

Frequency Synthesizer

ZSN-EDR10920/1

Typical Performance Data

FREQ. (MHz)	POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURRENT (mA)		
				F2			F3								
	-45 °C	+25°C	+75 °C	-45 °C	+25°C	+75 °C	-45 °C	+25°C	+75 °C	-45 °C	+25°C	+75 °C	-45 °C	+25°C	+75 °C
4600	-3.53	-4.09	-5.07	-53.37	-53.78	-55.48	-54.73	-53.06	-52.49	44.87	46.59	47.47	219.71	213.87	230.39
4950	-4.64	-4.64	-4.69	-66.92	-63.66	-60.93	-61.65	-63.29	-69.31	44.88	46.60	47.53	219.59	214.26	229.94

FREQ. (MHz)	PHASE NOISE (dBc/Hz)														
	@ OFFSETS														
	-45 °C					+25°C					+75 °C				
	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz	100Hz	1kHz	10kHz	100kHz	1MHz
4600	-70.96	-84.63	-89.32	-101.09	-131.53	-72.95	-86.16	-90.51	-101.14	-130.25	-72.81	-86.70	-90.50	-97.04	-127.90
4950	-71.37	-83.06	-87.75	-100.54	-130.77	-74.55	-82.70	-88.49	-100.54	-129.59	-72.89	-85.51	-89.17	-96.86	-127.71

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 SPURIOUS @Fcarrier 4600 MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS @Fcarrier 4950 MHz± (n*Fcomparison) (dBc) NOTE 1		
	n	-45 °C	+25°C	+75 °C	-45 °C	+25°C
-5	-123.00	-125.04	-108.56	-107.06	-98.90	-107.27
-4	-71.63	-72.58	-70.22	-70.47	-69.97	-69.99
-3	-124.05	-124.98	-108.62	-101.40	-99.89	-103.55
-2	-104.82	-108.92	-103.93	-91.95	-94.23	-85.03
-1	-122.85	-122.38	-104.59	-90.16	-92.72	-92.60
0 ^{note 2}	-	-	-	-	-	-
+1	-122.81	-114.90	-103.75	-90.26	-93.32	-94.42
+2	-105.84	-109.24	-105.68	-94.17	-93.68	-85.32
+3	-123.47	-124.75	-108.36	-102.41	-100.34	-101.61
+4	-71.10	-71.78	-69.40	-68.34	-68.39	-68.91
+5	-124.01	-125.17	-108.08	-112.12	-99.75	-107.75

Note 1: Comparison frequency 5 MHz

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

REFERENCE SPURIOUS ORDER	REFERENCE SPURIOUS @Fcarrier 4600 MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS @Fcarrier 4950 MHz± (n*Freference) (dBc) NOTE 3		
	n	-45 °C	+25°C	+75 °C	-45 °C	+25°C
-5	-77.37	-79.42	-83.55	-64.31	-70.37	-70.48
-4	-80.93	-86.46	-91.32	-68.15	-73.25	-71.37
-3	-71.64	-71.01	-72.22	-73.90	-76.61	-81.43
-2	-68.99	-68.32	-67.56	-69.16	-69.96	-71.02
-1	-71.85	-72.62	-70.25	-70.43	-69.86	-69.96
0 ^{note 4}	-	-	-	-	-	-
+1	-71.57	-71.80	-69.38	-68.39	-68.45	-68.96
+2	-69.96	-69.51	-67.64	-67.10	-68.37	-69.63
+3	-73.70	-73.95	-74.98	-75.97	-77.27	-78.15
+4	-78.98	-81.28	-85.12	-70.25	-74.42	-75.86
+5	-77.93	-78.21	-80.69	-66.71	-73.08	-78.36

Note 3: Reference frequency 20 MHz

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

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