Frequency Mixer HJK-ED9484/2

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=199MHz (dB) @LO (dBm)		
		+4	+7	+10
1620.1	1421.1	13.39	10.79	8.76
1640.1	1441.1	12.89	10.25	8.40
1660.1	1461.1	12.54	9.97	8.24
1680.1	1481.1	12.42	9.96	8.23
1700.1	1501.1	12.35	9.89	8.28
1720.1	1521.1	11.89	9.57	8.41
1740.1	1541.1	11.36	9.13	7.87
1760.1	1561.1	10.94	8.78	7.59
1780.1	1581.1	10.72	8.52	7.50
1800.1	1601.1	10.32	8.35	7.40
1820.1	1621.1	9.73	7.99	7.30
1840.1	1641.1	9.11	7.80	7.32
1860.1	1661.1	8.88	7.73	7.37
1880.1	1681.1	8.70	7.70	7.40
1900.1	1701.1	8.41	7.66	7.53
1920.1	1721.1	8.22	7.80	7.85
1940.1	1741.1	8.25	7.91	7.93
1960.1	1761.1	8.17	7.87	7.90
1980.1	1781.1	8.01	7.78	7.85
2000.1	1801.1	7.88	7.74	7.85
2020.1	1821.1	7.88	7.78	7.91
2040.1	1841.1	7.89	7.73	7.83
2060.1	1861.1	7.89	7.66	7.71
2080.1	1881.1	7.91	7.65	7.66
2100.1	1901.1	8.04	7.72	7.71
2120.1	1921.1	8.29	7.82	7.70
2140.1	1941.1	8.50	7.89	7.69
2160.1	1961.1	8.64	7.93	7.67
2180.1	1981.1	8.91	8.09	7.76
2190.1	1991.1	9.13	8.24	7.84
2210.1	2011.1	9.66	8.56	8.02
2220.1	2021.1	9.89	8.70	8.08
2240.1	2041.1	10.14	8.84	8.13
2250.1	2051.1	10.31	8.91	8.17
2270.1	2071.1	10.67	9.17	8.28
2280.1	2081.1	10.98	9.35	8.41
2300.1	2101.1	11.64	9.83	8.73
2310.1	2111.1	11.95	10.07	8.87
2330.1	2131.1	12.22	10.28	9.01
2340.1	2141.1	12.30	10.37	9.04

RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm) @LO (dBm)		
		+4	+7	+10
1620.1	1421.1	11.98	18.43	19.10
1640.1	1441.1	12.37	21.17	19.25
1660.1	1461.1	13.17	26.22	19.01
1680.1	1481.1	13.36	30.99	19.53
1700.1	1501.1	13.36	28.27	20.85
1720.1	1521.1	14.12	26.49	20.24
1740.1	1541.1	15.18	21.92	20.62
1760.1	1561.1	16.53	18.98	20.70
1780.1	1581.1	16.60	18.55	21.64
1800.1	1601.1	17.10	18.42	23.02
1820.1	1621.1	18.22	19.37	24.84
1840.1	1641.1	18.10	20.55	27.20
1860.1	1661.1	18.02	22.02	29.12
1880.1	1681.1	18.11	22.85	31.64
1900.1	1701.1	18.89	24.43	27.99
1920.1	1721.1	19.85	26.29	25.30
1940.1	1741.1	20.14	21.71	24.54
1960.1	1761.1	19.22	21.56	26.30
1980.1	1781.1	18.45	22.02	27.32
2000.1	1801.1	19.19	23.10	29.25
2020.1	1821.1	19.20	22.86	27.68
2040.1	1841.1	19.54	23.24	27.77
2060.1	1861.1	19.29	22.91	26.97
2080.1	1881.1	19.20	22.74	26.32
2100.1	1901.1	18.53	22.40	25.75
2120.1	1921.1	17.64	21.33	25.01
2140.1	1941.1	17.23	20.84	24.54
2160.1	1961.1	16.77	19.99	23.51
2180.1	1981.1	16.39	19.10	22.59
2190.1	1991.1	16.16	18.56	21.95
2210.1	2011.1	15.67	17.73	21.13
2220.1	2021.1	15.60	17.62	20.88
2240.1	2041.1	15.02	17.18	20.20
2250.1	2051.1	14.95	17.21	19.89
2270.1	2071.1	14.11	16.59	19.11
2280.1	2081.1	13.66	16.47	18.74
2300.1	2101.1	12.68	15.97	18.00
2310.1	2111.1	12.28	15.66	17.83
2330.1	2131.1	11.97	15.36	17.65
2340.1	2141.1	11.87	15.27	17.74

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+14dBm (dB) @LO (dBm)		
		+4	+7	+10
1620.1	1421.1	4.08	3.74	3.13
1640.1	1441.1	3.71	3.55	2.88
1660.1	1461.1	3.49	3.35	2.69
1680.1	1481.1	3.19	3.02	2.35
1700.1	1501.1	2.44	2.61	2.11
1720.1	1521.1	1.39	1.74	1.17
1740.1	1541.1	0.50	1.07	1.06
1760.1	1561.1	0.28	0.94	0.96
1780.1	1581.1	0.28	0.93	0.89
1800.1	1601.1	0.42	0.93	0.80
1820.1	1621.1	0.80	0.99	0.73
1840.1	1641.1	0.93	0.98	0.59
1860.1	1661.1	0.96	0.86	0.46
1880.1	1681.1	0.96	0.82	0.42
1900.1	1701.1	1.07	0.82	0.36
1920.1	1721.1	1.03	0.70	0.29
1940.1	1741.1	0.89	0.60	0.29
1960.1	1761.1	0.87	0.61	0.27
1980.1	1781.1	0.88	0.55	0.21
2000.1	1801.1	0.87	0.50	0.16
2020.1	1821.1	0.90	0.49	0.15
2040.1	1841.1	0.95	0.54	0.16
2060.1	1861.1	0.98	0.59	0.20
2080.1	1881.1	1.05	0.66	0.24
2100.1	1901.1	1.18	0.76	0.33
2120.1	1921.1	1.32	0.90	0.45
2140.1	1941.1	1.34	0.95	0.54
2160.1	1961.1	1.43	1.00	0.62
2180.1	1981.1	1.57	1.11	0.72
2190.1	1991.1	1.69	1.14	0.76
2210.1	2011.1	1.65	1.22	0.82
2220.1	2021.1	1.58	1.18	0.81
2240.1	2041.1	1.53	1.22	0.85
2250.1	2051.1	1.54	1.19	0.84
2270.1	2071.1	1.58	1.28	0.91
2280.1	2081.1	1.58	1.30	0.92
2300.1	2101.1	1.53	1.29	0.98
2310.1	2111.1	1.39	1.20	0.92
2330.1	2131.1	1.23	1.12	0.90
2340.1	2141.1	1.15	1.05	0.86

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1960MHz (dB) @LO (dBm) +7
440.0	1520.0	10.27
417.4	1542.6	9.64
394.7	1565.3	9.20
372.1	1587.9	8.90
349.5	1610.5	8.62
326.8	1633.2	8.27
304.2	1655.8	8.04
281.6	1678.4	7.97
258.9	1701.1	7.86
236.3	1723.7	7.94
213.7	1746.3	7.95
191.1	1768.9	7.80
168.4	1791.6	7.69
145.8	1814.2	7.59
123.2	1836.8	7.46
100.5	1859.5	7.41
77.9	1882.1	7.35
55.3	1904.7	7.38
32.6	1927.4	7.48
10.0	1950.0	7.83
10.0	1970.0	7.96
20.0	1980.0	7.81
30.0	1990.0	7.89
40.0	2000.0	8.01
50.0	2010.0	8.13
60.0	2020.0	8.19
70.0	2030.0	8.32
80.0	2040.0	8.38
90.0	2050.0	8.43
100.0	2060.0	8.53
110.0	2070.0	8.75
120.0	2080.0	8.93
130.0	2090.0	9.18
140.0	2100.0	9.39
150.0	2110.0	9.57
160.0	2120.0	9.64
170.0	2130.0	9.70
180.0	2140.0	9.79
190.0	2150.0	9.85
200.0	2160.0	10.06

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1909.9MHz (dB) @LO (dBm) +7
10.1	1920.0	7.69
16.3	1926.2	7.53
22.4	1932.3	7.49
28.6	1938.5	7.48
34.7	1944.6	7.49
40.9	1950.8	7.51
47.0	1956.9	7.51
53.2	1963.1	7.56
59.3	1969.2	7.61
65.5	1975.4	7.68
71.6	1981.5	7.74
77.8	1987.7	7.80
83.9	1993.8	7.87
90.1	2000.0	7.95
96.3	2006.2	8.05
102.4	2012.3	8.14
108.6	2018.5	8.20
114.7	2024.6	8.27
120.9	2030.8	8.30
127.0	2036.9	8.34
133.2	2043.1	8.40
139.3	2049.2	8.44
145.5	2055.4	8.54
151.6	2061.5	8.61
157.8	2067.7	8.75
163.9	2073.8	8.87
170.1	2080.0	8.98
176.3	2086.2	9.10
182.4	2092.3	9.25
188.6	2098.5	9.39
194.7	2104.6	9.51
200.9	2110.8	9.62
207.0	2116.9	9.70
213.2	2123.1	9.73
219.3	2129.2	9.78
225.5	2135.4	9.84
231.6	2141.5	9.89
237.8	2147.7	9.93
243.9	2153.8	10.03
250.1	2160.0	10.17

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2010.1MHz (dB) @LO (dBm) +7
490.1	1520.0	10.43
477.8	1532.3	10.16
465.5	1544.6	9.82
453.2	1556.9	9.52
440.9	1569.2	9.25
428.6	1581.5	9.06
416.3	1593.8	8.98
403.9	1606.2	8.82
391.6	1618.5	8.66
379.3	1630.8	8.44
367.0	1643.1	8.31
354.7	1655.4	8.20
342.4	1667.7	8.15
330.1	1680.0	8.09
317.8	1692.3	8.03
305.5	1704.6	8.04
293.2	1716.9	8.07
280.9	1729.2	8.13
268.6	1741.5	8.14
256.3	1753.8	8.08
243.9	1766.2	8.01
231.6	1778.5	7.92
219.3	1790.8	7.86
207.0	1803.1	7.81
194.7	1815.4	7.78
182.4	1827.7	7.70
170.1	1840.0	7.62
157.8	1852.3	7.57
145.5	1864.6	7.54
133.2	1876.9	7.49
120.9	1889.2	7.47
108.6	1901.5	7.47
96.3	1913.8	7.49
83.9	1926.2	7.51
71.6	1938.5	7.54
59.3	1950.8	7.57
47.0	1963.1	7.60
34.7	1975.4	7.71
22.4	1987.7	7.87
10.1	2000.0	8.26

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB) @LO (dBm)			LO-IF ISOLATION (dB) @LO (dBm)		
	+4	+7	+10	+4	+7	+10
1421.1	35.26	36.04	36.66	38.57	38.76	38.89
1441.1	35.09	35.77	36.31	38.70	38.86	38.97
1461.1	35.01	35.69	36.20	38.83	39.03	39.18
1481.1	34.70	35.50	35.91	38.99	39.28	39.29
1501.1	34.41	35.18	35.49	39.18	39.53	39.70
1521.1	34.11	34.79	34.81	39.42	39.84	40.50
1541.1	33.95	34.64	35.14	39.86	40.27	40.43
1561.1	33.77	34.43	34.61	40.01	40.32	40.27
1581.1	33.43	33.99	34.24	40.20	40.51	40.68
1601.1	33.27	33.99	34.07	40.08	40.67	41.04
1621.1	32.86	33.41	33.48	40.02	40.89	41.79
1641.1	32.59	32.97	32.80	39.98	42.01	44.40
1661.1	32.19	32.33	32.15	39.52	41.53	43.86
1681.1	31.62	31.66	31.42	38.41	39.64	40.74
1701.1	31.09	31.22	31.15	37.89	38.76	39.44
1721.1	30.94	31.50	31.84	39.78	41.24	41.39
1741.1	30.92	31.62	31.94	41.91	42.12	41.30
1761.1	30.63	31.25	31.41	42.52	41.48	40.53
1781.1	30.43	30.85	31.02	41.55	40.10	39.34
1801.1	30.39	30.83	30.93	40.83	39.50	38.45
1821.1	30.43	30.87	31.10	39.86	38.95	38.20
1841.1	30.34	30.88	31.04	39.68	38.98	38.34
1861.1	30.88	31.59	31.90	38.87	38.32	37.87
1881.1	31.34	32.09	32.45	38.51	37.98	37.61
1901.1	31.67	32.50	33.07	38.23	37.66	37.50
1921.1	32.25	33.36	34.02	38.08	37.66	37.46
1941.1	32.85	34.12	34.96	37.88	37.63	37.53
1961.1	33.19	34.46	35.26	37.59	37.40	37.31
1981.1	33.45	35.04	36.03	37.25	37.32	37.25
1991.1	33.53	35.24	36.29	37.04	37.16	37.07
2011.1	33.72	35.84	37.09	36.84	37.11	36.98
2021.1	33.86	36.01	37.34	36.79	37.10	36.98
2041.1	34.20	36.42	37.94	36.53	36.86	36.82
2051.1	34.35	36.52	38.11	36.52	36.70	36.72
2071.1	34.45	36.61	38.46	36.38	36.61	36.58
2081.1	34.55	36.68	38.74	36.36	36.45	36.56
2101.1	34.57	36.46	38.84	36.45	36.41	36.55
2111.1	34.68	36.47	38.89	36.51	36.44	36.48
2131.1	35.11	36.91	39.46	36.45	36.31	36.34
2141.1	35.62	37.32	39.68	36.43	36.29	36.17

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB) @LO (dBm)		
		+4	+7	+10
1620.1	1421.1	35.72	32.40	30.84
1640.1	1441.1	34.06	31.23	30.30
1660.1	1461.1	33.13	30.80	30.15
1680.1	1481.1	33.13	31.09	30.09
1700.1	1501.1	34.29	32.00	30.32
1720.1	1521.1	35.47	32.75	30.48
1740.1	1541.1	37.24	33.07	30.77
1760.1	1561.1	38.76	33.32	31.00
1780.1	1581.1	39.60	33.49	31.24
1800.1	1601.1	39.51	33.70	31.41
1820.1	1621.1	38.06	33.69	32.08
1840.1	1641.1	36.98	34.70	34.31
1860.1	1661.1	37.16	37.05	36.68
1880.1	1681.1	37.13	37.98	36.84
1900.1	1701.1	35.89	36.12	35.35
1920.1	1721.1	33.46	31.92	30.32
1940.1	1741.1	30.80	28.97	28.12
1960.1	1761.1	29.43	28.23	27.88
1980.1	1781.1	28.82	28.06	28.02
2000.1	1801.1	28.56	28.12	28.20
2020.1	1821.1	28.59	28.30	28.42
2040.1	1841.1	28.79	28.43	28.59
2060.1	1861.1	28.90	28.50	28.58
2080.1	1881.1	29.07	28.53	28.64
2100.1	1901.1	29.43	28.65	28.62
2120.1	1921.1	30.07	28.86	28.59
2140.1	1941.1	30.76	29.08	28.60
2160.1	1961.1	31.49	29.34	28.63
2180.1	1981.1	32.73	29.96	28.76
2190.1	1991.1	33.60	30.30	28.81
2210.1	2011.1	35.38	31.43	29.18
2220.1	2021.1	36.06	31.89	29.39
2240.1	2041.1	37.12	32.71	29.78
2250.1	2051.1	37.62	33.08	30.06
2270.1	2071.1	38.42	34.57	30.86
2280.1	2081.1	38.60	35.25	31.42
2300.1	2101.1	38.59	37.03	32.89
2310.1	2111.1	38.39	37.51	33.36
2330.1	2131.1	37.92	37.82	34.05
2340.1	2141.1	37.61	37.67	34.13

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1) @LO (dBm)		
		+4	+7	+10
1620.1	1421.1	3.42	2.59	1.96
1640.1	1441.1	3.20	2.41	1.83
1660.1	1461.1	3.00	2.24	1.71
1680.1	1481.1	2.91	2.19	1.66
1700.1	1501.1	2.83	2.13	1.62
1720.1	1521.1	2.67	2.00	1.56
1740.1	1541.1	2.47	1.84	1.44
1760.1	1561.1	2.33	1.72	1.36
1780.1	1581.1	2.25	1.64	1.32
1800.1	1601.1	2.12	1.58	1.29
1820.1	1621.1	1.96	1.46	1.25
1840.1	1641.1	1.76	1.36	1.23
1860.1	1661.1	1.63	1.29	1.23
1880.1	1681.1	1.55	1.26	1.26
1900.1	1701.1	1.47	1.23	1.29
1920.1	1721.1	1.35	1.22	1.40
1940.1	1741.1	1.27	1.28	1.52
1960.1	1761.1	1.24	1.35	1.60
1980.1	1781.1	1.25	1.43	1.67
2000.1	1801.1	1.30	1.50	1.73
2020.1	1821.1	1.34	1.54	1.77
2040.1	1841.1	1.36	1.54	1.77
2060.1	1861.1	1.38	1.54	1.76
2080.1	1881.1	1.40	1.55	1.76
2100.1	1901.1	1.42	1.54	1.74
2120.1	1921.1	1.46	1.52	1.70
2140.1	1941.1	1.50	1.53	1.68
2160.1	1961.1	1.54	1.54	1.68
2180.1	1981.1	1.61	1.57	1.67
2190.1	1991.1	1.66	1.58	1.67
2210.1	2011.1	1.77	1.63	1.67
2220.1	2021.1	1.81	1.66	1.68
2240.1	2041.1	1.88	1.70	1.70
2250.1	2051.1	1.92	1.73	1.71
2270.1	2071.1	2.02	1.80	1.74
2280.1	2081.1	2.09	1.84	1.76
2300.1	2101.1	2.23	1.95	1.81
2310.1	2111.1	2.29	1.99	1.84
2330.1	2131.1	2.36	2.05	1.88
2340.1	2141.1	2.39	2.08	1.90

LO (MHz)	LO VSWR (:1) @LO (dBm)		
	+4	+7	+10
1421.1	35.46	34.07	32.79
1441.1	33.42	32.18	31.03
1461.1	32.18	30.49	29.46
1481.1	31.03	28.96	27.59
1501.1	29.46	27.16	25.56
1521.1	27.16	24.83	21.73
1541.1	24.48	22.58	21.20
1561.1	22.29	20.70	19.32
1581.1	20.70	18.70	17.22
1601.1	18.70	16.56	14.87
1621.1	15.96	13.92	12.44
1641.1	13.39	11.53	10.19
1661.1	11.31	9.63	8.47
1681.1	9.43	7.97	6.91
1701.1	7.50	6.32	5.49
1721.1	5.97	5.16	4.61
1741.1	4.92	4.36	3.95
1761.1	4.06	3.61	3.29
1781.1	3.29	2.96	2.74
1801.1	2.70	2.52	2.40
1821.1	2.42	2.37	2.37
1841.1	2.44	2.52	2.61
1861.1	2.73	2.92	3.10
1881.1	3.25	3.52	3.79
1901.1	3.92	4.28	4.60
1921.1	4.70	5.14	5.54
1941.1	5.66	6.17	6.66
1961.1	6.76	7.34	7.87
1981.1	7.87	8.51	9.08
1991.1	8.43	9.08	9.69
2011.1	9.63	10.25	10.89
2021.1	10.25	10.96	11.53
2041.1	11.69	12.35	13.09
2051.1	12.35	12.99	13.70
2071.1	13.81	14.38	15.00
2081.1	14.50	15.00	15.53
2101.1	15.81	16.11	16.56
2111.1	16.41	16.72	17.05
2131.1	17.75	17.93	18.30
2141.1	18.30	18.50	18.90

IF (OUT) (MHz)	IF VSWR @LO=2000MHz (:1) @LO (dBm)		
	+4	+7	+10
10.0	1.76	1.48	1.29
50.0	1.75	1.44	1.22
90.0	1.83	1.54	1.33
130.0	1.89	1.60	1.41
170.0	2.02	1.73	1.54
210.0	2.14	1.86	1.68
250.0	2.28	1.97	1.78
310.0	2.57	2.23	2.01
350.0	2.74	2.36	2.14
410.0	3.02	2.60	2.35
450.0	3.18	2.70	2.42
510.0	3.55	2.97	2.64
550.0	3.61	3.07	2.74
610.0	3.83	3.24	2.89
650.0	3.95	3.28	2.89
710.0	4.11	3.41	3.00
750.0	4.22	3.49	3.06
810.0	4.24	3.50	3.07
850.0	4.29	3.50	3.03
910.0	4.29	3.50	3.02
950.0	4.35	3.58	3.09
1010.0	4.22	3.50	3.02
1050.0	4.11	3.39	2.92
1110.0	3.82	3.16	2.72
1150.0	3.79	3.17	2.74
1210.0	3.54	2.95	2.55
1250.0	3.42	2.86	2.46
1310.0	3.22	2.68	2.30
1350.0	3.15	2.63	2.27
1410.0	2.95	2.48	2.14
1450.0	2.78	2.34	2.02
1510.0	2.61	2.21	1.91
1550.0	2.51	2.14	1.87
1610.0	2.39	2.07	1.82
1650.0	2.29	1.99	1.76
1710.0	2.20	1.93	1.73
1750.0	2.12	1.86	1.68
1810.0	1.99	1.77	1.62
1850.0	1.87	1.67	1.55
1910.0	1.72	1.56	1.50

Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	23	22	39	32	36	40	38	52	58	56
1	-	18	+0	25	20	30	33	47	42	53	47	62
2	61	50	52	53	60	62	75	64	64	60	59	74
3	>90	73	50	64	48	59	53	62	59	74	69	70
4	>90	81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
5	>90	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
6	>90	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
7	>90	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
8	>90	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
9	>90	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
10	>90	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 1960 MHz; -1.00 dBm.
LO IN: 1761 MHz; +7.00 dBm
IF OUT: 199 MHz; -9.04 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	29	33	44	43	43	53	52	56	76	71
1	-	18	+0	26	21	32	35	53	46	61	57	78
2	41	41	43	43	48	61	58	58	63	52	56	68
3	70	60	31	45	30	43	39	47	47	64	58	63
4	>90	59	77	67	77	62	78	66	82	69	73	67
5	>90	76	81	65	50	62	48	55	53	59	60	69
6	>90	74	75	74	79	77	81	79	77	73	85	87
7	>90	>91	86	82	87	76	66	73	61	69	66	75
8	>90	>91	>91	81	87	80	>91	>91	90	79	>91	>91
9	>90	>91	>91	>91	>91	91	89	85	78	79	84	75
10	>90	>91	>91	>91	>91	>91	88	>91	>91	>91	90	>91
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 1960 MHz; 9.00 dBm.
LO IN: 1761 MHz; +7.00 dBm
IF OUT: 199 MHz; 0.73 dBm

Notes: 1. All Harmonics are in (dBc) relative to IF OUTPUT.
2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
3. RF Cal represent the Harmonics level of the RF input signal to the mixer.