

Frequency Synthesizer

KSN-EDR11124

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT			HARMONICS						PLL CURRENT		
	(dBm)			(dBc)						(mA)		
	-40 °C	+25°C	+85 °C	F2		F3		F3		-40 °C	+25°C	+85 °C
1020	-9.89	-12.38	-12.00	-33.03	-31.97	-32.02	-11.29	-11.24	-11.41	108.34	108.41	114.00
1025	-9.89	-12.39	-12.01	-32.97	-31.98	-31.53	-11.17	-11.15	-11.36	108.33	108.42	114.03
1110	-9.66	-12.17	-11.81	-29.36	-30.17	-27.85	-11.37	-11.19	-11.47	102.61	102.53	108.04
1200	-9.80	-12.29	-11.94	-28.79	-27.32	-26.42	-11.80	-11.73	-11.95	100.36	99.96	105.31
1290	-9.86	-12.34	-11.99	-29.95	-27.46	-26.33	-11.50	-11.31	-11.64	98.36	97.68	102.74
1380	-10.00	-12.48	-12.12	-30.86	-28.43	-26.64	-11.61	-11.44	-11.78	96.65	95.75	100.52
1470	-10.05	-12.53	-12.19	-29.47	-26.77	-25.81	-11.76	-11.60	-12.26	103.32	103.27	108.88
1560	-9.99	-12.48	-12.15	-26.75	-25.39	-24.75	-11.70	-11.52	-12.14	101.49	101.15	106.56
1650	-10.07	-12.59	-12.24	-24.28	-23.12	-22.34	-12.06	-11.94	-12.50	99.88	99.35	104.57
1740	-10.12	-12.63	-12.29	-22.88	-21.84	-20.96	-11.79	-11.62	-12.26	98.10	97.40	102.35
1830	-10.18	-12.71	-12.43	-20.75	-19.57	-20.19	-12.29	-12.04	-12.58	107.01	107.38	112.98
1920	-10.17	-12.66	-12.41	-19.88	-18.73	-19.20	-12.27	-12.00	-12.69	105.61	105.75	111.36
2010	-10.22	-12.71	-12.47	-19.24	-17.92	-18.81	-12.96	-12.59	-13.48	104.24	104.09	109.57
2095	-10.26	-12.73	-12.53	-18.25	-16.88	-17.92	-13.39	-12.95	-13.82	102.73	102.31	107.58

(MHz)	@ OFFSETS													
	-40 °C					+25°C					+85°C			
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz
1020	-88.01	-94.51	-91.03	-119.26	-144.32	-88.47	-95.66	-97.97	-116.74	-142.93	-86.50	-96.59	-99.56	-115.39
1025	-84.43	-93.25	-90.22	-119.31	-143.90	-88.71	-97.64	-98.11	-117.16	-143.31	-85.93	-95.52	-98.15	-115.81
1110	-86.33	-92.54	-92.62	-119.04	-142.34	-85.85	-96.50	-98.41	-115.80	-141.02	-84.82	-96.29	-99.42	-114.15
1200	-83.81	-90.61	-87.85	-116.01	-140.34	-89.53	-95.79	-97.29	-112.62	-138.96	-81.61	-94.76	-95.03	-112.23
1290	-84.29	-93.89	-90.22	-114.84	-140.95	-87.53	-93.40	-95.22	-112.78	-139.28	-84.72	-93.89	-96.04	-111.40
1380	-85.55	-88.31	-87.28	-112.76	-139.31	-87.22	-92.17	-93.81	-110.64	-138.05	-82.65	-94.70	-94.50	-109.27
1470	-83.11	-89.88	-89.70	-117.77	-141.60	-89.06	-92.48	-95.03	-114.36	-139.62	-83.32	-93.91	-95.22	-112.80
1560	-83.73	-91.10	-89.74	-117.06	-141.64	-83.91	-92.94	-95.15	-113.69	-139.84	-83.53	-92.29	-96.02	-111.88
1650	-81.53	-89.19	-87.78	-115.79	-140.87	-82.50	-93.06	-94.97	-112.80	-139.16	-81.88	-91.68	-95.02	-111.62
1740	-80.12	-89.53	-87.28	-113.72	-140.25	-80.90	-92.35	-92.99	-111.28	-138.62	-81.88	-93.25	-94.10	-110.24
1830	-80.00	-90.45	-88.93	-116.62	-140.58	-85.02	-91.69	-95.25	-112.53	-138.43	-81.34	-91.53	-96.13	-110.29
1920	-81.39	-89.59	-88.02	-115.37	-140.07	-83.64	-90.21	-93.30	-112.05	-138.35	-81.82	-94.28	-94.62	-110.26
2010	-82.99	-89.58	-86.19	-114.41	-139.22	-79.94	-92.54	-92.81	-111.31	-137.67	-81.36	-89.84	-94.00	-110.13
2095	-81.71	-88.59	-85.79	-113.03	-139.08	-81.49	-89.55	-92.42	-110.79	-137.82	-79.41	-91.44	-93.18	-109.28
2100	-79.37	-87.6	-86.38	-112.73	-139.18	-81.24	-90.87	-92.8	-110.23	-137.64	-79.29	-90.79	-93.00	-109.37

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-EDR11124

Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @F _{carrier} 1025 MHz± (n*F _{comparison}) (dBc) NOTE 1			COMPARISON SPURIOUS @F _{carrier} 1560 MHz± (n*F _{comparison}) (dBc) NOTE 1			COMPARISON SPURIOUS @F _{carrier} 2095 MHz± (n*F _{comparison}) (dBc) NOTE 1		
	-40 °C	+25°C	+85°C	-40 °C	+25°C	+85°C	-40 °C	+25°C	+85°C
n									
-5	-80.30	-78.86	-86.24	-87.91	-86.36	-84.96	-86.61	-85.07	-82.70
-4	-82.72	-78.74	-86.28	-89.73	-87.63	-85.80	-87.25	-85.53	-82.84
-3	-82.72	-82.13	-87.11	-100.40	-98.14	-93.49	-91.72	-91.36	-87.53
-2	-82.04	-84.86	-84.92	-98.20	-101.61	-97.37	-90.54	-91.22	-88.22
-1	-81.33	-90.39	-84.19	-91.75	-95.71	-95.88	-88.89	-90.20	-91.74
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-85.92	-88.25	-82.87	-89.64	-92.61	-93.49	-87.24	-88.45	-89.57
+2	-81.87	-107.26	-79.80	-85.07	-86.71	-86.83	-82.89	-83.84	-83.32
+3	-80.66	-90.61	-79.82	-83.80	-84.93	-85.35	-81.75	-82.85	-82.90
+4	-80.15	-86.10	-82.03	-83.79	-85.09	-86.33	-82.32	-83.74	-83.67
+5	-80.90	-84.19	-86.14	-84.30	-86.38	-88.75	-83.24	-85.66	-87.18

Note 1: Comparison frequency 200 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @F _{carrier} 1025 MHz± (n*F _{reference}) (dBc) NOTE 3			REFERENCE SPURIOUS @F _{carrier} 1560 MHz± (n*F _{reference}) (dBc) NOTE 3			REFERENCE SPURIOUS @F _{carrier} 2095 MHz± (n*F _{reference}) (dBc) NOTE 3		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
n									
-5	-110.94	-113.71	-114.15	-114.05	-116.73	-115.26	-112.31	-114.43	-114.29
-4	-110.25	-111.19	-109.36	-111.82	-113.21	-111.56	-110.17	-109.17	-108.75
-3	-107.16	-104.04	-105.88	-111.21	-107.75	-105.68	-104.83	-105.68	-99.19
-2	-98.81	-97.90	-100.21	-101.07	-101.06	-99.68	-94.80	-96.53	-94.87
-1	-86.85	-86.76	-84.25	-89.52	-88.57	-88.86	-86.41	-84.09	-82.75
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-85.89	-85.08	-85.24	-88.12	-89.79	-87.53	-84.58	-82.35	-83.61
+2	-99.30	-98.74	-99.44	-99.25	-103.21	-98.32	-98.60	-97.11	-94.84
+3	-105.88	-105.81	-104.75	-107.64	-106.86	-107.35	-104.18	-104.49	-103.96
+4	-111.57	-109.17	-112.15	-112.65	-112.72	-111.77	-113.32	-110.14	-108.11
+5	-114.94	-114.79	-112.80	-114.13	-116.19	-114.64	-115.80	-110.92	-111.03

Note 3: Reference frequency 26 MHz

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

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