

Frequency Synthesizer

KSN-EDR9658

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	-45 °C	+25°C	+85 °C
3200	1.39	1.54	1.31	-23.23	-23.76	-26.76	-22.63	-24.46	-25.94	36.88	38.95	40.65	18.34	20.23	24.69
3230	1.73	1.84	1.58	-24.00	-24.85	-27.76	-22.98	-25.01	-26.17	37.01	39.06	40.73	18.34	20.32	24.78
3260	1.57	1.72	1.45	-24.23	-25.28	-28.23	-22.10	-24.40	-25.67	37.13	39.14	40.80	18.37	20.36	24.84
3290	1.70	1.80	1.53	-25.03	-26.03	-28.71	-22.66	-24.58	-25.57	37.22	39.23	40.87	18.37	20.38	24.84
3320	1.80	1.91	1.64	-25.34	-26.58	-29.12	-23.11	-24.86	-25.81	37.28	39.29	40.93	18.39	20.40	24.86
3350	1.71	1.83	1.55	-26.29	-27.69	-29.87	-23.82	-25.56	-26.80	37.36	39.36	40.99	18.37	20.39	24.85
3380	1.81	1.91	1.64	-27.53	-28.92	-30.39	-24.95	-26.69	-27.52	37.42	39.43	41.05	18.40	20.42	24.87
3410	1.84	1.97	1.71	-28.85	-30.45	-30.82	-27.01	-28.28	-28.13	37.47	39.48	41.11	18.42	20.43	24.87
3440	1.66	1.75	1.49	-29.37	-31.30	-30.10	-26.04	-27.30	-27.24	37.56	39.56	41.18	18.44	20.46	24.90
3470	2.03	2.09	1.81	-30.32	-32.93	-29.88	-26.35	-27.50	-27.60	37.63	39.64	41.25	18.44	20.45	24.90
3480	2.06	2.15	1.88	-30.52	-33.40	-29.75	-26.94	-27.64	-27.80	37.65	39.66	41.26	15.92	17.81	22.14
3500	1.94	2.05	1.79	-30.27	-33.57	-29.02	-26.27	-27.52	-27.43	37.70	39.71	41.30	18.48	20.47	24.92

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
3200	36.88	18.34	-88.28	-113.58	-135.32	38.95	20.23	-89.02	-112.91	-135.37	40.65	24.69	-90.71	-112.88	-133.47
3230	37.01	18.34	-88.34	-114.12	-135.97	39.06	20.32	-89.19	-113.52	-135.80	40.73	24.78	-89.90	-113.36	-134.13
3260	37.13	18.37	-88.19	-114.30	-136.34	39.14	20.36	-89.51	-113.87	-136.13	40.80	24.84	-90.25	-113.66	-134.41
3290	37.22	18.37	-88.48	-114.94	-136.77	39.23	20.38	-89.27	-114.36	-136.61	40.87	24.84	-90.74	-114.20	-134.91
3320	37.28	18.39	-88.60	-115.06	-137.00	39.29	20.40	-89.38	-114.53	-136.76	40.93	24.86	-90.41	-114.20	-135.04
3350	37.36	18.37	-89.27	-115.30	-137.32	39.36	20.39	-89.20	-114.48	-136.87	40.99	24.85	-90.73	-114.41	-135.39
3380	37.42	18.40	-88.93	-115.69	-137.52	39.43	20.42	-88.75	-114.49	-137.03	41.05	24.87	-90.38	-114.43	-135.41
3410	37.47	18.42	-88.43	-115.53	-137.56	39.48	20.43	-88.16	-114.25	-136.96	41.11	24.87	-90.26	-114.46	-135.38
3440	37.56	18.44	-89.74	-115.88	-137.69	39.56	20.46	-87.74	-113.82	-137.02	41.18	24.90	-90.04	-114.54	-135.43
3470	37.63	18.44	-89.32	-115.97	-137.62	39.64	20.45	-86.17	-113.22	-136.93	41.25	24.90	-90.40	-114.65	-135.34
3480	37.65	15.92	-89.61	-115.94	-137.80	39.66	17.81	-85.38	-112.92	-136.74	41.26	22.14	-90.28	-114.66	-135.84
3500	37.70	18.48	-89.35	-115.86	-137.52	39.71	20.47	-84.78	-112.50	-136.64	41.30	24.92	-90.30	-114.48	-135.33

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.
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Typical Performance Data

COMPARISON SPURIOUS ORDER	REFERENCE & COMPARISON SPURIOUS @Fcarrier 3230 MHz± (n*Fcomparison) (dBc) NOTE 1			REFERENCE & COMPARISON SPURIOUS @Fcarrier 3355 MHz± (n*Fcomparison) (dBc) NOTE 1			REFERENCE & COMPARISON SPURIOUS @Fcarrier 3480 MHz± (n*Fcomparison) (dBc) NOTE 1			
	n	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C	-45 °C	+25°C	+85 °C
-5	-77.13	-82.16	-85.77	-78.03	-81.28	-85.58	-99.91	-96.40	-97.15	
-4	-74.58	-79.33	-82.93	-77.09	-79.49	-81.52	-89.90	-89.21	-90.35	
-3	-75.48	-77.52	-80.01	-77.71	-79.25	-81.88	-98.12	-95.10	-93.60	
-2	-80.32	-82.46	-84.32	-80.57	-83.34	-88.74	-94.88	-95.86	-94.47	
-1	-91.13	-96.38	-93.98	-88.81	-84.58	-81.71	-91.40	-91.15	-88.90	
0 ^{note 2}	-	-	-	-	-	-	-	-	-	
+1	-83.85	-86.13	-86.40	-93.91	-85.81	-82.08	-82.79	-84.14	-85.24	
+2	-83.24	-88.56	-91.85	-86.01	-87.19	-86.18	-84.17	-83.75	-83.89	
+3	-76.88	-79.80	-82.98	-79.41	-80.58	-83.62	-98.07	-94.62	-92.05	
+4	-75.70	-78.16	-80.14	-79.37	-83.25	-86.70	-90.56	-91.56	-93.31	
+5	-76.90	-80.59	-84.54	-79.84	-83.43	-87.67	-103.11	-110.71	-109.60	

Note 1: Reference & Comparison frequency 30 MHz

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

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