

Frequency Synthesizer

KSN-EDR10373/1

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				F2			F3								
	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C
2040	5.72	6.09	6.24	-33.27	-34.85	-37.06	-33.27	-34.85	-37.06	19.84	21.80	23.49	10.90	13.25	15.77
2060	5.52	5.89	6.03	-33.39	-34.84	-36.83	-33.39	-34.84	-36.83	19.83	21.78	23.46	10.95	13.27	15.83
2069	5.41	5.78	5.91	-33.21	-34.57	-36.60	-33.21	-34.57	-36.60	19.83	21.77	23.47	10.96	13.28	15.84
2098	5.48	5.79	5.89	-31.15	-32.40	-34.38	-31.15	-32.40	-34.38	20.03	21.94	23.60	10.98	13.30	15.86
2127	5.81	6.13	6.21	-30.76	-31.81	-33.92	-30.76	-31.81	-33.92	20.11	22.03	23.67	11.00	13.31	15.89
2156	5.36	5.70	5.80	-29.57	-30.87	-32.88	-29.57	-30.87	-32.88	20.04	21.95	23.60	11.02	13.33	15.91
2185	5.40	5.72	5.80	-29.17	-30.47	-32.89	-29.17	-30.47	-32.89	20.19	22.10	23.72	11.04	13.35	15.92
2214	5.48	5.77	5.83	-30.14	-31.42	-33.58	-30.14	-31.42	-33.58	20.29	22.19	23.81	11.06	13.37	15.94
2243	5.34	5.67	5.77	-30.66	-31.93	-33.78	-30.66	-31.93	-33.78	20.25	22.17	23.80	11.07	13.39	15.96
2272	5.05	5.42	5.53	-31.23	-31.71	-32.95	-31.23	-31.71	-32.95	20.29	22.21	23.83	11.07	13.39	15.97
2301	5.07	5.46	5.58	-28.92	-29.40	-30.66	-28.92	-29.40	-30.66	20.37	22.27	23.88	11.09	13.40	15.99
2310	5.03	5.43	5.55	-28.12	-28.73	-29.97	-28.12	-28.73	-29.97	20.39	22.29	23.89	11.11	13.42	16.00
2330	5.14	5.53	5.64	-27.01	-27.47	-28.77	-27.01	-27.47	-28.77	20.48	22.36	23.93	11.11	13.42	16.01

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-35 °C					+25°C					+85 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2040	-61.93	-65.52	-96.69	-117.41	-137.29	-62.67	-70.20	-96.72	-115.26	-137.16	-59.20	-66.19	-93.66	-114.62	-134.89
2060	-62.92	-70.01	-96.08	-115.97	-135.92	-62.98	-70.08	-96.23	-115.14	-136.63	-56.55	-66.60	-93.47	-112.96	-134.36
2069	-65.14	-66.09	-96.78	-115.55	-136.68	-62.88	-63.72	-97.00	-115.70	-136.57	-60.11	-60.10	-94.29	-114.18	-134.03
2098	-63.80	-70.67	-96.82	-117.50	-137.24	-62.82	-69.39	-96.42	-116.75	-137.26	-56.96	-67.44	-94.36	-113.82	-134.50
2127	-61.16	-64.60	-98.16	-117.08	-138.85	-60.68	-65.92	-98.22	-116.54	-138.26	-56.28	-65.46	-95.17	-115.14	-135.66
2156	-61.76	-68.66	-96.51	-117.38	-137.40	-62.63	-67.99	-96.11	-115.51	-137.02	-56.13	-64.56	-93.14	-112.58	-134.51
2185	-60.85	-69.60	-97.92	-117.70	-138.54	-60.29	-68.83	-96.90	-116.95	-137.73	-53.94	-68.25	-94.79	-115.06	-135.04
2214	-59.70	-69.73	-97.97	-119.29	-139.00	-58.19	-67.68	-96.81	-117.05	-137.82	-53.51	-62.53	-94.12	-115.17	-135.17
2243	-59.76	-68.46	-97.88	-117.00	-138.60	-56.99	-67.74	-96.59	-116.87	-137.40	-53.15	-64.54	-93.62	-113.18	-134.50
2272	-57.91	-70.12	-96.97	-117.74	-138.26	-54.89	-66.98	-95.97	-116.96	-137.23	-50.74	-64.64	-93.12	-113.16	-134.62
2301	-58.79	-70.60	-97.51	-118.77	-138.78	-55.57	-67.04	-96.25	-115.52	-137.31	-51.08	-67.08	-92.93	-112.68	-134.51
2310	-60.11	-67.98	-97.11	-118.68	-138.55	-57.14	-67.87	-95.59	-117.07	-136.57	-50.53	-64.29	-92.91	-113.75	-134.41
2330	-58.63	-70.59	-98.29	-119.50	-139.24	-52.98	-67.49	-96.33	-117.82	-137.63	-52.13	-64.65	-93.70	-113.77	-134.98

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/MCULStore/terms.jsp



Frequency Synthesizer

KSN-EDR10373/1

Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 2060 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2185 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2310 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C
-5	-87.80	-91.18	-91.51	-94.81	-97.17	-91.57	-87.32	-87.51	-94.81
-4	-85.87	-85.81	-84.23	-85.25	-85.00	-91.88	-89.73	-86.24	-94.76
-3	-89.85	-89.11	-85.61	-84.31	-90.43	-91.99	-85.11	-85.24	-90.51
-2	-82.54	-80.39	-79.79	-80.21	-87.72	-80.66	-81.66	-77.61	-90.25
-1	-66.99	-66.32	-66.52	-72.45	-74.28	-76.46	-76.86	-73.72	-81.10
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-67.15	-66.80	-66.14	-74.36	-72.44	-75.09	-75.19	-73.75	-84.09
+2	-81.18	-79.84	-80.17	-79.18	-86.45	-79.94	-80.71	-77.19	-87.04
+3	-89.15	-89.90	-85.94	-79.99	-91.15	-92.83	-85.15	-86.11	-91.47
+4	-86.39	-86.10	-86.73	-85.26	-86.31	-89.89	-88.71	-83.82	-95.53
+5	-87.65	-92.74	-90.33	-98.76	-95.31	-92.68	-86.78	-88.13	-96.49

Note 1: Comparison frequency 50 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 2060 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2185 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2310 MHz± (n*Freference) (dBc) NOTE 3		
	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C	-35 °C	+25°C	+85 °C
-5	-133.11	-126.85	-134.07	-131.03	-125.75	-132.12	-128.99	-128.39	-121.53
-4	-120.53	-126.79	-123.46	-122.36	-124.44	-125.60	-125.42	-126.40	-130.91
-3	-123.73	-130.79	-129.89	-128.76	-126.15	-132.94	-128.23	-128.99	-126.49
-2	-102.68	-105.22	-104.91	-105.85	-108.71	-107.88	-107.40	-108.69	-109.53
-1	-101.34	-99.47	-97.61	-110.99	-108.48	-109.55	-101.16	-104.47	-109.18
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-101.63	-99.84	-98.28	-114.34	-114.76	-112.06	-98.56	-101.23	-104.76
+2	-101.79	-105.01	-104.48	-104.83	-107.15	-106.38	-105.00	-106.84	-107.92
+3	-131.10	-127.55	-127.97	-128.45	-125.83	-128.57	-127.48	-128.12	-130.97
+4	-118.91	-121.31	-123.41	-119.78	-121.55	-124.80	-119.81	-119.02	-122.27
+5	-128.53	-127.49	-129.67	-128.47	-124.93	-128.71	-122.74	-127.79	-113.44

Note 3: Reference frequency 14.4 MHz

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

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