

Frequency Synthesizer

DSN-EDR11168

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS						A-VCC CURRENT (mA)			D-VCC CURRENT (mA)		
				(dBc)											
	-30 °C	+25°C	+70 °C	F2			F3								
-30 °C				+25°C	+70 °C	-30 °C	+25°C	+70 °C							
1470.0	14.08	14.04	14.17	-18.69	-20.84	-23.47	-42.77	-43.84	-45.94	56.57	59.75	61.97	45.34	48.03	51.30
1532.5	14.16	14.08	14.19	-20.46	-22.80	-25.63	-43.75	-44.48	-47.62	56.45	59.62	61.80	45.49	48.19	51.45
1595.0	13.96	13.84	13.91	-22.84	-24.97	-27.95	-45.76	-47.24	-51.22	56.30	59.42	61.67	45.37	48.07	51.34
1657.5	14.10	13.93	13.90	-25.07	-26.76	-29.75	-53.04	-54.56	-60.05	56.17	59.33	61.69	45.21	47.89	50.89
1720.0	13.91	13.69	13.50	-27.78	-29.13	-31.85	-59.89	-62.28	-62.56	55.83	59.13	61.62	43.55	46.13	49.30
1782.5	13.79	13.61	13.38	-31.09	-31.66	-34.51	-66.82	-62.78	-64.16	55.77	59.15	61.69	45.00	47.68	50.94
1845.0	14.03	13.79	13.45	-34.29	-34.18	-36.57	-65.36	-64.25	-70.50	55.58	59.05	61.65	45.27	47.95	51.23
1907.5	13.59	13.38	13.01	-36.92	-37.22	-38.72	-61.70	-63.18	-72.00	55.35	58.92	61.59	45.47	48.19	51.48
1970.0	13.49	13.28	12.88	-40.05	-41.07	-41.61	-59.01	-55.81	-59.69	55.16	58.78	61.54	45.34	48.06	51.35
2032.5	13.12	12.91	12.52	-42.18	-43.76	-44.90	-53.13	-49.38	-51.05	54.94	58.60	61.46	45.75	48.52	51.87
2095.0	12.73	12.59	12.20	-44.46	-48.10	-52.17	-49.36	-45.30	-47.08	54.62	58.38	61.29	45.67	48.43	51.77

FREQ. (MHz)	PHASE NOISE (dBc/Hz) @ OFFSETS														
	-30 °C					+25°C					+70 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
1470.0	-85.23	-94.74	-97.92	-119.39	-140.81	-87.10	-95.91	-97.67	-119.00	-141.09	-90.89	-94.25	-97.47	-117.70	-138.74
1532.5	-87.50	-94.11	-98.04	-120.03	-141.58	-87.04	-94.51	-97.66	-119.13	-141.57	-88.17	-92.84	-97.30	-117.53	-138.74
1595.0	-84.62	-94.43	-98.00	-120.46	-142.13	-91.05	-94.94	-97.38	-118.99	-141.45	-88.16	-94.08	-96.69	-117.12	-138.48
1657.5	-82.22	-95.40	-98.58	-120.52	-142.89	-86.66	-94.36	-97.69	-118.50	-141.38	-84.19	-94.37	-97.65	-116.72	-138.48
1720.0	-84.25	-94.97	-98.57	-120.03	-142.73	-87.26	-93.59	-97.28	-117.82	-140.88	-86.99	-91.32	-96.56	-116.40	-138.18
1782.5	-86.84	-94.64	-98.41	-119.20	-142.18	-86.69	-92.88	-97.67	-117.17	-140.53	-84.91	-94.93	-97.39	-115.83	-137.91
1845.0	-84.95	-93.06	-98.27	-119.43	-142.37	-89.22	-93.86	-97.43	-117.30	-140.47	-84.33	-92.23	-97.02	-115.98	-138.26
1907.5	-82.93	-93.93	-97.47	-118.85	-141.85	-84.84	-91.74	-97.17	-117.05	-140.10	-85.72	-93.05	-96.38	-115.97	-138.09
1970.0	-84.15	-92.12	-96.76	-118.55	-141.46	-86.82	-93.47	-97.19	-116.97	-139.87	-84.30	-90.86	-96.26	-115.87	-138.05
2032.5	-83.77	-91.67	-96.96	-118.80	-141.46	-85.54	-93.45	-96.57	-117.49	-140.18	-84.04	-90.85	-96.04	-116.38	-138.67
2095.0	-82.34	-91.93	-96.36	-118.85	-141.38	-85.81	-92.31	-96.50	-117.76	-140.32	-85.54	-91.93	-96.07	-116.66	-138.65

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



Typical Performance Data

COMPARISON SPURIOUS ORDER	COMPARISON & REFERENCE SPURIOUS @Fcarrier 1470 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON & REFERENCE SPURIOUS @Fcarrier 1782.5 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON & REFERENCE SPURIOUS @Fcarrier 2095 MHz± (n*Fcomparison) (dBc) NOTE 1		
	-30 °C	+25°C	+70 °C	-30 °C	+25°C	+70 °C	-30 °C	+25°C	+70 °C
-5	-94.19	-94.27	-94.53	-97.78	-106.95	-112.11	-91.47	-93.04	-95.40
-4	-72.62	-75.51	-79.36	-75.75	-88.65	-90.73	-74.31	-72.82	-73.48
-3	-94.80	-96.52	-108.81	-105.77	-114.78	-118.85	-97.10	-101.99	-105.49
-2	-79.40	-79.89	-81.54	-87.47	-87.64	-84.36	-92.30	-87.43	-90.72
-1	-103.40	-103.84	-101.25	-107.67	-118.32	-113.33	-87.29	-98.92	-108.85
0 ^{note 2}	-	-	-	-	-	-	-	-	-
+1	-99.17	-105.13	-98.48	-105.50	-109.81	-106.79	-92.76	-98.08	-102.82
+2	-78.42	-77.31	-76.36	-75.47	-75.35	-74.51	-78.46	-78.28	-76.92
+3	-94.18	-96.51	-115.66	-95.66	-101.77	-108.45	-94.10	-99.39	-106.54
+4	-73.20	-75.16	-76.49	-66.76	-71.00	-72.54	-71.39	-71.42	-71.26
+5	-96.63	-94.00	-91.67	-89.63	-97.49	-101.46	-91.94	-92.71	-98.24

Note 1: Reference & Comparison frequency 10 MHz

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

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

