

Frequency Synthesizer

KSN-EDR7427/1

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						VCO CURRENT (mA)			PLL CURRENT (mA)		
				(dBc)											
				F2			F3								
-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	
705.00	-1.22	-0.70	-0.44	-25.20	-25.98	-26.77	-36.83	-39.42	-41.68	14.46	15.78	16.76	4.05	4.17	4.28
711.99	-1.06	-0.54	-0.28	-25.12	-25.78	-26.59	-36.69	-38.40	-41.13	14.62	15.95	16.92	4.06	4.17	4.28
718.98	-0.94	-0.41	-0.16	-25.37	-25.93	-26.67	-36.12	-37.83	-40.44	14.75	16.10	17.08	4.06	4.18	4.28
720.00	-0.93	-0.40	-0.15	-25.50	-26.03	-26.77	-36.28	-37.77	-40.33	14.77	16.12	17.10	4.02	4.14	4.23
725.97	-0.85	-0.32	-0.08	-25.99	-26.58	-27.31	-36.20	-37.79	-40.30	14.87	16.23	17.20	4.06	4.18	4.28
732.96	-0.77	-0.24	-0.01	-25.65	-26.25	-27.00	-35.79	-37.40	-39.77	14.97	16.34	17.32	4.07	4.18	4.28
739.95	-0.71	-0.18	0.05	-25.39	-25.94	-26.64	-35.86	-37.36	-39.67	15.04	16.44	17.43	4.07	4.19	4.29
746.94	-0.66	-0.13	0.09	-26.13	-26.66	-27.32	-35.80	-37.20	-39.62	15.11	16.52	17.51	4.07	4.19	4.29
753.93	-0.61	-0.09	0.12	-26.26	-26.81	-27.49	-35.70	-37.24	-39.76	15.16	16.58	17.57	4.07	4.19	4.29
760.02	-0.59	-0.07	0.14	-26.03	-26.59	-27.27	-35.43	-36.98	-39.50	15.17	16.60	17.61	4.07	4.19	4.29
760.92	-0.58	-0.07	0.14	-26.04	-26.63	-27.28	-35.49	-36.98	-39.48	15.17	16.60	17.61	4.07	4.19	4.29
767.91	-0.61	-0.09	0.10	-26.38	-26.88	-27.57	-35.40	-36.98	-39.54	15.17	16.61	17.62	4.08	4.19	4.30
775.02	-0.69	-0.17	0.02	-26.03	-26.61	-27.33	-35.64	-37.14	-39.67	15.13	16.58	17.60	4.08	4.20	4.30

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
705.00	-75.67	-78.19	-111.18	-133.17	-151.88	-74.10	-77.34	-110.16	-131.66	-150.42	-73.00	-76.89	-108.21	-129.40	-149.02
711.99	-76.62	-80.70	-111.35	-133.52	-152.54	-74.42	-79.15	-110.45	-132.04	-152.21	-74.69	-78.38	-108.60	-129.77	-149.59
718.98	-76.69	-78.42	-111.61	-133.51	-152.02	-73.11	-79.91	-110.72	-132.34	-150.76	-74.13	-77.18	-108.96	-130.15	-149.66
720.00	-73.90	-79.96	-111.76	-133.48	-151.54	-74.95	-79.30	-110.86	-132.35	-150.97	-73.89	-78.71	-108.87	-130.15	-149.64
725.97	-74.77	-80.36	-111.49	-133.51	-150.65	-72.47	-80.89	-110.79	-132.40	-151.96	-73.99	-77.87	-109.11	-130.31	-149.46
732.96	-73.32	-79.94	-111.51	-133.46	-153.32	-72.28	-80.09	-111.24	-132.39	-151.89	-72.25	-77.67	-108.99	-130.42	-150.31
739.95	-73.58	-79.74	-111.15	-133.32	-152.27	-73.13	-79.19	-110.75	-132.28	-151.93	-72.21	-78.25	-109.19	-130.23	-149.94
746.94	-74.62	-79.37	-111.03	-133.12	-153.12	-72.98	-79.38	-110.64	-132.24	-151.89	-73.45	-77.54	-108.63	-130.23	-150.43
753.93	-75.58	-80.80	-111.08	-132.84	-151.61	-73.68	-80.10	-110.69	-132.03	-151.23	-73.77	-78.77	-108.78	-130.18	-150.00
760.02	-74.39	-79.62	-111.23	-132.81	-152.48	-72.08	-78.14	-110.06	-131.85	-151.79	-72.34	-78.04	-108.41	-129.94	-149.96
760.92	-74.02	-81.31	-110.79	-132.69	-152.87	-71.80	-78.99	-110.38	-131.77	-151.80	-73.74	-78.10	-108.67	-129.86	-149.72
767.91	-74.03	-78.77	-110.57	-132.36	-151.47	-71.72	-79.38	-110.05	-131.43	-151.07	-72.16	-77.30	-107.90	-129.60	-149.26
775.02	-73.05	-80.53	-110.54	-132.08	-150.70	-71.10	-79.27	-109.47	-131.13	-151.11	-70.26	-79.19	-107.82	-129.24	-149.30

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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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 720 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 740.01 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 760.02 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	-91.79	-93.67	-102.36	-96.93	-98.01	-95.94	-100.17	-110.67	-110.44
-4	-90.35	-92.39	-99.85	-94.80	-96.55	-94.09	-98.69	-108.46	-106.65
-3	-88.06	-89.81	-99.10	-92.63	-94.28	-91.48	-95.14	-106.24	-105.63
-2	-84.19	-85.58	-93.22	-89.03	-90.32	-88.90	-93.40	-101.56	-103.26
-1	-78.29	-79.24	-89.30	-83.91	-84.72	-83.04	-87.35	-97.05	-93.12
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-78.93	-79.91	-89.62	-84.10	-84.45	-83.98	-86.35	-97.16	-94.78
+2	-84.67	-86.13	-93.82	-88.83	-90.88	-88.30	-93.07	-103.48	-102.44
+3	-88.22	-89.25	-97.44	-92.22	-94.15	-91.97	-95.08	-108.62	-107.22
+4	-90.17	-92.07	-101.25	-94.67	-97.03	-93.92	-96.56	-108.13	-109.00
+5	-92.88	-94.16	-108.90	-96.61	-98.54	-95.62	-100.03	-111.16	-110.03

Note 1: Comparison frequency 30 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 720 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 740.01 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 760.02 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	-125.23	-124.57	-126.38	-126.02	-127.02	-126.80	-125.30	-127.01	-125.96
-4	-125.98	-126.56	-124.66	-124.97	-126.73	-125.28	-121.55	-121.45	-124.65
-3	-122.54	-125.53	-125.64	-125.48	-126.07	-127.64	-126.65	-127.49	-127.04
-2	-122.27	-124.88	-124.56	-125.60	-125.35	-125.10	-126.92	-128.26	-128.38
-1	-104.28	-105.74	-107.10	-105.22	-106.53	-106.72	-105.76	-106.91	-106.47
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-108.51	-110.51	-112.50	-109.73	-111.85	-110.85	-112.11	-112.87	-113.52
+2	-120.79	-125.61	-124.54	-124.58	-126.49	-126.54	-125.29	-126.89	-125.71
+3	-115.61	-120.20	-126.93	-125.88	-126.86	-125.25	-124.77	-126.57	-126.80
+4	-121.20	-124.07	-124.77	-125.17	-126.33	-126.94	-117.59	-120.30	-121.92
+5	-119.18	-121.94	-124.34	-125.73	-127.70	-127.19	-125.69	-126.40	-126.79

Note 3: Reference frequency 19.2 MHz

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

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