

# Frequency Synthesizer

# SSND-1014N-119+

## Typical Performance Data

FREQ. (MHz)		POWER OUTPUT (dBm)			HARMONICS (dBc)						VCO CURRENT (mA)			PLL CURENT (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
IF	1000	-10.29	-9.72	-9.94	-24.83	-31.22	-43.66	-49.04	-44.89	-36.17	6.86	7.90	8.65	6.47	6.66	6.82
RF	1440	1.93	2.95	3.68	-29.89	-30.87	-32.32	-57.39	-63.55	-67.75	8.86	10.46	11.57	6.47	6.66	6.82

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
IF	1000	-82.37	-92.65	-91.73	-118.91	-146.75	-83.35	-90.41	-91.46	-118.35	-145.98	-86.92	-92.44	-91.14	-117.31	-144.69
RF	1440	-80.87	-90.97	-89.77	-120.14	-143.76	-82.69	-91.08	-89.51	-119.80	-143.09	-82.90	-89.83	-89.92	-119.21	-142.57

## Typical Performance Data

COMPARISON SPURIOUS ORDER  n	COMPARISON SPURIOUS (IF) @Fcarrier 1000MHz± (n*Fcomparison) (dBc) NOTE 1			COMPARISON SPURIOUS (RF) @Fcarrier 1440MHz± (n*Fcomparison) (dBc) NOTE 1		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
-4	-101.21	-104.36	-102.09	-96.99	-122.86	-104.97
-3	-98.72	-105.65	-102.13	-98.11	-114.62	-96.87
-2	-93.83	-106.00	-96.70	-92.74	-116.44	-92.69
-1	-90.41	-96.24	-90.61	-85.19	-103.99	-88.86
0 <sup>note 2</sup>	-	-	-	-	-	-
+1	-87.18	-90.94	-90.61	-85.35	-104.64	-88.89
+2	-89.40	-103.62	-101.95	-92.89	-117.51	-92.77
+3	-93.28	-98.88	-108.19	-98.86	-117.27	-96.70
+4	-97.85	-100.78	-105.91	-97.13	-124.83	-104.39

Note 1: Comparison frequency 2000 kHz

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

REFERENCE SPURIOUS ORDER  n	REFERENCE SPURIOUS (IF) @Fcarrier 1000MHz± (n*Freference) (dBc) NOTE 3			REFERENCE SPURIOUS (RF) @Fcarrier 1440MHz± (n*Freference) (dBc) NOTE 3		
	-45°C	+25°C	+85°C	-45°C	+25°C	+85°C
-5	-107.54	-105.37	-105.57	-115.59	-103.43	-110.01
-4	-93.75	-97.17	-96.16	-117.59	-110.24	-110.38
-3	-84.36	-86.05	-86.28	-114.38	-110.76	-112.91
-2	-78.28	-78.97	-79.06	-124.24	-104.56	-119.42
-1	-75.49	-76.34	-76.07	-119.55	-107.94	-100.63
0 <sup>note 4</sup>	-	-	-	-	-	-
+1	-82.30	-82.04	-81.92	-105.29	-104.57	-110.55
+2	-83.79	-83.41	-83.57	-111.78	-110.73	-114.76
+3	-89.47	-90.36	-90.65	-123.06	-112.23	-115.98
+4	-98.90	-99.89	-101.31	-117.19	-120.43	-115.81
+5	-108.33	-112.67	-117.95	-113.26	-113.11	-112.92

Note 3: Reference frequency 10 MHz

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