

Frequency Synthesizer

KSN-EDR9542

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						VCO CURRENT (mA)			PLL CURRENT (mA)		
				(dBc)											
	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
2097	3.32	2.92	2.50	-25.65	-28.01	-28.56	-41.81	-43.17	-40.35	27.31	28.23	28.68	5.90	7.17	8.45
2101	3.31	2.87	2.50	-25.73	-28.02	-28.56	-44.36	-42.18	-39.91	27.30	28.23	28.67	5.91	7.17	8.47
2105	3.29	2.82	2.49	-25.97	-27.70	-28.86	-43.72	-41.40	-41.03	27.29	28.23	28.66	5.91	7.17	8.48
2107	3.29	2.89	2.49	-25.98	-27.27	-29.08	-43.35	-41.36	-41.01	27.28	28.30	28.66	5.92	7.18	8.49
2109	3.28	2.88	2.48	-26.07	-26.88	-29.23	-43.34	-42.13	-40.85	27.27	28.29	28.65	5.91	7.17	8.49
2113	3.27	2.88	2.50	-26.07	-26.32	-29.65	-42.92	-43.72	-40.54	27.25	28.28	28.64	5.91	7.17	8.49
2117	3.27	2.88	2.50	-26.14	-26.28	-29.97	-42.30	-43.58	-40.21	27.24	28.26	28.63	5.92	7.17	8.49
2121	3.27	2.67	2.53	-26.35	-26.53	-30.28	-41.88	-42.97	-39.67	27.22	28.22	28.63	5.92	7.17	8.49
2125	3.27	2.66	2.55	-26.74	-27.08	-30.42	-43.24	-42.71	-39.87	27.21	28.21	28.61	5.92	7.17	8.50
2127	3.26	2.65	2.55	-26.96	-27.33	-30.61	-43.03	-42.21	-40.19	27.20	28.20	28.61	5.93	7.19	8.50
2129	3.26	2.64	2.55	-26.96	-27.66	-30.63	-43.21	-41.82	-40.65	27.20	28.20	28.61	5.92	7.17	8.50
2133	3.26	2.64	2.56	-26.23	-28.33	-30.60	-42.22	-42.06	-40.65	27.20	28.19	28.61	5.92	7.18	8.50
2137	3.00	2.65	2.57	-26.23	-28.81	-30.31	-42.18	-42.13	-39.96	27.46	28.18	28.60	5.92	7.18	8.50

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-45 °C					+25°C					+85 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2097	-58.96	-77.30	-107.21	-131.25	-151.47	-56.47	-74.19	-106.18	-129.50	-149.85	-59.24	-74.65	-105.99	-127.99	-148.22
2101	-63.43	-78.69	-107.05	-130.83	-151.59	-54.66	-73.39	-106.50	-129.43	-149.39	-62.81	-77.02	-105.40	-127.79	-147.85
2105	-63.86	-78.24	-107.83	-130.91	-151.68	-56.93	-73.99	-105.98	-129.60	-149.81	-63.67	-75.62	-105.44	-127.65	-148.16
2107	-61.80	-77.72	-107.48	-130.73	-151.46	-60.90	-77.69	-106.98	-129.33	-149.71	-62.36	-75.80	-105.99	-127.73	-147.85
2109	-62.86	-76.34	-107.70	-130.76	-150.52	-61.50	-75.07	-106.47	-129.26	-149.97	-65.84	-74.59	-105.53	-127.78	-147.83
2113	-61.48	-77.12	-107.45	-130.75	-151.97	-58.91	-76.14	-106.40	-129.33	-149.37	-62.53	-74.99	-105.65	-127.70	-147.60
2117	-61.57	-78.09	-106.66	-130.84	-151.19	-58.33	-76.07	-106.27	-129.16	-149.61	-62.13	-75.44	-105.41	-127.78	-147.87
2121	-61.88	-78.65	-107.40	-130.47	-150.77	-59.58	-73.02	-105.79	-129.39	-149.11	-62.86	-75.83	-105.52	-127.43	-146.76
2125	-63.62	-76.92	-106.42	-130.64	-151.29	-58.53	-73.33	-105.87	-129.43	-149.52	-61.51	-75.71	-104.82	-127.61	-148.18
2127	-68.84	-76.75	-106.54	-130.66	-151.25	-56.22	-72.51	-105.61	-129.23	-149.73	-61.38	-75.27	-104.84	-127.28	-147.67
2129	-63.33	-74.11	-106.88	-130.17	-150.84	-56.82	-72.03	-106.02	-128.74	-149.61	-61.79	-74.31	-104.92	-127.26	-147.64
2133	-63.99	-75.26	-106.17	-130.54	-151.50	-56.54	-72.36	-105.96	-129.27	-149.73	-60.67	-74.82	-104.60	-127.32	-147.56
2137	-60.03	-74.34	-106.18	-130.18	-150.46	-58.46	-70.65	-105.36	-129.02	-149.72	-60.07	-75.16	-104.24	-126.91	-147.27

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



Frequency Synthesizer

KSN-EDR9542

Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 2107 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2117 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2127 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
-5	-104.89	-116.53	-109.69	-113.75	-112.55	-116.80	-113.09	-108.53	-115.54
-4	-110.88	-109.36	-108.96	-112.32	-111.31	-110.29	-108.49	-111.12	-109.76
-3	-106.93	-108.33	-107.85	-106.73	-106.71	-107.22	-108.23	-104.63	-108.16
-2	-101.46	-100.11	-99.78	-99.42	-102.85	-93.85	-96.43	-101.08	-100.04
-1	-88.71	-86.30	-84.43	-87.25	-89.41	-84.99	-85.95	-85.45	-88.70
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-89.80	-88.97	-85.19	-87.41	-89.90	-82.46	-88.95	-84.97	-90.34
+2	-98.61	-100.85	-100.27	-99.03	-97.00	-99.43	-97.67	-97.51	-99.75
+3	-104.97	-105.87	-107.16	-105.65	-106.57	-107.43	-106.33	-104.45	-107.18
+4	-108.85	-111.21	-109.79	-111.63	-111.67	-111.04	-107.87	-107.54	-111.55
+5	-111.18	-110.46	-113.30	-110.27	-112.54	-115.08	-110.56	-109.73	-114.54

Note 1: Comparison frequency 125 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 2107 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2117 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2127 MHz± (n*Freference) (dBc) NOTE 3		
	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
-5	-122.64	-123.07	-121.63	-122.26	-119.60	-120.01	-122.61	-119.23	-119.22
-4	-125.82	-126.06	-124.20	-126.43	-126.34	-129.91	-124.93	-124.96	-130.73
-3	-128.23	-127.00	-125.94	-130.27	-126.39	-130.62	-125.12	-125.18	-127.72
-2	-124.65	-125.66	-123.65	-126.31	-126.11	-127.88	-127.14	-124.48	-128.85
-1	-111.29	-119.88	-111.02	-113.40	-115.84	-109.55	-117.26	-116.14	-110.34
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-111.76	-117.86	-110.64	-113.05	-117.53	-108.37	-115.21	-117.23	-105.98
+2	-120.89	-119.32	-121.53	-120.57	-120.29	-123.98	-122.43	-121.06	-125.67
+3	-126.20	-129.93	-128.06	-130.73	-129.63	-129.81	-131.90	-130.02	-128.85
+4	-126.80	-124.47	-129.62	-127.47	-126.00	-131.73	-124.94	-125.83	-128.70
+5	-122.47	-125.79	-123.33	-120.31	-124.61	-122.76	-122.75	-124.32	-121.78

Note 3: Reference frequency 20 MHz

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

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