

Frequency Synthesizer

DSN-EDR9520

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						VCO CURRENT (mA)			PLL CURRENT (mA)		
				(dBc)											
	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	
850	-0.67	0.00	0.36	-16.90	-17.71	-18.08	-48.32	-50.81	-52.13	38.08	40.65	42.23	8.89	9.62	11.26
870	-0.64	0.02	0.38	-18.28	-19.04	-19.36	-51.91	-55.26	-57.99	38.32	40.83	42.40	8.95	9.69	11.33
895	-0.58	0.09	0.43	-20.02	-20.71	-20.95	-56.93	-76.62	-70.26	38.58	41.07	42.58	8.95	9.68	11.32
940	-0.33	0.30	0.59	-22.94	-23.86	-24.37	-54.01	-49.94	-50.13	39.07	41.49	42.84	8.99	9.73	11.36
985	-0.03	0.53	0.74	-24.88	-26.33	-27.55	-46.48	-46.45	-47.35	39.55	41.84	43.03	9.05	9.78	11.42
1030	0.34	0.83	0.97	-27.29	-29.21	-31.02	-45.87	-46.63	-47.71	39.95	42.06	43.10	9.08	9.83	11.46
1075	0.56	0.99	1.06	-29.88	-32.13	-34.54	-45.96	-46.56	-48.36	40.21	42.15	43.09	9.15	9.88	11.53
1120	0.71	1.08	1.11	-32.54	-35.45	-38.69	-45.45	-47.66	-49.62	40.30	42.13	43.01	9.06	9.80	11.47
1165	0.87	1.18	1.17	-35.06	-38.53	-42.91	-49.35	-51.21	-52.27	40.25	42.02	42.89	9.10	9.84	11.50
1210	0.85	1.13	1.08	-36.83	-41.05	-46.72	-46.13	-48.06	-49.54	40.17	41.90	42.76	9.19	9.93	11.59
1255	0.97	1.22	1.14	-39.14	-43.83	-50.05	-44.08	-46.00	-47.49	39.99	41.70	42.57	9.24	9.98	11.64
1300	0.79	1.02	0.90	-41.35	-45.46	-48.41	-41.64	-43.52	-46.07	39.83	41.52	42.40	9.29	10.04	11.70
1320	0.82	1.03	0.88	-42.89	-46.02	-48.44	-41.50	-43.27	-45.63	39.71	41.40	42.30	9.23	9.97	11.64

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
850	-94.22	-105.16	-105.23	-102.51	-127.81	-93.55	-105.56	-105.97	-104.39	-127.09	-96.24	-103.14	-103.91	-102.84	-126.95
870	-96.05	-103.24	-104.71	-103.79	-126.21	-94.96	-104.22	-105.51	-104.78	-126.39	-95.55	-104.64	-103.46	-102.63	-126.91
895	-93.33	-104.87	-104.59	-103.55	-125.82	-94.09	-102.53	-106.14	-104.16	-126.26	-92.72	-103.27	-103.62	-102.12	-126.82
940	-94.10	-104.21	-103.53	-102.41	-125.68	-95.05	-103.34	-104.98	-103.12	-126.12	-93.49	-104.42	-103.10	-102.17	-126.18
985	-91.99	-103.20	-103.27	-102.17	-124.84	-95.21	-102.03	-104.01	-102.07	-125.90	-94.36	-103.27	-102.85	-102.12	-125.05
1030	-94.47	-103.04	-103.21	-102.32	-123.83	-90.89	-102.30	-103.62	-101.63	-124.98	-91.83	-100.44	-102.83	-101.57	-123.93
1075	-98.59	-103.60	-102.52	-102.30	-122.77	-93.90	-102.04	-102.86	-101.86	-123.65	-93.88	-102.28	-101.57	-100.95	-123.02
1120	-94.81	-103.91	-102.02	-100.96	-122.79	-92.74	-103.87	-103.69	-102.09	-122.77	-92.34	-101.91	-101.45	-101.37	-122.10
1165	-92.32	-103.11	-101.52	-100.41	-122.73	-92.03	-101.78	-102.80	-101.87	-122.43	-91.38	-103.09	-100.70	-101.28	-121.68
1210	-92.19	-101.46	-101.39	-100.85	-122.58	-92.91	-101.24	-102.07	-101.46	-122.47	-92.78	-102.43	-100.76	-101.26	-121.47
1255	-90.37	-103.61	-101.51	-100.94	-122.10	-88.05	-102.04	-102.17	-100.88	-122.84	-92.26	-101.29	-100.82	-100.67	-121.98
1300	-94.20	-101.67	-101.33	-100.43	-122.75	-90.09	-103.43	-102.32	-100.04	-123.66	-89.49	-103.58	-100.10	-99.48	-123.23
1320	-90.93	-103.05	-100.88	-99.99	-123.32	-92.62	-102.17	-102.00	-99.67	-124.13	-90.57	-101.51	-100.59	-99.02	-124.06

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	-91.15	-88.35	-97.05	-99.37	-96.94	-103.31	-104.53	-92.61	-103.06
-4	-100.36	-92.03	-96.38	-98.99	-97.30	-101.16	-107.87	-92.28	-100.74
-3	-91.99	-87.72	-92.51	-98.01	-95.82	-100.43	-107.96	-90.95	-96.29
-2	-95.74	-87.54	-89.68	-95.85	-96.95	-95.65	-111.03	-90.72	-93.17
-1	-96.21	-93.54	-103.18	-97.42	-94.98	-90.71	-92.05	-90.61	-94.12
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-84.16	-91.32	-108.66	-95.08	-100.44	-97.10	-96.05	-92.29	-95.94
+2	-82.65	-90.49	-90.02	-94.80	-100.63	-106.06	-102.38	-89.50	-89.96
+3	-85.24	-89.93	-91.12	-97.58	-95.07	-105.32	-104.28	-90.70	-92.23
+4	-84.76	-88.85	-91.92	-97.65	-97.93	-110.36	-106.22	-91.18	-95.43
+5	-86.85	-89.98	-94.55	-97.85	-97.88	-106.03	-102.59	-90.09	-97.83

Note 1: Comparison frequency 5 MHz

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	-91.15	-88.35	-97.05	-99.37	-96.94	-103.31	-104.53	-92.61	-103.06
-4	-100.36	-92.03	-96.38	-98.99	-97.30	-101.16	-107.87	-92.28	-100.74
-3	-91.99	-87.72	-92.51	-98.01	-95.82	-100.43	-107.96	-90.95	-96.29
-2	-95.74	-87.54	-89.68	-95.85	-96.95	-95.65	-111.03	-90.72	-93.17
-1	-96.21	-93.54	-103.18	-97.42	-94.98	-90.71	-92.05	-90.61	-94.12
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-84.16	-91.32	-108.66	-95.08	-100.44	-97.10	-96.05	-92.29	-95.94
+2	-82.65	-90.49	-90.02	-94.80	-100.63	-106.06	-102.38	-89.50	-89.96
+3	-85.24	-89.93	-91.12	-97.58	-95.07	-105.32	-104.28	-90.70	-92.23
+4	-84.76	-88.85	-91.92	-97.65	-97.93	-110.36	-106.22	-91.18	-95.43
+5	-86.85	-89.98	-94.55	-97.85	-97.88	-106.03	-102.59	-90.09	-97.83

Note 3: Reference frequency 50 MHz

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

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 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

