

Frequency Synthesizer

KSN-EDR10969

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				F2			F3								
	-40 °C	+25°C	+85 °C	-40 °C	+25°C	+85 °C	-40 °C	+25°C	+85 °C	-40 °C	+25°C	+85 °C	-40 °C	+25°C	+85 °C
2719.9	2.53	2.03	1.88	-27.22	-27.74	-27.34	-51.12	-52.35	-50.71	44.87	46.59	47.47	12.33	13.35	16.14
2721.5	2.53	2.04	1.86	-27.05	-27.76	-27.31	-51.19	-49.46	-51.58	44.88	46.60	47.53	12.50	13.59	16.32
2721.8	2.53	2.03	1.85	-27.20	-27.68	-27.34	-52.18	-50.94	-49.74	44.88	46.60	47.55	12.53	13.65	16.35
2723.8	2.53	2.03	1.84	-27.35	-27.83	-27.42	-52.54	-51.49	-50.72	44.89	46.61	47.57	12.61	13.74	16.43
2725.7	2.52	2.03	1.84	-26.98	-27.68	-27.20	-53.81	-49.47	-51.26	44.87	46.61	47.58	12.62	13.77	16.45
2727.6	2.52	2.04	1.84	-26.92	-27.59	-27.36	-55.57	-49.95	-48.37	44.88	46.62	47.58	12.54	13.69	16.36
2729.5	2.53	2.05	1.84	-27.25	-27.69	-27.38	-56.13	-51.12	-47.39	44.89	46.62	47.59	12.41	13.56	16.22
2731.4	2.53	2.06	1.84	-27.43	-27.78	-27.24	-54.80	-49.62	-47.11	44.90	46.63	47.60	12.48	13.64	16.29
2733.4	2.53	2.08	1.84	-27.17	-27.76	-27.29	-55.70	-51.21	-48.23	44.90	46.64	47.61	12.59	13.75	16.40
2735.3	2.53	2.09	1.84	-27.26	-27.86	-27.41	-56.27	-52.22	-48.80	44.91	46.64	47.61	12.60	13.77	16.42
2737.2	2.54	2.09	1.83	-27.21	-27.86	-27.42	-56.52	-53.24	-49.55	44.92	46.65	47.62	12.57	13.73	16.39
2737.5	2.54	2.10	1.84	-27.40	-27.71	-27.37	-53.99	-51.43	-50.63	44.92	46.65	47.62	12.56	13.73	16.38
2739.1	2.54	2.09	1.83	-27.45	-27.89	-27.43	-55.53	-51.67	-51.54	44.92	46.65	47.62	12.45	13.62	16.25

FREQ. (MHz)	PHASE NOISE (dBc/Hz)														
	@ OFFSETS														
	-40°C					+25°C					+85°C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2719.9	-84.77	-91.42	-97.09	-125.07	-145.64	-83.49	-89.12	-97.18	-123.74	-144.01	-83.03	-89.65	-96.25	-122.62	-142.84
2721.5	-83.80	-90.22	-97.49	-125.17	-145.65	-81.66	-87.91	-97.11	-123.84	-144.07	-82.91	-90.07	-96.22	-122.61	-142.83
2721.8	-84.09	-92.33	-97.37	-125.25	-145.64	-85.79	-88.66	-97.72	-123.67	-144.14	-82.92	-90.44	-96.33	-122.71	-142.84
2723.8	-84.36	-91.29	-97.28	-125.03	-145.60	-84.53	-87.16	-96.67	-123.79	-143.98	-84.15	-89.35	-96.31	-122.47	-142.79
2725.7	-83.94	-89.27	-96.83	-124.86	-145.42	-83.38	-86.80	-97.26	-123.68	-144.16	-81.01	-90.26	-96.85	-122.58	-142.71
2727.6	-82.31	-89.77	-97.04	-124.82	-145.57	-82.81	-89.40	-97.56	-123.67	-143.96	-83.60	-89.23	-96.37	-122.54	-142.70
2729.5	-82.82	-90.94	-97.51	-124.88	-145.35	-83.03	-89.46	-97.27	-123.61	-144.00	-87.04	-90.17	-95.94	-122.29	-142.72
2731.4	-83.27	-89.63	-97.66	-125.30	-145.48	-82.24	-89.05	-97.19	-123.74	-143.94	-83.96	-89.70	-96.18	-122.28	-142.66
2733.4	-83.54	-90.63	-97.37	-125.20	-145.53	-82.50	-89.23	-97.14	-123.53	-143.99	-85.34	-91.43	-96.50	-122.25	-142.51
2735.3	-84.23	-92.16	-97.37	-124.82	-145.39	-84.35	-88.85	-97.21	-123.73	-143.91	-83.14	-90.09	-96.34	-122.35	-142.59
2737.2	-80.82	-92.37	-97.25	-124.92	-145.25	-82.49	-89.18	-97.84	-123.59	-144.07	-83.13	-89.11	-96.37	-122.19	-142.53
2737.5	-81.31	-90.90	-97.57	-125.11	-145.47	-82.47	-88.61	-97.68	-123.78	-143.95	-82.00	-90.86	-96.03	-122.27	-142.63
2739.1	-83.33	-90.05	-97.62	-124.94	-145.49	-82.09	-89.42	-97.34	-123.72	-143.99	-84.59	-90.37	-96.65	-122.28	-142.68

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 2721.52 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2729.52 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 2737.52 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
-5	-110.15	-105.90	-114.70	-112.54	-106.90	-112.98	-113.27	-106.93	-108.64
-4	-110.15	-110.42	-112.83	-110.64	-108.23	-111.03	-111.99	-107.10	-108.15
-3	-110.35	-117.05	-113.17	-112.39	-109.98	-116.02	-111.25	-107.60	-111.76
-2	-110.29	-120.29	-112.43	-105.72	-107.63	-111.61	-103.50	-103.86	-109.43
-1	-96.81	-94.11	-97.00	-86.98	-88.64	-90.70	-85.72	-85.81	-86.24
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-97.49	-98.16	-94.14	-106.28	-101.25	-98.91	-98.39	-102.61	-101.45
+2	-109.52	-108.10	-106.77	-106.90	-114.13	-107.78	-104.71	-115.86	-108.64
+3	-105.70	-113.39	-110.00	-104.08	-110.75	-109.35	-104.10	-110.69	-107.84
+4	-103.07	-111.77	-109.82	-103.91	-111.34	-110.19	-103.69	-109.46	-107.88
+5	-105.06	-110.79	-110.70	-104.26	-112.55	-108.20	-105.73	-112.01	-108.29

Note 1: Comparison frequency 200 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 2721.52 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2729.52 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 2737.52 MHz± (n*Freference) (dBc) NOTE 3		
	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C	-40°C	+25°C	+85°C
-5	-112.10	-117.81	-114.18	-108.06	-103.92	-104.69	-106.18	-108.38	-106.85
-4	-119.24	-124.25	-119.72	-104.30	-101.47	-101.90	-105.61	-102.45	-105.90
-3	-118.94	-120.90	-126.85	-98.07	-99.19	-98.60	-100.14	-97.14	-99.77
-2	-127.11	-120.26	-123.38	-90.55	-90.22	-90.81	-87.96	-92.60	-91.75
-1	-108.23	-107.15	-108.46	-76.85	-77.06	-79.28	-82.95	-85.51	-83.68
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-112.16	-109.84	-106.11	-75.64	-79.39	-78.98	-84.24	-86.53	-85.93
+2	-123.94	-116.79	-120.95	-88.22	-90.69	-92.62	-90.19	-88.71	-91.36
+3	-118.31	-120.88	-122.13	-100.52	-97.88	-95.62	-99.09	-99.73	-100.66
+4	-126.94	-120.76	-120.53	-102.39	-99.76	-103.51	-102.40	-104.85	-101.83
+5	-113.69	-121.48	-120.82	-107.42	-108.53	-107.93	-107.44	-109.23	-106.74

Note 3: Reference frequency 26 MHz

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

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