

Frequency Synthesizer

DSN-EDR8382

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				F2			F3								
	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C
2900	-2.52	-3.09	-4.45	-26.87	-29.94	-33.11	-38.85	-41.58	-44.96	44.01	47.25	49.19	11.81	13.60	15.47
2980	-2.05	-2.23	-3.01	-28.32	-30.25	-32.05	-42.87	-48.67	-51.19	44.13	47.66	49.36	11.82	13.64	15.51
3040	-2.44	-2.49	-3.16	-27.47	-29.49	-30.97	-47.16	-53.43	-49.76	44.34	47.82	49.49	11.83	13.66	15.53
3060	-1.98	-2.05	-2.68	-26.60	-28.96	-30.64	-47.17	-51.24	-49.82	44.46	47.89	49.54	11.84	13.67	15.53
3140	-2.38	-2.46	-3.01	-26.83	-28.41	-29.69	-39.63	-40.43	-40.32	44.74	48.10	49.72	11.85	13.69	15.55
3220	-1.97	-2.11	-2.58	-24.13	-26.45	-28.15	-39.78	-39.47	-39.49	45.00	48.32	49.90	11.87	13.71	15.57
3300	-1.30	-1.43	-1.86	-27.54	-29.70	-30.83	-44.90	-40.73	-39.30	45.27	48.54	50.11	11.88	13.73	15.58
3380	-1.42	-1.57	-2.01	-25.01	-27.37	-28.56	-37.00	-36.09	-36.27	45.53	48.77	50.31	11.90	13.75	15.60
3460	-1.95	-2.10	-2.57	-28.10	-29.21	-29.73	-36.28	-34.09	-34.35	45.81	49.01	50.51	11.91	13.76	15.61
3540	-1.76	-1.97	-2.41	-22.74	-25.17	-26.59	-40.94	-38.79	-37.89	46.14	49.29	50.76	11.92	13.77	15.62
3620	-1.04	-1.31	-1.72	-26.00	-27.56	-28.50	-42.71	-41.07	-40.27	46.41	49.55	50.99	11.94	13.79	15.63
3700	-1.38	-1.73	-2.23	-23.94	-26.28	-27.57	-38.34	-40.57	-40.94	46.66	49.76	51.17	11.95	13.80	15.64

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-45 °C					+25°C					+70 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
2900	-79.14	-75.66	-82.68	-114.85	-134.84	-80.26	-77.79	-81.59	-113.00	-133.50	-77.45	-76.04	-81.08	-110.26	-130.63
2980	-73.50	-75.77	-84.53	-115.65	-135.48	-80.72	-77.05	-84.65	-114.96	-134.95	-77.70	-75.76	-84.37	-113.46	-133.82
3040	-78.23	-76.25	-85.99	-116.83	-135.71	-76.60	-76.69	-85.87	-115.96	-136.08	-77.16	-75.16	-85.56	-114.78	-135.17
3060	-79.93	-75.91	-86.62	-117.29	-135.91	-79.57	-76.72	-86.68	-116.53	-136.83	-80.37	-75.53	-86.11	-115.24	-135.63
3140	-79.55	-75.92	-86.96	-117.69	-136.85	-79.03	-75.79	-87.00	-116.81	-136.68	-77.29	-74.75	-86.38	-115.77	-136.10
3220	-77.34	-74.59	-87.57	-118.06	-136.85	-78.58	-74.36	-87.52	-117.32	-137.03	-78.42	-75.04	-86.41	-116.27	-136.43
3300	-77.99	-74.45	-87.82	-118.45	-138.91	-76.69	-74.98	-87.48	-117.66	-137.51	-76.82	-73.95	-86.46	-116.59	-137.02
3380	-78.59	-74.15	-87.73	-118.52	-137.12	-78.54	-75.48	-87.00	-117.80	-137.52	-76.51	-74.08	-86.39	-116.78	-137.10
3460	-73.77	-72.96	-87.35	-118.52	-139.33	-78.76	-75.33	-86.65	-117.74	-137.58	-77.25	-73.62	-86.16	-116.63	-137.21
3540	-76.97	-73.59	-87.15	-118.59	-136.21	-78.07	-74.56	-86.67	-117.68	-137.76	-76.61	-73.31	-85.73	-116.47	-137.13
3620	-78.15	-73.37	-86.96	-118.26	-136.98	-77.53	-74.22	-86.69	-117.20	-137.68	-76.58	-72.50	-85.66	-116.13	-136.85
3700	-77.64	-71.78	-87.55	-117.57	-137.85	-77.34	-72.95	-87.08	-116.45	-137.20	-75.61	-72.17	-86.22	-115.47	-136.23

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/MCLStore/terms.jsp



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Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON SPURIOUS @Fcarrier 3040 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 3290 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 3540 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C
-5	-91.79	-97.90	-100.16	-93.15	-95.92	-98.78	-90.86	-96.33	-101.19
-4	-90.07	-95.42	-97.67	-90.19	-94.32	-95.79	-88.23	-94.17	-97.94
-3	-86.93	-92.28	-93.90	-86.73	-91.27	-92.22	-84.84	-90.85	-94.92
-2	-82.58	-88.68	-90.31	-82.85	-87.47	-88.86	-80.88	-86.73	-90.32
-1	-79.20	-81.27	-85.02	-79.72	-79.64	-83.70	-77.76	-79.45	-85.18
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-78.97	-80.79	-85.17	-79.30	-79.54	-83.63	-77.45	-79.58	-85.20
+2	-82.31	-88.00	-90.09	-82.41	-86.57	-88.14	-80.84	-85.58	-90.06
+3	-86.02	-91.62	-93.42	-85.85	-90.99	-91.74	-84.30	-90.00	-93.58
+4	-88.53	-94.31	-96.31	-88.97	-93.18	-95.14	-87.51	-92.67	-96.90
+5	-90.94	-96.58	-99.13	-90.92	-94.54	-97.24	-89.97	-94.87	-99.88

Note 1: Comparison frequency 125 kHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 3040 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 3290 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 3540 MHz± (n*Freference) (dBc) NOTE 3		
	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C	-45 °C	+25°C	+70 °C
-5	-80.77	-84.71	-87.14	-80.69	-85.57	-89.57	-82.85	-88.95	-92.50
-4	-89.36	-87.92	-85.71	-79.47	-81.91	-82.97	-76.94	-78.89	-79.94
-3	-92.47	-93.10	-95.82	-83.23	-85.77	-87.53	-83.35	-84.72	-86.18
-2	-85.71	-86.25	-86.19	-85.76	-85.34	-85.12	-83.91	-84.04	-84.07
-1	-84.36	-82.38	-81.90	-77.59	-79.16	-80.08	-77.49	-78.52	-79.47
0 ^{note 4}	-	-	-	-	-	-	-	-	-
+1	-79.61	-85.25	-91.62	-84.43	-85.16	-84.54	-86.15	-88.51	-88.01
+2	-84.14	-83.65	-83.36	-86.33	-86.29	-85.82	-84.21	-84.60	-84.61
+3	-89.37	-90.54	-91.43	-89.99	-91.88	-92.92	-86.21	-88.08	-89.30
+4	-83.08	-84.87	-84.11	-94.02	-93.77	-88.89	-94.40	-101.98	-97.22
+5	-78.15	-82.98	-86.16	-76.84	-81.30	-83.86	-78.95	-82.64	-84.39

Note 3: Reference frequency 81 MHz

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

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