

Frequency Mixer

SRA-173H+

Typical Performance Data

| RF (IN) (MHz) | LO (MHz) | CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB) | | | RF (IN) (MHz) | LO (MHz) | IP3 INPUT (dBm) | | | RF (IN) (MHz) | LO (MHz) | COMPRESSION @RF IN=+10dBm (dB) | | |
|---------------|----------|--|-------|-------|---------------|----------|-----------------|-------|-------|---------------|----------|--------------------------------|------|------|
| | | @LO (dBm) | | | | | @LO (dBm) | | | | | @LO (dBm) | | |
| | | +14 | +17 | +20 | | | +14 | +17 | +20 | | | +14 | +17 | +20 |
| 10.1 | 40.1 | 5.64 | 5.58 | 5.57 | 10.1 | 40.1 | 32.39 | 29.51 | 28.49 | 10.1 | 40.1 | 0.62 | 0.30 | 0.16 |
| 89.8 | 119.8 | 6.16 | 5.99 | 5.96 | 89.8 | 119.8 | 25.85 | 26.52 | 26.22 | 89.8 | 119.8 | 0.43 | 0.20 | 0.12 |
| 169.6 | 199.6 | 6.28 | 6.07 | 5.99 | 169.6 | 199.6 | 24.48 | 25.37 | 25.61 | 169.6 | 199.6 | 0.40 | 0.21 | 0.13 |
| 249.3 | 279.3 | 6.39 | 6.14 | 6.04 | 249.3 | 279.3 | 23.57 | 25.10 | 26.38 | 249.3 | 279.3 | 0.37 | 0.20 | 0.10 |
| 329.1 | 359.1 | 6.44 | 6.20 | 6.11 | 329.1 | 359.1 | 24.28 | 27.34 | 24.65 | 329.1 | 359.1 | 0.35 | 0.16 | 0.08 |
| 408.8 | 438.8 | 6.44 | 6.22 | 6.15 | 408.8 | 438.8 | 25.16 | 25.41 | 23.11 | 408.8 | 438.8 | 0.36 | 0.16 | 0.08 |
| 488.6 | 518.6 | 6.46 | 6.27 | 6.21 | 488.6 | 518.6 | 24.76 | 21.75 | 26.46 | 488.6 | 518.6 | 0.34 | 0.16 | 0.08 |
| 568.3 | 598.3 | 6.52 | 6.33 | 6.28 | 568.3 | 598.3 | 24.65 | 21.94 | 29.49 | 568.3 | 598.3 | 0.29 | 0.14 | 0.08 |
| 648.0 | 678.0 | 6.60 | 6.40 | 6.36 | 648.0 | 678.0 | 24.35 | 23.67 | 34.10 | 648.0 | 678.0 | 0.27 | 0.14 | 0.08 |
| 727.8 | 757.8 | 6.64 | 6.45 | 6.41 | 727.8 | 757.8 | 22.10 | 24.21 | 34.21 | 727.8 | 757.8 | 0.27 | 0.14 | 0.09 |
| 807.5 | 837.5 | 6.66 | 6.49 | 6.46 | 807.5 | 837.5 | 21.21 | 33.12 | 27.07 | 807.5 | 837.5 | 0.27 | 0.15 | 0.08 |
| 887.3 | 917.3 | 6.70 | 6.53 | 6.52 | 887.3 | 917.3 | 21.16 | 30.81 | 27.61 | 887.3 | 917.3 | 0.31 | 0.17 | 0.11 |
| 967.0 | 997.0 | 6.73 | 6.56 | 6.55 | 967.0 | 997.0 | 21.80 | 29.33 | 26.20 | 967.0 | 997.0 | 0.33 | 0.18 | 0.11 |
| 1046.7 | 1076.7 | 6.84 | 6.63 | 6.61 | 1046.7 | 1076.7 | 27.59 | 24.98 | 25.05 | 1046.7 | 1076.7 | 0.32 | 0.16 | 0.10 |
| 1126.5 | 1156.5 | 6.95 | 6.74 | 6.71 | 1126.5 | 1156.5 | 27.62 | 23.93 | 24.85 | 1126.5 | 1156.5 | 0.31 | 0.14 | 0.08 |
| 1206.2 | 1236.2 | 7.05 | 6.79 | 6.76 | 1206.2 | 1236.2 | 21.35 | 29.52 | 27.87 | 1206.2 | 1236.2 | 0.41 | 0.17 | 0.10 |
| 1286.0 | 1316.0 | 7.21 | 6.91 | 6.87 | 1286.0 | 1316.0 | 19.04 | 28.05 | 28.28 | 1286.0 | 1316.0 | 0.46 | 0.22 | 0.11 |
| 1365.7 | 1395.7 | 7.39 | 7.08 | 7.01 | 1365.7 | 1395.7 | 18.56 | 27.72 | 25.76 | 1365.7 | 1395.7 | 0.45 | 0.21 | 0.10 |
| 1445.5 | 1475.5 | 7.52 | 7.23 | 7.13 | 1445.5 | 1475.5 | 19.67 | 24.02 | 22.65 | 1445.5 | 1475.5 | 0.43 | 0.20 | 0.10 |
| 1525.2 | 1555.2 | 7.45 | 7.21 | 7.13 | 1525.2 | 1555.2 | 25.44 | 20.90 | 21.29 | 1525.2 | 1555.2 | 0.45 | 0.22 | 0.15 |
| 1604.9 | 1634.9 | 7.51 | 7.28 | 7.18 | 1604.9 | 1634.9 | 25.20 | 21.04 | 21.39 | 1604.9 | 1634.9 | 0.45 | 0.24 | 0.18 |
| 1684.7 | 1714.7 | 7.57 | 7.34 | 7.25 | 1684.7 | 1714.7 | 24.94 | 24.16 | 25.46 | 1684.7 | 1714.7 | 0.48 | 0.30 | 0.23 |
| 1764.4 | 1794.4 | 7.68 | 7.45 | 7.36 | 1764.4 | 1794.4 | 23.49 | 26.09 | 27.31 | 1764.4 | 1794.4 | 0.50 | 0.33 | 0.25 |
| 1844.2 | 1874.2 | 7.84 | 7.59 | 7.48 | 1844.2 | 1874.2 | 22.85 | 26.18 | 28.94 | 1844.2 | 1874.2 | 0.50 | 0.35 | 0.23 |
| 1923.9 | 1953.9 | 8.01 | 7.71 | 7.57 | 1923.9 | 1953.9 | 20.27 | 21.57 | 23.91 | 1923.9 | 1953.9 | 0.50 | 0.35 | 0.22 |
| 2003.6 | 2033.6 | 8.09 | 7.78 | 7.60 | 2003.6 | 2033.6 | 19.33 | 19.35 | 20.65 | 2003.6 | 2033.6 | 0.52 | 0.36 | 0.23 |
| 2083.4 | 2113.4 | 8.16 | 7.80 | 7.63 | 2083.4 | 2113.4 | 19.41 | 19.59 | 20.27 | 2083.4 | 2113.4 | 0.53 | 0.35 | 0.24 |
| 2163.1 | 2193.1 | 8.27 | 7.89 | 7.70 | 2163.1 | 2193.1 | 19.54 | 19.97 | 20.89 | 2163.1 | 2193.1 | 0.52 | 0.33 | 0.22 |
| 2242.9 | 2272.9 | 8.40 | 8.01 | 7.79 | 2242.9 | 2272.9 | 21.39 | 22.56 | 23.24 | 2242.9 | 2272.9 | 0.58 | 0.34 | 0.21 |
| 2322.6 | 2352.6 | 8.49 | 8.15 | 7.93 | 2322.6 | 2352.6 | 23.79 | 28.85 | 32.21 | 2322.6 | 2352.6 | 0.65 | 0.38 | 0.21 |
| 2402.4 | 2432.4 | 8.57 | 8.21 | 8.00 | 2402.4 | 2432.4 | 22.98 | 24.79 | 26.44 | 2402.4 | 2432.4 | 0.72 | 0.41 | 0.22 |
| 2482.1 | 2512.1 | 8.66 | 8.29 | 8.09 | 2482.1 | 2512.1 | 21.85 | 25.56 | 30.63 | 2482.1 | 2512.1 | 0.78 | 0.46 | 0.26 |
| 2561.8 | 2591.8 | 8.92 | 8.51 | 8.30 | 2561.8 | 2591.8 | 22.60 | 28.73 | 29.71 | 2561.8 | 2591.8 | 0.70 | 0.41 | 0.27 |
| 2641.6 | 2671.6 | 9.28 | 8.84 | 8.60 | 2641.6 | 2671.6 | 22.92 | 31.11 | 29.11 | 2641.6 | 2671.6 | 0.60 | 0.39 | 0.27 |
| 2721.3 | 2751.3 | 9.89 | 9.39 | 9.09 | 2721.3 | 2751.3 | 25.59 | 29.00 | 26.77 | 2721.3 | 2751.3 | 0.40 | 0.28 | 0.21 |
| 2801.1 | 2831.1 | 10.22 | 9.74 | 9.42 | 2801.1 | 2831.1 | 24.24 | 24.93 | 24.76 | 2801.1 | 2831.1 | 0.28 | 0.23 | 0.20 |
| 2880.8 | 2910.8 | 10.35 | 9.91 | 9.57 | 2880.8 | 2910.8 | 21.67 | 22.48 | 22.62 | 2880.8 | 2910.8 | 0.21 | 0.18 | 0.18 |
| 2960.6 | 2990.6 | 10.57 | 10.16 | 9.86 | 2960.6 | 2990.6 | 21.02 | 21.92 | 22.03 | 2960.6 | 2990.6 | 0.17 | 0.14 | 0.17 |
| 3040.3 | 3070.3 | 10.82 | 10.44 | 10.19 | 3040.3 | 3070.3 | 21.00 | 22.26 | 22.51 | 3040.3 | 3070.3 | 0.18 | 0.12 | 0.16 |
| 3100.1 | 3130.1 | 11.01 | 10.63 | 10.36 | 3100.1 | 3130.1 | 21.06 | 22.49 | 24.23 | 3100.1 | 3130.1 | 0.17 | 0.08 | 0.13 |



Frequency Mixer

SRA-173H+

Typical Performance Data

| IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=610.1MHz (dB) | IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10.1MHz (dB) | IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1210.1MHz (dB) |
|----------------|----------|--|----------------|----------|---|----------------|----------|---|
| | | @LO (dBm) | | | @LO (dBm) | | | @LO (dBm) |
| | | +17 | | | +17 | | | +17 |
| 600.0 | 10.1 | 6.28 | 10.0 | 20.1 | 5.92 | 1200.0 | 10.1 | 7.14 |
| 584.9 | 25.2 | 6.33 | 90.6 | 100.7 | 5.61 | 1159.7 | 50.4 | 7.10 |
| 569.7 | 40.4 | 6.30 | 171.2 | 181.3 | 5.44 | 1119.3 | 90.8 | 7.18 |
| 554.6 | 55.5 | 6.33 | 251.8 | 261.9 | 5.48 | 1099.2 | 110.9 | 7.13 |
| 539.5 | 70.6 | 6.37 | 332.3 | 342.4 | 5.57 | 1058.8 | 151.3 | 7.20 |
| 524.4 | 85.7 | 6.43 | 412.9 | 423.0 | 5.35 | 1038.6 | 171.5 | 7.23 |
| 509.2 | 100.9 | 6.34 | 493.5 | 503.6 | 5.37 | 998.3 | 211.8 | 7.11 |
| 494.1 | 116.0 | 6.34 | 574.1 | 584.2 | 5.41 | 978.1 | 232.0 | 7.12 |
| 479.0 | 131.1 | 6.35 | 654.7 | 664.8 | 5.45 | 937.8 | 272.3 | 7.03 |
| 463.8 | 146.3 | 6.32 | 735.3 | 745.4 | 5.43 | 917.6 | 292.5 | 7.06 |
| 448.7 | 161.4 | 6.37 | 815.9 | 826.0 | 5.52 | 877.3 | 332.8 | 6.96 |
| 433.6 | 176.5 | 6.38 | 896.5 | 906.6 | 5.56 | 857.1 | 353.0 | 6.92 |
| 418.5 | 191.6 | 6.38 | 977.0 | 987.1 | 5.51 | 816.8 | 393.3 | 6.98 |
| 403.3 | 206.8 | 6.37 | 1057.6 | 1067.7 | 5.61 | 796.6 | 413.5 | 6.97 |
| 388.2 | 221.9 | 6.29 | 1138.2 | 1148.3 | 5.69 | 756.3 | 453.8 | 6.88 |
| 373.1 | 237.0 | 6.28 | 1198.7 | 1208.8 | 5.82 | 736.1 | 474.0 | 6.84 |
| 357.9 | 252.2 | 6.26 | 1279.3 | 1289.4 | 6.03 | 695.8 | 514.3 | 6.75 |
| 342.8 | 267.3 | 6.29 | 1339.7 | 1349.8 | 6.11 | 675.6 | 534.5 | 6.78 |
| 327.7 | 282.4 | 6.30 | 1420.3 | 1430.4 | 6.40 | 635.3 | 574.8 | 6.83 |
| 312.6 | 297.5 | 6.33 | 1480.7 | 1490.8 | 6.57 | 615.1 | 595.0 | 6.81 |
| 297.4 | 312.7 | 6.33 | 1561.3 | 1571.4 | 6.83 | 574.7 | 635.4 | 6.69 |
| 282.3 | 327.8 | 6.19 | 1621.7 | 1631.8 | 7.06 | 554.6 | 655.5 | 6.71 |
| 267.2 | 342.9 | 6.20 | 1702.3 | 1712.4 | 7.13 | 514.2 | 695.9 | 6.65 |
| 252.1 | 358.0 | 6.29 | 1762.8 | 1772.9 | 7.12 | 494.1 | 716.0 | 6.56 |
| 236.9 | 373.2 | 6.18 | 1843.4 | 1853.5 | 7.23 | 453.7 | 756.4 | 6.55 |
| 221.8 | 388.3 | 6.15 | 1903.8 | 1913.9 | 7.30 | 433.6 | 776.5 | 6.56 |
| 206.7 | 403.4 | 6.23 | 1984.4 | 1994.5 | 7.52 | 393.2 | 816.9 | 6.51 |
| 191.5 | 418.6 | 6.15 | 2044.8 | 2054.9 | 7.77 | 373.1 | 837.0 | 6.48 |
| 176.4 | 433.7 | 6.09 | 2125.4 | 2135.5 | 8.06 | 332.7 | 877.4 | 6.52 |
| 161.3 | 448.8 | 6.09 | 2185.9 | 2196.0 | 8.21 | 312.5 | 897.6 | 6.52 |
| 146.2 | 463.9 | 6.13 | 2266.4 | 2276.5 | 8.48 | 272.2 | 937.9 | 6.51 |
| 131.0 | 479.1 | 6.16 | 2326.9 | 2337.0 | 8.52 | 252.0 | 958.1 | 6.59 |
| 115.9 | 494.2 | 6.17 | 2407.5 | 2417.6 | 8.85 | 211.7 | 998.4 | 6.56 |
| 100.8 | 509.3 | 6.21 | 2467.9 | 2478.0 | 9.06 | 191.5 | 1018.6 | 6.57 |
| 85.6 | 524.5 | 6.16 | 2548.5 | 2558.6 | 9.44 | 151.2 | 1058.9 | 6.59 |
| 70.5 | 539.6 | 6.10 | 2608.9 | 2619.0 | 9.48 | 131.0 | 1079.1 | 6.58 |
| 55.4 | 554.7 | 6.25 | 2689.5 | 2699.6 | 9.62 | 90.7 | 1119.4 | 6.69 |
| 40.3 | 569.8 | 6.19 | 2750.0 | 2760.1 | 9.79 | 70.5 | 1139.6 | 6.58 |
| 25.1 | 585.0 | 6.17 | 2830.6 | 2840.7 | 9.91 | 30.2 | 1179.9 | 6.77 |
| 10.0 | 600.1 | 6.61 | 2891.0 | 2901.1 | 10.02 | 10.0 | 1200.1 | 7.14 |

Frequency Mixer

SRA-173H+

Typical Performance Data

| LO (MHz) | LO-RF ISOLATION (dB) | | | LO-IF ISOLATION (dB) | | | RF (IN) (MHz) | LO (MHz) | RF-IF ISOLATION (dB) | | |
|-------------|-------------------------|-------|-------|-------------------------|-------|-------|---------------------|-------------|-------------------------|-------|-------|
| | @LO (dBm) | | | @LO (dBm) | | | | | @LO (dBm) | | |
| | +14 | +17 | +20 | +14 | +17 | +20 | | | +14 | +17 | +20 |
| 40.1 | 52.36 | 54.36 | 55.17 | 40.49 | 43.27 | 45.13 | 10.1 | 40.1 | 26.55 | 26.71 | 26.60 |
| 119.8 | 55.22 | 56.52 | 56.91 | 38.89 | 40.76 | 41.92 | 89.8 | 119.8 | 26.93 | 26.90 | 26.94 |
| 199.6 | 57.58 | 58.31 | 58.49 | 38.23 | 39.32 | 39.68 | 169.6 | 199.6 | 27.44 | 27.73 | 27.74 |
| 279.3 | 59.35 | 59.70 | 59.15 | 37.00 | 37.36 | 37.42 | 249.3 | 279.3 | 28.53 | 28.76 | 28.92 |
| 359.1 | 60.91 | 60.84 | 60.04 | 36.03 | 36.13 | 35.96 | 329.1 | 359.1 | 29.88 | 30.03 | 30.24 |
| 438.8 | 64.42 | 62.09 | 61.08 | 35.31 | 35.40 | 34.91 | 408.8 | 438.8 | 31.44 | 31.47 | 31.91 |
| 518.6 | 68.75 | 68.71 | 64.51 | 34.53 | 34.08 | 33.55 | 488.6 | 518.6 | 34.58 | 33.95 | 33.53 |
| 598.3 | 61.02 | 60.87 | 60.43 | 33.71 | 33.20 | 32.62 | 568.3 | 598.3 | 37.98 | 37.57 | 36.37 |
| 678.0 | 57.83 | 56.89 | 56.22 | 33.01 | 32.13 | 31.88 | 648.0 | 678.0 | 41.66 | 40.64 | 39.64 |
| 757.8 | 54.53 | 53.46 | 53.40 | 32.47 | 31.55 | 31.25 | 727.8 | 757.8 | 41.00 | 38.58 | 37.79 |
| 837.5 | 50.88 | 49.72 | 49.59 | 32.54 | 31.66 | 31.29 | 807.5 | 837.5 | 38.36 | 35.14 | 34.70 |
| 917.3 | 49.56 | 48.40 | 48.43 | 31.50 | 30.70 | 30.59 | 887.3 | 917.3 | 35.98 | 33.09 | 33.03 |
| 997.0 | 49.15 | 47.41 | 46.87 | 30.99 | 30.33 | 30.31 | 967.0 | 997.0 | 35.05 | 32.97 | 32.69 |
| 1076.7 | 48.42 | 47.27 | 46.76 | 31.07 | 30.54 | 30.57 | 1046.7 | 1076.7 | 35.05 | 32.65 | 32.54 |
| 1156.5 | 48.21 | 47.50 | 47.30 | 30.78 | 30.09 | 30.05 | 1126.5 | 1156.5 | 34.42 | 32.44 | 32.42 |
| 1236.2 | 47.46 | 47.09 | 46.55 | 30.58 | 30.20 | 30.32 | 1206.2 | 1236.2 | 36.15 | 34.53 | 34.79 |
| 1316.0 | 45.43 | 45.11 | 44.57 | 31.12 | 30.96 | 31.22 | 1286.0 | 1316.0 | 38.67 | 39.13 | 39.06 |
| 1395.7 | 38.84 | 38.29 | 37.82 | 32.66 | 33.00 | 33.52 | 1365.7 | 1395.7 | 40.02 | 49.43 | 55.81 |
| 1475.5 | 43.03 | 40.98 | 39.45 | 30.80 | 31.41 | 31.82 | 1445.5 | 1475.5 | 41.02 | 44.63 | 46.94 |
| 1555.2 | 64.70 | 53.41 | 48.48 | 32.15 | 32.91 | 33.42 | 1525.2 | 1555.2 | 41.39 | 43.74 | 42.14 |
| 1634.9 | 57.22 | 56.68 | 53.07 | 33.95 | 35.17 | 35.75 | 1604.9 | 1634.9 | 34.49 | 35.14 | 35.06 |
| 1714.7 | 53.99 | 54.77 | 53.76 | 34.85 | 36.84 | 38.30 | 1684.7 | 1714.7 | 32.84 | 33.36 | 33.59 |
| 1794.4 | 54.69 | 53.30 | 52.26 | 34.40 | 36.59 | 38.73 | 1764.4 | 1794.4 | 32.57 | 32.57 | 32.77 |
| 1874.2 | 48.88 | 47.95 | 47.83 | 34.60 | 37.36 | 39.67 | 1844.2 | 1874.2 | 33.32 | 32.83 | 32.59 |
| 1953.9 | 47.10 | 45.46 | 44.81 | 34.55 | 36.60 | 37.59 | 1923.9 | 1953.9 | 34.33 | 34.03 | 33.62 |
| 2033.6 | 48.64 | 46.20 | 44.45 | 33.33 | 35.05 | 35.73 | 2003.6 | 2033.6 | 34.32 | 33.70 | 33.11 |
| 2113.4 | 52.74 | 48.95 | 46.33 | 32.32 | 33.93 | 35.06 | 2083.4 | 2113.4 | 35.34 | 34.70 | 33.73 |
| 2193.1 | 53.98 | 51.95 | 49.47 | 32.33 | 34.14 | 35.51 | 2163.1 | 2193.1 | 33.16 | 33.60 | 33.87 |
| 2272.9 | 52.92 | 51.28 | 49.01 | 32.51 | 34.27 | 35.57 | 2242.9 | 2272.9 | 30.33 | 30.87 | 31.67 |
| 2352.6 | 50.00 | 48.70 | 47.01 | 33.55 | 35.55 | 36.61 | 2322.6 | 2352.6 | 28.84 | 29.15 | 29.58 |
| 2432.4 | 47.55 | 45.68 | 43.78 | 34.58 | 37.20 | 38.26 | 2402.4 | 2432.4 | 27.24 | 27.82 | 28.22 |
| 2512.1 | 43.86 | 42.69 | 41.53 | 34.98 | 37.50 | 38.11 | 2482.1 | 2512.1 | 26.13 | 26.72 | 27.04 |
| 2591.8 | 41.35 | 40.53 | 39.91 | 36.30 | 38.53 | 38.30 | 2561.8 | 2591.8 | 25.08 | 25.84 | 26.15 |
| 2671.6 | 38.96 | 38.33 | 38.02 | 37.15 | 39.49 | 38.66 | 2641.6 | 2671.6 | 23.76 | 24.41 | 24.79 |
| 2751.3 | 38.16 | 37.63 | 37.31 | 38.40 | 41.15 | 39.73 | 2721.3 | 2751.3 | 23.26 | 23.73 | 24.07 |
| 2831.1 | 37.55 | 37.11 | 36.51 | 38.26 | 40.81 | 39.18 | 2801.1 | 2831.1 | 25.73 | 26.15 | 26.44 |
| 2910.8 | 36.42 | 35.82 | 35.13 | 37.60 | 39.83 | 38.86 | 2880.8 | 2910.8 | 26.47 | 27.15 | 27.73 |
| 2990.6 | 36.11 | 35.29 | 34.19 | 37.85 | 39.97 | 38.60 | 2960.6 | 2990.6 | 26.67 | 27.42 | 28.10 |
| 3070.3 | 35.91 | 34.82 | 34.00 | 38.04 | 39.88 | 38.91 | 3040.3 | 3070.3 | 27.11 | 27.89 | 28.44 |
| 3130.1 | 35.83 | 34.54 | 33.80 | 38.40 | 39.94 | 39.01 | 3100.1 | 3130.1 | 27.87 | 28.71 | 29.14 |

Frequency Mixer

SRA-173H+

Typical Performance Data

| RF (IN) (MHz) | LO (MHz) | RF VSWR (:1) | | |
|---------------|----------|--------------|------|------|
| | | @LO (dBm) | | |
| | | +14 | +17 | +20 |
| 10.1 | 40.1 | 1.22 | 1.12 | 1.05 |
| 89.8 | 119.8 | 1.29 | 1.19 | 1.13 |
| 169.6 | 199.6 | 1.34 | 1.24 | 1.17 |
| 249.3 | 279.3 | 1.38 | 1.28 | 1.23 |
| 329.1 | 359.1 | 1.42 | 1.34 | 1.30 |
| 408.8 | 438.8 | 1.48 | 1.40 | 1.36 |
| 488.6 | 518.6 | 1.55 | 1.47 | 1.44 |
| 568.3 | 598.3 | 1.60 | 1.52 | 1.49 |
| 648.0 | 678.0 | 1.67 | 1.59 | 1.56 |
| 727.8 | 757.8 | 1.70 | 1.61 | 1.58 |
| 807.5 | 837.5 | 1.72 | 1.62 | 1.58 |
| 887.3 | 917.3 | 1.77 | 1.66 | 1.61 |
| 967.0 | 997.0 | 1.78 | 1.66 | 1.61 |
| 1046.7 | 1076.7 | 1.76 | 1.64 | 1.59 |
| 1126.5 | 1156.5 | 1.72 | 1.59 | 1.53 |
| 1206.2 | 1236.2 | 1.70 | 1.56 | 1.49 |
| 1286.0 | 1316.0 | 1.70 | 1.55 | 1.48 |
| 1365.7 | 1395.7 | 1.70 | 1.57 | 1.50 |
| 1445.5 | 1475.5 | 1.70 | 1.59 | 1.55 |
| 1525.2 | 1555.2 | 1.68 | 1.62 | 1.58 |
| 1604.9 | 1634.9 | 1.71 | 1.66 | 1.62 |
| 1684.7 | 1714.7 | 1.73 | 1.68 | 1.65 |
| 1764.4 | 1794.4 | 1.73 | 1.69 | 1.66 |
| 1844.2 | 1874.2 | 1.70 | 1.68 | 1.66 |
| 1923.9 | 1953.9 | 1.66 | 1.64 | 1.62 |
| 2003.6 | 2033.6 | 1.62 | 1.58 | 1.56 |
| 2083.4 | 2113.4 | 1.56 | 1.52 | 1.49 |
| 2163.1 | 2193.1 | 1.50 | 1.45 | 1.41 |
| 2242.9 | 2272.9 | 1.45 | 1.40 | 1.37 |
| 2322.6 | 2352.6 | 1.39 | 1.34 | 1.30 |
| 2402.4 | 2432.4 | 1.31 | 1.27 | 1.24 |
| 2482.1 | 2512.1 | 1.23 | 1.19 | 1.16 |
| 2561.8 | 2591.8 | 1.14 | 1.10 | 1.09 |
| 2641.6 | 2671.6 | 1.04 | 1.01 | 1.03 |
| 2721.3 | 2751.3 | 1.13 | 1.15 | 1.16 |
| 2801.1 | 2831.1 | 1.21 | 1.24 | 1.26 |
| 2880.8 | 2910.8 | 1.35 | 1.39 | 1.41 |
| 2960.6 | 2990.6 | 1.55 | 1.59 | 1.61 |
| 3040.3 | 3070.3 | 1.75 | 1.79 | 1.82 |
| 3100.1 | 3130.1 | 1.88 | 1.92 | 1.94 |

| LO (MHz) | LO VSWR (:1) | | |
|----------|--------------|------|------|
| | @LO (dBm) | | |
| | +14 | +17 | +20 |
| 40.1 | 1.49 | 2.12 | 2.78 |
| 119.8 | 1.44 | 2.02 | 2.62 |
| 199.6 | 1.39 | 1.91 | 2.48 |
| 279.3 | 1.34 | 1.83 | 2.36 |
| 359.1 | 1.30 | 1.77 | 2.27 |
| 438.8 | 1.23 | 1.68 | 2.16 |
| 518.6 | 1.19 | 1.59 | 2.04 |
| 598.3 | 1.14 | 1.49 | 1.90 |
| 678.0 | 1.13 | 1.37 | 1.75 |
| 757.8 | 1.14 | 1.27 | 1.62 |
| 837.5 | 1.18 | 1.19 | 1.52 |
| 917.3 | 1.25 | 1.18 | 1.49 |
| 997.0 | 1.33 | 1.25 | 1.52 |
| 1076.7 | 1.41 | 1.36 | 1.62 |
| 1156.5 | 1.48 | 1.48 | 1.75 |
| 1236.2 | 1.58 | 1.62 | 1.90 |
| 1316.0 | 1.67 | 1.75 | 2.03 |
| 1395.7 | 1.71 | 1.75 | 1.99 |
| 1475.5 | 1.64 | 1.82 | 2.12 |
| 1555.2 | 1.85 | 2.14 | 2.55 |
| 1634.9 | 1.93 | 2.30 | 2.75 |
| 1714.7 | 1.97 | 2.39 | 2.88 |
| 1794.4 | 1.98 | 2.43 | 2.94 |
| 1874.2 | 1.95 | 2.41 | 2.90 |
| 1953.9 | 1.84 | 2.28 | 2.72 |
| 2033.6 | 1.86 | 2.34 | 2.80 |
| 2113.4 | 1.90 | 2.39 | 2.86 |
| 2193.1 | 1.88 | 2.37 | 2.82 |
| 2272.9 | 1.83 | 2.29 | 2.71 |
| 2352.6 | 1.78 | 2.20 | 2.59 |
| 2432.4 | 1.75 | 2.14 | 2.51 |
| 2512.1 | 1.74 | 2.12 | 2.47 |
| 2591.8 | 1.77 | 2.13 | 2.47 |
| 2671.6 | 1.78 | 2.13 | 2.45 |
| 2751.3 | 1.79 | 2.12 | 2.42 |
| 2831.1 | 1.82 | 2.12 | 2.40 |
| 2910.8 | 1.86 | 2.13 | 2.39 |
| 2990.6 | 1.89 | 2.15 | 2.39 |
| 3070.3 | 1.94 | 2.17 | 2.40 |
| 3130.1 | 1.99 | 2.20 | 2.42 |

| IF (OUT) (MHz) | IF VSWR @LO=1200MHz (:1) | | |
|----------------|--------------------------|------|------|
| | @LO (dBm) | | |
| | +14 | +17 | +20 |
| 10.0 | 1.08 | 1.23 | 1.31 |
| 50.0 | 1.08 | 1.22 | 1.30 |
| 90.0 | 1.07 | 1.21 | 1.28 |
| 110.0 | 1.08 | 1.22 | 1.29 |
| 150.0 | 1.08 | 1.21 | 1.28 |
| 170.0 | 1.07 | 1.20 | 1.27 |
| 210.0 | 1.06 | 1.18 | 1.25 |
| 230.0 | 1.06 | 1.18 | 1.25 |
| 270.0 | 1.07 | 1.17 | 1.23 |
| 290.0 | 1.06 | 1.15 | 1.22 |
| 330.0 | 1.05 | 1.16 | 1.23 |
| 350.0 | 1.05 | 1.14 | 1.21 |
| 390.0 | 1.03 | 1.10 | 1.17 |
| 410.0 | 1.03 | 1.11 | 1.18 |
| 450.0 | 1.07 | 1.09 | 1.15 |
| 470.0 | 1.05 | 1.07 | 1.14 |
| 510.0 | 1.03 | 1.09 | 1.16 |
| 530.0 | 1.06 | 1.06 | 1.13 |
| 570.0 | 1.09 | 1.06 | 1.11 |
| 590.0 | 1.07 | 1.06 | 1.12 |
| 630.0 | 1.10 | 1.03 | 1.09 |
| 650.0 | 1.11 | 1.06 | 1.11 |
| 690.0 | 1.10 | 1.09 | 1.14 |
| 710.0 | 1.15 | 1.07 | 1.09 |
| 750.0 | 1.20 | 1.13 | 1.13 |
| 770.0 | 1.16 | 1.11 | 1.13 |
| 810.0 | 1.20 | 1.11 | 1.10 |
| 830.0 | 1.25 | 1.18 | 1.17 |
| 870.0 | 1.23 | 1.17 | 1.17 |
| 890.0 | 1.26 | 1.18 | 1.16 |
| 930.0 | 1.33 | 1.26 | 1.24 |
| 950.0 | 1.29 | 1.22 | 1.21 |
| 990.0 | 1.32 | 1.24 | 1.22 |
| 1010.0 | 1.39 | 1.32 | 1.30 |
| 1050.0 | 1.40 | 1.34 | 1.32 |
| 1070.0 | 1.41 | 1.33 | 1.30 |
| 1110.0 | 1.49 | 1.41 | 1.38 |
| 1130.0 | 1.47 | 1.41 | 1.39 |
| 1170.0 | 1.47 | 1.39 | 1.37 |
| 1190.0 | 1.59 | 1.52 | 1.50 |

Harmonics Tables

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | - | - | 4 | 29 | 16 | 34 | 17 | 39 | 23 | 40 | 28 | 35 |
| 1 | - | 34 | +0 | 35 | 11 | 38 | 21 | 37 | 25 | 41 | 35 | 48 |
| 2 | 72 | >79 | 73 | 67 | 70 | 62 | 56 | 67 | 52 | 74 | 56 | 74 |
| 3 | >90 | >79 | 64 | >79 | 65 | 76 | 63 | >79 | 66 | >79 | 77 | >79 |
| 4 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| 5 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| 6 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| 7 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| 8 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| 9 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| 10 | >90 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 | >79 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Test conditions: RF IN: 600 MHz; -5.00 dBm.
 LO IN: 630 MHz; +17.00 dBm
 IF OUT: 30 MHz; -11.38 dBm

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|-----|----|-----|----|-----|
| 0 | - | - | 14 | 39 | 27 | 46 | 31 | 47 | 36 | 49 | 40 | 47 |
| 1 | - | 34 | +0 | 34 | 11 | 38 | 22 | 39 | 26 | 44 | 36 | 58 |
| 2 | 52 | 65 | 54 | 63 | 51 | 54 | 45 | 60 | 42 | 63 | 48 | 68 |
| 3 | 85 | 66 | 53 | 63 | 51 | 76 | 45 | 65 | 47 | 57 | 57 | 57 |
| 4 | >90 | 79 | 64 | 74 | 67 | 73 | 65 | 67 | 68 | 69 | 62 | 78 |
| 5 | >90 | 80 | 65 | 80 | 60 | 76 | 64 | 77 | 61 | 81 | 67 | 84 |
| 6 | >90 | 85 | 74 | >89 | 71 | 87 | 76 | 80 | 76 | 79 | 73 | >89 |
| 7 | >90 | 88 | 82 | >89 | 84 | 82 | 75 | 80 | 72 | 81 | 71 | >89 |
| 8 | >90 | >89 | 88 | >89 | 84 | >89 | 77 | >89 | 78 | >89 | 77 | >89 |
| 9 | >90 | >89 | >89 | >89 | >89 | >89 | 86 | >89 | 86 | >89 | 85 | >89 |
| 10 | >90 | >89 | >89 | >89 | >89 | >89 | >89 | >89 | 85 | >89 | 85 | >89 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 600 MHz; 5.00 dBm.
 LO IN: 630 MHz; +17.00 dBm
 IF OUT: 30 MHz; -1.47 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.