRENT (mA)		
				(dBc)											
	-45°C	+25°C	+75°C	F2			F3								
-45°C				+25°C	+75°C	-45°C	+25°C	+75°C							
2160	2.10	2.48	2.54	-33.17	-35.14	-38.69	-30.21	-32.33	-34.22	28.26	30.73	32.25	13.62	15.21	16.43
2168	2.23	2.62	2.66	-33.93	-35.86	-39.38	-30.84	-32.97	-34.04	28.36	30.78	32.28	13.66	15.25	16.49
2176	2.32	2.70	2.73	-34.41	-36.47	-40.19	-35.15	-37.60	-37.83	28.39	30.80	32.29	13.67	15.26	16.53
2184	2.41	2.79	2.81	-33.74	-35.92	-39.94	-33.33	-35.93	-38.10	28.40	30.80	32.28	13.68	15.27	16.56
2192	2.48	2.86	2.86	-33.69	-35.91	-39.80	-35.23	-37.65	-38.52	28.41	30.81	32.28	13.68	15.27	16.57
2200	2.52	2.90	2.91	-34.39	-36.69	-40.56	-39.66	-42.36	-42.63	28.40	30.79	32.27	13.69	15.28	16.60
2208	2.61	2.97	2.97	-34.19	-36.53	-40.67	-38.97	-40.63	-42.43	28.38	30.78	32.25	13.68	15.28	16.60
2216	2.64	2.99	2.97	-33.36	-35.56	-39.78	-42.54	-44.38	-44.50	28.35	30.74	32.21	13.69	15.29	16.62
2224	2.65	2.99	2.96	-33.96	-36.09	-40.18	-44.51	-44.32	-46.15	28.32	30.71	32.18	13.69	15.28	16.62
2232	2.70	3.03	2.97	-35.22	-37.51	-41.92	-45.62	-45.75	-45.61	28.28	30.66	32.14	13.70	15.29	16.63
2240	2.43	2.87	3.03	-35.66	-38.23	-42.30	-47.10	-44.75	-47.65	27.68	30.31	32.10	13.69	15.29	16.63

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-45°C					+25°C					+75°C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2160	-71.46	-79.87	-110.32	-133.58	-153.38	-73.94	-80.25	-111.41	-133.48	-153.54	-71.17	-79.83	-110.82	-132.58	-152.37
2168	-72.83	-81.14	-110.53	-133.47	-153.65	-73.00	-81.05	-111.00	-133.51	-153.93	-74.50	-78.57	-110.38	-132.66	-152.73
2176	-71.55	-78.88	-111.49	-134.05	-153.45	-75.95	-78.63	-111.69	-133.57	-153.57	-70.46	-76.47	-110.68	-132.41	-153.12
2184	-72.28	-80.46	-110.69	-134.13	-153.79	-75.36	-78.97	-111.44	-133.42	-153.04	-70.45	-79.23	-110.70	-132.58	-152.26
2192	-71.74	-77.76	-110.69	-134.01	-154.06	-74.08	-79.58	-110.58	-133.77	-154.48	-69.73	-79.07	-110.21	-132.41	-152.57
2200	-72.03	-79.46	-110.91	-134.18	-154.38	-72.39	-79.45	-111.39	-133.60	-153.49	-71.65	-77.64	-109.80	-132.36	-152.50
2208	-72.48	-79.81	-110.76	-134.19	-155.27	-70.82	-79.05	-111.13	-133.59	-153.51	-69.93	-79.90	-109.42	-132.16	-152.45
2216	-70.70	-78.35	-110.69	-133.97	-153.78	-72.44	-78.95	-110.75	-133.34	-153.01	-70.03	-79.15	-108.66	-131.90	-152.35
2224	-69.66	-79.54	-109.94	-133.43	-153.05	-70.59	-78.48	-109.91	-132.89	-153.31	-68.51	-76.8	-108.37	-131.79	-151.27
2232	-68.02	-77.67	-109.13	-132.50	-152.28	-69.12	-79.55	-109.68	-132.24	-152.00	-67.22	-78.4	-108.15	-131.16	-150.63
2240	-73.43	-78.08	-110.33	-132.48	-154.47	-70.85	-79.95	-109.71	-131.96	-148.44	-66.05	-78.48	-107.41	-130.72	-150.51

REFERENCE & COMPARISON SPURIOUS ORDER	REFERENCE SPURIOUS @ Fcarrier 2200 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @ Fcarrier 2200 MHz± (n*Fcomparison) (dBc) NOTE 2		
	-45°C	+25°C	+75°C	-45°C	+25°C	+75°C
-5	-123.06	-124.96	-118.47	-107.22	-112.8	-110.44
-4	-124.61	-127.01	-126.39	-103.06	-107.2	-105.22
-3	-126.23	-128.59	-128.27	-94.15	-101.06	-100.75
-2	-125.42	-127.63	-128.02	-85.49	-93.81	-95.98
-1	-118.04	-119.65	-127.58	-87.68	-83.92	-84.95
0 note 3	-	-	-	-	-	-
+1	-122.85	-118.21	-121.88	-84.69	-83.14	-84.21
+2	-128.00	-124.83	-127.51	-87.57	-96.85	-92.96
+3	-127.81	-130.11	-129.15	-102.59	-101.16	-104.14
+4	-126.64	-125.73	-125.11	-106.58	-106.34	-107.19
+5	-119.04	-121.08	-116.96	-108.60	-112.92	-110.81

Note 1: Reference frequency 10 MHz.

Note 2: Comparison frequency 0.1 MHz.

Note 3: All spurs are referenced to carrier signal (n=0).

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.
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