

Frequency Synthesizer

KSN-RDF1265

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				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			
1730	2.94	2.31	1.66	-53.13	-42.32	-37.55	-55.35	-53.86	-57.09	25.15	26.17	26.77	6.42	8.02	9.32
1740	2.96	2.34	1.69	-53.09	-43.01	-38.73	-55.36	-53.48	-57.80	25.10	26.15	26.76	6.43	8.05	9.33
1747	2.94	2.33	1.70	-51.56	-42.75	-39.10	-53.72	-52.63	-56.77	25.07	26.14	26.75	6.46	8.05	9.34
1750	2.93	2.32	1.69	-50.78	-42.68	-39.21	-52.71	-52.71	-56.72	25.06	26.13	26.75	6.46	8.05	9.34
1760	2.97	2.36	1.73	-47.94	-42.77	-39.35	-54.60	-52.77	-56.05	25.00	26.10	26.74	6.43	8.03	9.32
1770	3.01	2.40	1.77	-45.78	-41.97	-38.62	-56.61	-52.47	-55.89	24.96	26.08	26.72	6.45	8.04	9.33
1780	3.09	2.47	1.83	-47.20	-42.69	-38.85	-55.20	-52.45	-57.04	24.92	26.05	26.71	6.46	8.05	9.34
1790	3.17	2.55	1.92	-49.50	-45.09	-41.16	-54.24	-51.36	-55.71	24.88	26.02	26.69	6.47	8.06	9.35
1800	3.21	2.60	1.98	-49.96	-45.87	-42.53	-52.56	-51.64	-54.71	24.84	26.00	26.67	6.48	8.07	9.36
1807	3.22	2.61	1.99	-49.56	-46.08	-42.56	-52.94	-50.94	-54.42	24.80	25.97	26.65	6.48	8.07	9.37
1810	3.22	2.60	1.99	-49.01	-45.86	-42.37	-53.54	-50.92	-54.59	24.79	25.95	26.64	6.48	8.08	9.37
1820	3.19	2.59	1.99	-47.78	-45.53	-42.18	-53.73	-51.99	-55.88	24.71	25.90	26.60	6.49	8.08	9.38
1830	3.16	2.56	1.96	-47.49	-45.76	-42.47	-50.43	-50.80	-55.02	24.62	25.84	26.56	6.50	8.09	9.39

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
1730	-78.35	-74.42	-95.02	-122.05	-145.24	-77.63	-73.64	-96.62	-121.58	-146.59	-81.18	-74.89	-96.24	-121.22	-146.05
1740	-78.62	-74.65	-95.25	-121.74	-145.57	-79.35	-74.89	-96.37	-122.34	-146.73	-80.14	-73.37	-96.05	-121.51	-146.24
1747	-76.45	-74.37	-95.34	-120.12	-146.43	-77.70	-74.51	-96.58	-124.12	-146.99	-81.36	-74.07	-95.84	-121.22	-146.60
1750	-75.76	-74.09	-95.09	-123.07	-146.08	-80.99	-74.70	-96.38	-123.27	-146.99	-81.05	-75.83	-95.92	-122.44	-146.49
1760	-76.45	-73.84	-95.15	-125.22	-146.92	-77.91	-74.87	-95.51	-125.60	-147.23	-81.75	-77.87	-94.96	-121.63	-146.56
1770	-76.97	-75.20	-94.45	-123.44	-146.46	-81.27	-74.34	-95.35	-124.75	-147.56	-78.21	-74.67	-95.64	-120.54	-146.23
1780	-75.22	-75.20	-94.36	-122.73	-146.16	-79.99	-72.65	-95.85	-125.47	-147.33	-81.25	-75.76	-95.31	-119.56	-146.00
1790	-77.60	-74.42	-95.57	-125.03	-147.14	-79.73	-73.08	-95.26	-125.05	-147.09	-80.69	-74.44	-94.75	-118.62	-146.04
1800	-76.59	-72.90	-95.11	-124.58	-147.18	-80.49	-74.99	-95.14	-123.85	-147.05	-83.39	-74.80	-95.07	-118.93	-145.69
1807	-78.88	-73.47	-94.80	-122.78	-146.97	-80.96	-72.80	-95.05	-123.17	-147.00	-78.86	-72.64	-94.99	-118.20	-145.49
1810	-77.23	-75.21	-94.76	-124.65	-146.27	-80.78	-74.05	-94.72	-124.57	-146.43	-79.68	-73.74	-94.93	-118.03	-145.64
1820	-76.84	-73.41	-94.82	-123.67	-146.61	-80.05	-72.55	-94.53	-123.80	-146.48	-79.68	-73.98	-94.49	-117.32	-145.21
1830	-77.71	-73.92	-94.79	-122.14	-146.64	-80.34	-73.28	-95.32	-120.55	-145.67	-78.52	-72.78	-95.02	-117.93	-145.48

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 1747 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1777 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 1807 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	-104.30	-105.68	-111.07	-105.79	-108.14	-112.48	-109.16	-114.22	-102.91
-4	-101.16	-103.58	-109.65	-102.69	-106.96	-110.06	-110.46	-110.07	-100.34
-3	-102.28	-99.41	-108.50	-101.20	-106.87	-105.44	-105.72	-106.43	-98.51
-2	-96.72	-96.10	-102.27	-102.03	-101.59	-101.53	-100.18	-102.08	-92.78
-1	-90.45	-91.22	-87.88	-90.83	-105.13	-84.45	-90.33	-98.45	-80.59
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-89.97	-90.63	-88.25	-89.58	-106.55	-85.03	-91.46	-99.01	-80.07
+2	-94.77	-95.63	-103.51	-101.98	-100.96	-102.54	-100.41	-104.19	-93.09
+3	-101.21	-99.38	-106.68	-101.36	-106.65	-106.01	-106.76	-108.13	-98.13
+4	-100.79	-103.24	-107.83	-101.80	-108.17	-110.71	-109.22	-111.95	-100.97
+5	-104.62	-102.90	-111.88	-106.59	-110.02	-112.89	-110.91	-112.83	-104.35

Note 1: Comparison frequency 100 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 1747 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1777 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 1807 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	-127.73	-127.76	-126.41	-128.61	-127.79	-126.26	-128.65	-128.32	-126.22
-4	-128.76	-127.53	-126.70	-125.84	-127.66	-127.41	-128.96	-128.27	-126.76
-3	-127.15	-128.48	-126.62	-128.06	-128.26	-126.91	-125.96	-128.80	-126.30
-2	-127.12	-123.58	-122.24	-126.35	-125.43	-122.55	-125.01	-127.50	-125.40
-1	-105.25	-104.07	-103.83	-105.84	-103.40	-104.81	-105.79	-104.02	-103.97
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-102.65	-100.89	-101.82	-103.86	-100.58	-102.85	-103.45	-100.53	-102.04
+2	-124.17	-120.26	-121.14	-126.87	-120.54	-121.25	-128.05	-122.75	-123.40
+3	-119.74	-119.33	-120.70	-121.11	-122.56	-121.17	-122.97	-121.65	-119.30
+4	-123.12	-124.96	-126.25	-125.33	-125.70	-127.15	-126.21	-125.41	-126.11
+5	-123.66	-126.05	-126.50	-128.39	-128.08	-124.54	-127.72	-127.82	-124.40

Note 3: Reference frequency 10 MHz

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

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