

Frequency Mixer

MAC-42MH+

Typical Performance Data

| RF (IN) (MHz) | LO (MHz) | CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB) | | | RF (IN) (MHz) | LO (MHz) | IP-3 INPUT (dBm) | | | RF (IN) (MHz) | LO (MHz) | COMPRESSION @RF IN=+9dBm (dB) | | |
|---------------|----------|--|------|------|---------------|----------|------------------|-------|-------|---------------|----------|-------------------------------|------|------|
| | | @LO (dBm) | | | | | @LO (dBm) | | | | | @LO (dBm) | | |
| | | +10 | +13 | +16 | | | +10 | +13 | +16 | | | +10 | +13 | +16 |
| 1000.1 | 1030.1 | 5.76 | 5.45 | 5.26 | 1000.1 | 1030.1 | 19.34 | 19.38 | 19.07 | 1000.1 | 1030.1 | 2.38 | 2.19 | 2.04 |
| 1050.1 | 1080.1 | 5.88 | 5.59 | 5.44 | 1050.1 | 1080.1 | 19.45 | 19.47 | 18.79 | 1050.1 | 1080.1 | 2.21 | 2.00 | 1.82 |
| 1100.1 | 1130.1 | 6.11 | 5.78 | 5.56 | 1100.1 | 1130.1 | 16.92 | 17.87 | 18.44 | 1100.1 | 1130.1 | 1.85 | 1.72 | 1.62 |
| 1150.1 | 1180.1 | 6.12 | 5.96 | 5.83 | 1150.1 | 1180.1 | 16.73 | 16.98 | 17.03 | 1150.1 | 1180.1 | 1.59 | 1.43 | 1.33 |
| 1200.1 | 1230.1 | 6.08 | 5.95 | 5.85 | 1200.1 | 1230.1 | 16.71 | 18.91 | 19.61 | 1200.1 | 1230.1 | 1.48 | 1.35 | 1.24 |
| 1250.1 | 1280.1 | 6.06 | 5.94 | 5.89 | 1250.1 | 1280.1 | 17.09 | 17.93 | 18.24 | 1250.1 | 1280.1 | 1.18 | 1.09 | 1.02 |
| 1300.1 | 1330.1 | 5.94 | 5.90 | 5.86 | 1300.1 | 1330.1 | 18.13 | 18.04 | 18.75 | 1300.1 | 1330.1 | 1.01 | 0.91 | 0.90 |
| 1350.1 | 1380.1 | 5.93 | 5.92 | 5.94 | 1350.1 | 1380.1 | 21.25 | 18.06 | 18.92 | 1350.1 | 1380.1 | 0.87 | 0.75 | 0.75 |
| 1400.1 | 1430.1 | 5.70 | 5.67 | 5.76 | 1400.1 | 1430.1 | 19.93 | 22.96 | 19.99 | 1400.1 | 1430.1 | 0.92 | 0.78 | 0.69 |
| 1450.1 | 1480.1 | 5.82 | 5.78 | 5.79 | 1450.1 | 1480.1 | 19.26 | 20.76 | 22.89 | 1450.1 | 1480.1 | 0.86 | 0.73 | 0.65 |
| 1500.1 | 1530.1 | 5.84 | 5.75 | 5.75 | 1500.1 | 1530.1 | 19.48 | 20.51 | 22.26 | 1500.1 | 1530.1 | 0.91 | 0.77 | 0.66 |
| 1550.1 | 1580.1 | 6.17 | 5.98 | 5.91 | 1550.1 | 1580.1 | 25.77 | 22.13 | 23.43 | 1550.1 | 1580.1 | 0.69 | 0.59 | 0.50 |
| 1600.1 | 1630.1 | 6.01 | 5.91 | 5.88 | 1600.1 | 1630.1 | 19.32 | 20.87 | 23.24 | 1600.1 | 1630.1 | 0.70 | 0.55 | 0.46 |
| 1700.1 | 1730.1 | 6.20 | 6.02 | 5.94 | 1700.1 | 1730.1 | 22.05 | 20.66 | 23.51 | 1700.1 | 1730.1 | 0.73 | 0.63 | 0.50 |
| 1800.1 | 1830.1 | 6.06 | 6.00 | 5.98 | 1800.1 | 1830.1 | 26.20 | 28.34 | 27.19 | 1800.1 | 1830.1 | 0.56 | 0.43 | 0.35 |
| 1900.1 | 1930.1 | 5.95 | 5.92 | 5.88 | 1900.1 | 1930.1 | 21.56 | 23.90 | 24.85 | 1900.1 | 1930.1 | 0.61 | 0.45 | 0.39 |
| 2000.1 | 2030.1 | 6.03 | 5.95 | 5.92 | 2000.1 | 2030.1 | 19.47 | 20.11 | 20.80 | 2000.1 | 2030.1 | 0.70 | 0.54 | 0.43 |
| 2100.1 | 2130.1 | 6.05 | 5.91 | 5.81 | 2100.1 | 2130.1 | 18.18 | 19.01 | 19.80 | 2100.1 | 2130.1 | 0.86 | 0.72 | 0.62 |
| 2200.1 | 2230.1 | 6.15 | 5.90 | 5.76 | 2200.1 | 2230.1 | 17.24 | 18.41 | 19.22 | 2200.1 | 2230.1 | 1.15 | 1.04 | 0.93 |
| 2300.1 | 2330.1 | 6.27 | 5.97 | 5.79 | 2300.1 | 2330.1 | 15.02 | 15.41 | 16.55 | 2300.1 | 2330.1 | 1.24 | 1.10 | 1.00 |
| 2400.1 | 2430.1 | 5.68 | 5.53 | 5.43 | 2400.1 | 2430.1 | 17.24 | 18.25 | 18.39 | 2400.1 | 2430.1 | 0.99 | 0.83 | 0.73 |
| 2500.1 | 2530.1 | 6.13 | 5.80 | 5.63 | 2500.1 | 2530.1 | 16.54 | 16.49 | 16.98 | 2500.1 | 2530.1 | 1.13 | 0.99 | 0.88 |
| 2600.1 | 2630.1 | 6.23 | 6.05 | 5.94 | 2600.1 | 2630.1 | 16.94 | 17.24 | 17.99 | 2600.1 | 2630.1 | 1.15 | 0.97 | 0.87 |
| 2700.1 | 2730.1 | 6.24 | 5.92 | 5.68 | 2700.1 | 2730.1 | 15.00 | 15.43 | 15.53 | 2700.1 | 2730.1 | 1.13 | 1.10 | 1.11 |
| 2800.1 | 2830.1 | 6.11 | 5.84 | 5.69 | 2800.1 | 2830.1 | 14.09 | 15.15 | 16.36 | 2800.1 | 2830.1 | 1.18 | 1.04 | 0.93 |
| 2900.1 | 2930.1 | 5.51 | 5.49 | 5.53 | 2900.1 | 2930.1 | 20.86 | 20.52 | 19.49 | 2900.1 | 2930.1 | 0.95 | 0.78 | 0.72 |
| 3000.1 | 3030.1 | 5.46 | 5.45 | 5.49 | 3000.1 | 3030.1 | 20.50 | 22.00 | 21.32 | 3000.1 | 3030.1 | 0.73 | 0.65 | 0.66 |
| 3100.1 | 3130.1 | 5.57 | 5.55 | 5.61 | 3100.1 | 3130.1 | 19.00 | 21.64 | 22.11 | 3100.1 | 3130.1 | 0.40 | 0.37 | 0.40 |
| 3200.1 | 3230.1 | 5.54 | 5.53 | 5.63 | 3200.1 | 3230.1 | 20.06 | 21.28 | 22.22 | 3200.1 | 3230.1 | 0.38 | 0.29 | 0.25 |
| 3300.1 | 3330.1 | 5.60 | 5.67 | 5.78 | 3300.1 | 3330.1 | 18.45 | 22.65 | 25.38 | 3300.1 | 3330.1 | 0.42 | 0.21 | 0.17 |
| 3400.1 | 3430.1 | 5.71 | 5.74 | 5.83 | 3400.1 | 3430.1 | 21.39 | 21.89 | 23.34 | 3400.1 | 3430.1 | 1.18 | 0.78 | 0.54 |
| 3500.1 | 3530.1 | 6.20 | 5.97 | 5.96 | 3500.1 | 3530.1 | 22.81 | 20.10 | 20.99 | 3500.1 | 3530.1 | 1.03 | 0.93 | 0.77 |
| 3600.1 | 3630.1 | 6.08 | 5.84 | 5.79 | 3600.1 | 3630.1 | 22.78 | 21.16 | 20.81 | 3600.1 | 3630.1 | 0.93 | 0.75 | 0.58 |
| 3700.1 | 3730.1 | 6.73 | 6.41 | 6.22 | 3700.1 | 3730.1 | 23.00 | 22.48 | 21.47 | 3700.1 | 3730.1 | 0.71 | 0.65 | 0.65 |
| 3800.1 | 3830.1 | 6.55 | 6.25 | 6.09 | 3800.1 | 3830.1 | 19.55 | 19.72 | 19.24 | 3800.1 | 3830.1 | 0.83 | 0.79 | 0.80 |
| 3900.1 | 3930.1 | 6.41 | 6.14 | 6.01 | 3900.1 | 3930.1 | 18.67 | 19.39 | 19.08 | 3900.1 | 3930.1 | 1.00 | 0.96 | 0.97 |
| 3950.1 | 3980.1 | 6.73 | 6.38 | 6.26 | 3950.1 | 3980.1 | 18.57 | 19.91 | 19.46 | 3950.1 | 3980.1 | 0.77 | 0.81 | 0.81 |
| 4000.1 | 4030.1 | 6.83 | 6.40 | 6.23 | 4000.1 | 4030.1 | 17.54 | 19.13 | 19.55 | 4000.1 | 4030.1 | 0.77 | 0.80 | 0.85 |
| 4100.1 | 4130.1 | 6.63 | 6.34 | 6.20 | 4100.1 | 4130.1 | 17.20 | 18.92 | 19.46 | 4100.1 | 4130.1 | 0.94 | 0.92 | 0.94 |
| 4200.1 | 4230.1 | 6.66 | 6.33 | 6.26 | 4200.1 | 4230.1 | 15.78 | 18.12 | 19.03 | 4200.1 | 4230.1 | 0.91 | 0.91 | 0.91 |

Typical Performance Data

| IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2600.1MHz (dB) | IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1000.1MHz (dB) | IF (OUT) (MHz) | LO (MHz) | CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=4200.1MHz (dB) |
|----------------|----------|---|----------------|----------|---|----------------|----------|---|
| | | @LO (dBm) | | | @LO (dBm) | | | @LO (dBm) |
| | | +10 | | | +13 | | | +13 |
| 1800.0 | 800.1 | 11.73 | 20.0 | 1020.1 | 5.77 | 1900.0 | 2300.1 | 16.01 |
| 1600.0 | 1000.1 | 9.50 | 30.0 | 1030.1 | 5.58 | 1800.0 | 2400.1 | 12.00 |
| 1400.0 | 1200.1 | 7.69 | 40.0 | 1040.1 | 5.70 | 1700.0 | 2500.1 | 9.67 |
| 1200.0 | 1400.1 | 5.86 | 50.0 | 1050.1 | 5.62 | 1600.0 | 2600.1 | 9.16 |
| 1000.0 | 1600.1 | 7.22 | 60.0 | 1060.1 | 5.58 | 1500.0 | 2700.1 | 8.86 |
| 800.0 | 1800.1 | 6.77 | 70.0 | 1070.1 | 5.49 | 1400.0 | 2800.1 | 8.45 |
| 600.0 | 2000.1 | 6.57 | 80.0 | 1080.1 | 5.47 | 1300.0 | 2900.1 | 7.27 |
| 400.0 | 2200.1 | 5.83 | 90.0 | 1090.1 | 5.53 | 1200.0 | 3000.1 | 7.52 |
| 240.0 | 2360.1 | 5.92 | 100.0 | 1100.1 | 5.49 | 1100.0 | 3100.1 | 7.50 |
| 220.0 | 2380.1 | 5.96 | 110.0 | 1110.1 | 5.44 | 1000.0 | 3200.1 | 7.44 |
| 200.0 | 2400.1 | 5.97 | 120.0 | 1120.1 | 5.34 | 900.0 | 3300.1 | 7.33 |
| 180.0 | 2420.1 | 6.16 | 130.0 | 1130.1 | 5.54 | 800.0 | 3400.1 | 7.14 |
| 160.0 | 2440.1 | 6.18 | 140.0 | 1140.1 | 5.64 | 700.0 | 3500.1 | 7.01 |
| 140.0 | 2460.1 | 6.33 | 150.0 | 1150.1 | 5.61 | 600.0 | 3600.1 | 6.84 |
| 120.0 | 2480.1 | 6.33 | 160.0 | 1160.1 | 5.61 | 500.0 | 3700.1 | 6.72 |
| 100.0 | 2500.1 | 6.37 | 170.0 | 1170.1 | 5.63 | 400.0 | 3800.1 | 6.74 |
| 80.0 | 2520.1 | 6.51 | 180.0 | 1180.1 | 5.75 | 300.0 | 3900.1 | 6.42 |
| 60.0 | 2540.1 | 6.44 | 190.0 | 1190.1 | 5.76 | 240.0 | 3960.1 | 6.46 |
| 40.0 | 2560.1 | 6.36 | 200.0 | 1200.1 | 5.73 | 230.0 | 3970.1 | 6.40 |
| 20.0 | 2580.1 | 6.30 | 210.0 | 1210.1 | 5.63 | 220.0 | 3980.1 | 6.37 |
| 20.0 | 2620.1 | 6.24 | 220.0 | 1220.1 | 5.59 | 210.0 | 3990.1 | 6.42 |
| 40.0 | 2640.1 | 6.15 | 230.0 | 1230.1 | 5.61 | 200.0 | 4000.1 | 6.44 |
| 60.0 | 2660.1 | 6.06 | 300.0 | 1300.1 | 5.66 | 190.0 | 4010.1 | 6.41 |
| 80.0 | 2680.1 | 6.07 | 400.0 | 1400.1 | 5.72 | 180.0 | 4020.1 | 6.36 |
| 100.0 | 2700.1 | 6.14 | 500.0 | 1500.1 | 5.58 | 170.0 | 4030.1 | 6.40 |
| 120.0 | 2720.1 | 6.25 | 600.0 | 1600.1 | 6.19 | 160.0 | 4040.1 | 6.43 |
| 140.0 | 2740.1 | 6.31 | 700.0 | 1700.1 | 5.88 | 150.0 | 4050.1 | 6.48 |
| 160.0 | 2760.1 | 6.24 | 800.0 | 1800.1 | 5.65 | 140.0 | 4060.1 | 6.44 |
| 180.0 | 2780.1 | 6.34 | 900.0 | 1900.1 | 5.76 | 130.0 | 4070.1 | 6.37 |
| 200.0 | 2800.1 | 6.31 | 1000.0 | 2000.1 | 5.99 | 120.0 | 4080.1 | 6.38 |
| 220.0 | 2820.1 | 6.27 | 1100.0 | 2100.1 | 6.18 | 110.0 | 4090.1 | 6.42 |
| 240.0 | 2840.1 | 6.07 | 1200.0 | 2200.1 | 6.74 | 100.0 | 4100.1 | 6.47 |
| 400.0 | 3000.1 | 5.75 | 1300.0 | 2300.1 | 6.81 | 90.0 | 4110.1 | 6.49 |
| 600.0 | 3200.1 | 5.41 | 1400.0 | 2400.1 | 7.16 | 80.0 | 4120.1 | 6.38 |
| 800.0 | 3400.1 | 5.72 | 1500.0 | 2500.1 | 7.64 | 70.0 | 4130.1 | 6.43 |
| 1000.0 | 3600.1 | 6.17 | 1600.0 | 2600.1 | 8.35 | 60.0 | 4140.1 | 6.39 |
| 1200.0 | 3800.1 | 6.43 | 1700.0 | 2700.1 | 8.85 | 50.0 | 4150.1 | 6.47 |
| 1400.0 | 4000.1 | 6.46 | 1800.0 | 2800.1 | 10.41 | 40.0 | 4160.1 | 6.43 |
| 1600.0 | 4200.1 | 7.89 | 1900.0 | 2900.1 | 14.10 | 30.0 | 4170.1 | 6.38 |
| 1800.0 | 4400.1 | 12.78 | 2000.0 | 3000.1 | 17.48 | 20.0 | 4180.1 | 6.37 |

Frequency Mixer

MAC-42MH+

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) | | |
| | +10 | +13 | +16 | +10 | +13 | +16 | | | +10 | +13 | +16 |
| 1030.1 | 31.82 | 32.12 | 32.48 | 18.99 | 21.53 | 23.60 | 1000.1 | 1030.1 | 12.73 | 12.46 | 12.29 |
| 1080.1 | 33.30 | 33.35 | 33.58 | 19.70 | 22.39 | 24.48 | 1050.1 | 1080.1 | 14.52 | 14.16 | 13.96 |
| 1130.1 | 35.75 | 35.42 | 35.29 | 20.66 | 23.21 | 25.06 | 1100.1 | 1130.1 | 16.95 | 16.36 | 15.98 |
| 1180.1 | 38.83 | 38.15 | 37.63 | 21.13 | 23.56 | 25.14 | 1150.1 | 1180.1 | 19.46 | 19.05 | 18.75 |
| 1230.1 | 40.66 | 40.00 | 39.33 | 21.76 | 23.98 | 25.03 | 1200.1 | 1230.1 | 22.07 | 21.46 | 21.15 |
| 1280.1 | 43.33 | 42.41 | 42.19 | 22.04 | 23.98 | 24.69 | 1250.1 | 1280.1 | 26.76 | 25.51 | 24.61 |
| 1330.1 | 45.99 | 42.83 | 41.02 | 22.91 | 24.08 | 24.21 | 1300.1 | 1330.1 | 31.19 | 29.80 | 28.79 |
| 1380.1 | 47.30 | 42.65 | 39.20 | 23.10 | 23.57 | 23.31 | 1350.1 | 1380.1 | 28.48 | 26.48 | 25.47 |
| 1430.1 | 44.96 | 41.57 | 37.24 | 23.39 | 23.42 | 22.91 | 1400.1 | 1430.1 | 25.21 | 23.60 | 22.40 |
| 1480.1 | 44.72 | 42.09 | 38.84 | 23.60 | 23.33 | 22.75 | 1450.1 | 1480.1 | 24.56 | 23.03 | 21.70 |
| 1530.1 | 42.89 | 40.87 | 38.06 | 23.42 | 22.92 | 22.32 | 1500.1 | 1530.1 | 22.95 | 21.67 | 20.44 |
| 1580.1 | 43.88 | 41.67 | 39.82 | 24.25 | 23.74 | 22.99 | 1550.1 | 1580.1 | 21.68 | 20.47 | 19.62 |
| 1630.1 | 40.65 | 38.60 | 37.53 | 26.06 | 24.85 | 23.27 | 1600.1 | 1630.1 | 20.73 | 20.13 | 19.61 |
| 1730.1 | 39.71 | 38.47 | 37.76 | 24.22 | 23.23 | 22.45 | 1700.1 | 1730.1 | 21.73 | 21.00 | 20.47 |
| 1830.1 | 41.78 | 39.95 | 38.67 | 23.19 | 22.50 | 21.97 | 1800.1 | 1830.1 | 21.33 | 20.99 | 20.72 |
| 1930.1 | 40.07 | 38.95 | 38.10 | 22.08 | 22.52 | 22.69 | 1900.1 | 1930.1 | 21.65 | 21.38 | 21.09 |
| 2030.1 | 38.80 | 38.08 | 37.41 | 20.44 | 22.07 | 23.46 | 2000.1 | 2030.1 | 21.72 | 21.44 | 21.23 |
| 2130.1 | 37.75 | 37.25 | 36.68 | 19.01 | 21.21 | 23.23 | 2100.1 | 2130.1 | 23.56 | 23.32 | 23.15 |
| 2230.1 | 38.47 | 36.70 | 35.52 | 18.80 | 20.03 | 20.52 | 2200.1 | 2230.1 | 30.43 | 30.25 | 30.21 |
| 2330.1 | 39.13 | 37.40 | 35.25 | 20.45 | 19.99 | 19.12 | 2300.1 | 2330.1 | 28.86 | 28.62 | 28.54 |
| 2430.1 | 39.14 | 36.48 | 34.40 | 22.39 | 20.30 | 18.77 | 2400.1 | 2430.1 | 22.26 | 22.03 | 21.87 |
| 2530.1 | 40.62 | 38.83 | 36.49 | 23.79 | 20.91 | 19.04 | 2500.1 | 2530.1 | 19.73 | 19.48 | 19.27 |
| 2630.1 | 40.25 | 37.50 | 35.69 | 24.93 | 21.18 | 19.15 | 2600.1 | 2630.1 | 17.07 | 16.79 | 16.66 |
| 2730.1 | 37.97 | 39.05 | 38.49 | 24.95 | 21.62 | 20.22 | 2700.1 | 2730.1 | 16.13 | 15.79 | 15.47 |
| 2830.1 | 38.87 | 40.49 | 39.60 | 24.89 | 21.72 | 20.26 | 2800.1 | 2830.1 | 15.51 | 15.05 | 14.67 |
| 2930.1 | 36.13 | 38.36 | 42.37 | 24.90 | 22.42 | 21.25 | 2900.1 | 2930.1 | 14.69 | 14.50 | 14.42 |
| 3030.1 | 37.36 | 38.56 | 38.05 | 26.29 | 24.61 | 23.67 | 3000.1 | 3030.1 | 14.88 | 14.74 | 14.61 |
| 3130.1 | 38.43 | 38.22 | 37.16 | 26.39 | 26.10 | 26.18 | 3100.1 | 3130.1 | 16.04 | 16.10 | 16.10 |
| 3230.1 | 38.39 | 36.79 | 34.82 | 26.35 | 26.71 | 27.44 | 3200.1 | 3230.1 | 16.86 | 16.83 | 16.82 |
| 3330.1 | 36.88 | 35.40 | 32.94 | 25.96 | 26.77 | 27.95 | 3300.1 | 3330.1 | 17.38 | 17.25 | 17.24 |
| 3430.1 | 35.33 | 34.36 | 32.95 | 26.40 | 27.91 | 29.40 | 3400.1 | 3430.1 | 18.85 | 18.91 | 19.05 |
| 3530.1 | 33.01 | 33.07 | 31.92 | 25.48 | 26.69 | 27.82 | 3500.1 | 3530.1 | 30.98 | 31.04 | 31.42 |
| 3630.1 | 31.49 | 31.14 | 30.94 | 24.35 | 25.88 | 27.87 | 3600.1 | 3630.1 | 19.75 | 19.68 | 19.78 |
| 3730.1 | 30.44 | 29.56 | 29.17 | 22.49 | 24.37 | 26.61 | 3700.1 | 3730.1 | 33.33 | 33.06 | 32.74 |
| 3830.1 | 29.89 | 29.25 | 28.54 | 22.23 | 24.07 | 25.90 | 3800.1 | 3830.1 | 22.03 | 21.71 | 21.91 |
| 3930.1 | 30.27 | 30.15 | 28.88 | 22.78 | 25.14 | 26.67 | 3900.1 | 3930.1 | 31.71 | 34.23 | 39.49 |
| 3980.1 | 28.88 | 29.45 | 28.79 | 20.60 | 22.15 | 23.84 | 3950.1 | 3980.1 | 33.71 | 34.07 | 33.13 |
| 4030.1 | 28.61 | 28.98 | 28.57 | 18.97 | 20.25 | 21.96 | 4000.1 | 4030.1 | 31.53 | 30.65 | 30.01 |
| 4130.1 | 28.55 | 28.49 | 28.15 | 16.56 | 17.52 | 19.24 | 4100.1 | 4130.1 | 32.02 | 29.21 | 27.34 |
| 4230.1 | 28.74 | 29.07 | 28.39 | 14.72 | 15.22 | 16.68 | 4200.1 | 4230.1 | 30.29 | 30.47 | 29.94 |

Typical Performance Data

| RF (IN) (MHz) | LO (MHz) | RF VSWR (:1) | | | LO (MHz) | LO VSWR (:1) | | | IF (OUT) (MHz) | IF VSWR @LO=4200MHz (:1) | | |
|---------------|----------|--------------|------|------|----------|--------------|------|------|----------------|--------------------------|------|------|
| | | @LO (dBm) | | | | @LO (dBm) | | | | @LO (dBm) | | |
| | | +10 | +13 | +16 | | +10 | +13 | +16 | | +10 | +13 | +16 |
| 1000.1 | 1030.1 | 2.64 | 2.46 | 2.34 | 1030.1 | 3.77 | 4.69 | 5.75 | 10.1 | 1.02 | 1.23 | 1.42 |
| 1050.1 | 1080.1 | 3.09 | 2.92 | 2.79 | 1080.1 | 3.25 | 4.12 | 5.12 | 20.1 | 1.12 | 1.41 | 1.56 |
| 1100.1 | 1130.1 | 3.45 | 3.27 | 3.13 | 1130.1 | 2.92 | 3.75 | 4.69 | 30.1 | 1.10 | 1.38 | 1.53 |
| 1150.1 | 1180.1 | 3.64 | 3.54 | 3.44 | 1180.1 | 2.63 | 3.40 | 4.28 | 40.1 | 1.11 | 1.38 | 1.54 |
| 1200.1 | 1230.1 | 3.51 | 3.41 | 3.34 | 1230.1 | 2.48 | 3.22 | 4.05 | 50.1 | 1.11 | 1.37 | 1.54 |
| 1250.1 | 1280.1 | 3.51 | 3.39 | 3.33 | 1280.1 | 2.31 | 3.03 | 3.81 | 60.1 | 1.11 | 1.35 | 1.51 |
| 1300.1 | 1330.1 | 3.44 | 3.30 | 3.25 | 1330.1 | 2.24 | 2.95 | 3.72 | 70.1 | 1.09 | 1.29 | 1.47 |
| 1350.1 | 1380.1 | 3.28 | 3.09 | 3.01 | 1380.1 | 2.17 | 2.84 | 3.56 | 80.1 | 1.13 | 1.33 | 1.49 |
| 1400.1 | 1430.1 | 3.17 | 2.92 | 2.74 | 1430.1 | 2.22 | 2.89 | 3.63 | 90.1 | 1.13 | 1.34 | 1.49 |
| 1450.1 | 1480.1 | 3.36 | 3.10 | 2.87 | 1480.1 | 2.28 | 2.93 | 3.67 | 100.1 | 1.13 | 1.33 | 1.48 |
| 1500.1 | 1530.1 | 3.28 | 3.02 | 2.78 | 1530.1 | 2.39 | 3.08 | 3.84 | 110.1 | 1.16 | 1.34 | 1.48 |
| 1550.1 | 1580.1 | 3.29 | 2.99 | 2.75 | 1580.1 | 2.60 | 3.31 | 4.09 | 200.1 | 1.24 | 1.33 | 1.45 |
| 1600.1 | 1630.1 | 3.14 | 2.91 | 2.73 | 1630.1 | 2.79 | 3.54 | 4.39 | 300.1 | 1.38 | 1.40 | 1.47 |
| 1700.1 | 1730.1 | 3.19 | 2.92 | 2.74 | 1730.1 | 3.16 | 4.08 | 5.09 | 400.1 | 1.50 | 1.43 | 1.46 |
| 1800.1 | 1830.1 | 2.78 | 2.68 | 2.59 | 1830.1 | 3.24 | 4.23 | 5.35 | 500.1 | 1.65 | 1.48 | 1.44 |
| 1900.1 | 1930.1 | 2.68 | 2.56 | 2.47 | 1930.1 | 3.37 | 4.36 | 5.47 | 600.1 | 1.86 | 1.58 | 1.47 |
| 2000.1 | 2030.1 | 2.59 | 2.45 | 2.33 | 2030.1 | 3.67 | 4.56 | 5.57 | 700.1 | 2.09 | 1.74 | 1.58 |
| 2100.1 | 2130.1 | 2.59 | 2.43 | 2.30 | 2130.1 | 3.89 | 4.72 | 5.65 | 800.1 | 2.33 | 1.92 | 1.74 |
| 2200.1 | 2230.1 | 2.59 | 2.41 | 2.28 | 2230.1 | 4.21 | 4.85 | 5.67 | 900.1 | 2.36 | 1.94 | 1.76 |
| 2300.1 | 2330.1 | 2.51 | 2.24 | 2.07 | 2330.1 | 4.42 | 4.91 | 5.54 | 1000.1 | 2.34 | 1.92 | 1.74 |
| 2400.1 | 2430.1 | 2.02 | 1.85 | 1.70 | 2430.1 | 4.38 | 4.78 | 5.33 | 1100.1 | 2.34 | 1.95 | 1.80 |
| 2500.1 | 2530.1 | 2.32 | 2.07 | 1.89 | 2530.1 | 4.28 | 4.48 | 4.91 | 1200.1 | 2.24 | 1.98 | 1.88 |
| 2600.1 | 2630.1 | 2.30 | 2.07 | 1.93 | 2630.1 | 3.98 | 4.06 | 4.45 | 1300.1 | 2.26 | 2.18 | 2.17 |
| 2700.1 | 2730.1 | 2.48 | 2.24 | 2.03 | 2730.1 | 3.99 | 4.07 | 4.38 | 1400.1 | 2.55 | 2.60 | 2.66 |
| 2800.1 | 2830.1 | 2.33 | 2.11 | 1.96 | 2830.1 | 3.29 | 3.40 | 3.78 | 1500.1 | 2.85 | 3.08 | 3.23 |
| 2900.1 | 2930.1 | 1.97 | 1.91 | 1.88 | 2930.1 | 2.66 | 2.90 | 3.34 | 1600.1 | 3.43 | 3.85 | 4.09 |
| 3000.1 | 3030.1 | 2.03 | 1.96 | 1.93 | 3030.1 | 3.08 | 2.94 | 3.21 | 1700.1 | 4.50 | 5.05 | 5.37 |
| 3100.1 | 3130.1 | 2.04 | 1.95 | 1.91 | 3130.1 | 3.14 | 2.84 | 2.99 | 1800.1 | 6.09 | 6.72 | 7.08 |
| 3200.1 | 3230.1 | 2.05 | 1.94 | 1.89 | 3230.1 | 3.06 | 2.70 | 2.82 | 1900.1 | 7.67 | 8.19 | 8.46 |
| 3300.1 | 3330.1 | 1.90 | 1.78 | 1.73 | 3330.1 | 2.83 | 2.51 | 2.71 | 2000.1 | 7.69 | 7.89 | 7.96 |
| 3400.1 | 3430.1 | 1.99 | 1.77 | 1.66 | 3430.1 | 2.75 | 2.53 | 2.72 | 2100.1 | 5.81 | 5.88 | 5.89 |
| 3500.1 | 3530.1 | 2.76 | 2.40 | 2.22 | 3530.1 | 2.73 | 2.53 | 2.74 | 2200.1 | 4.89 | 4.98 | 5.03 |
| 3600.1 | 3630.1 | 3.02 | 2.60 | 2.31 | 3630.1 | 2.81 | 2.67 | 2.86 | 2300.1 | 6.21 | 6.34 | 6.41 |
| 3700.1 | 3730.1 | 3.65 | 3.29 | 2.97 | 3730.1 | 2.97 | 2.83 | 3.03 | 2400.1 | 7.85 | 7.93 | 7.99 |
| 3800.1 | 3830.1 | 3.51 | 3.18 | 2.89 | 3830.1 | 3.21 | 3.05 | 3.22 | 2500.1 | 7.96 | 7.93 | 7.93 |
| 3900.1 | 3930.1 | 3.49 | 3.16 | 2.90 | 3930.1 | 3.59 | 3.27 | 3.37 | 2600.1 | 6.87 | 6.66 | 6.60 |
| 3950.1 | 3980.1 | 3.41 | 3.09 | 2.84 | 3980.1 | 3.85 | 3.29 | 3.26 | 2700.1 | 5.42 | 5.09 | 4.95 |
| 4000.1 | 4030.1 | 3.73 | 3.30 | 3.05 | 4030.1 | 4.18 | 3.49 | 3.47 | 2800.1 | 4.08 | 3.67 | 3.48 |
| 4100.1 | 4130.1 | 3.30 | 2.98 | 2.78 | 4130.1 | 4.44 | 3.61 | 3.46 | 2900.1 | 3.15 | 2.73 | 2.53 |
| 4200.1 | 4230.1 | 3.20 | 2.84 | 2.66 | 4230.1 | 4.73 | 3.57 | 3.30 | 3000.1 | 2.91 | 2.54 | 2.36 |

Harmonics Tables

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | --- | --- | -13.09 | 7.75 | 4.52 | 22.95 | 12.29 | 35.83 | 31.51 | 45.59 | 44.56 | 43.90 |
| 1 | --- | 21.20 | --- | 44.76 | 13.51 | 29.06 | 38.00 | 40.94 | 54.66 | 53.60 | 70.40 | 78.60 |
| 2 | 124.87 | 64.81 | 64.24 | 69.12 | 58.37 | 62.80 | 61.96 | 69.45 | 68.36 | 78.06 | 83.98 | 79.45 |
| 3 | 130.40 | 81.70 | 75.60 | 92.97 | 84.00 | 97.37 | 87.04 | 84.35 | 87.47 | 94.09 | 97.47 | 95.96 |
| 4 | 129.19 | 98.77 | 99.27 | 98.96 | 100.06 | 96.94 | 99.03 | 97.93 | 100.25 | 99.21 | 98.32 | 99.68 |
| 5 | 131.22 | 99.36 | 99.48 | 97.34 | 99.60 | 101.09 | 93.81 | 100.52 | 99.33 | 100.10 | 100.12 | 98.81 |
| 6 | 127.42 | 96.12 | 99.00 | 99.62 | 97.95 | 98.45 | 99.81 | 99.27 | 100.38 | 100.77 | 99.58 | 98.80 |
| 7 | 125.67 | 94.34 | 96.41 | 99.99 | 99.24 | 97.90 | 98.82 | 100.13 | 94.53 | 98.83 | 97.56 | 96.54 |
| 8 | 126.48 | 94.35 | 87.03 | 97.73 | 97.56 | 93.26 | 65.19 | 61.57 | 84.73 | 73.46 | 77.47 | 84.36 |
| 9 | 123.38 | 93.87 | 95.23 | 96.69 | 99.82 | 98.04 | 100.65 | 99.98 | 94.92 | 102.01 | 98.62 | 100.80 |
| 10 | 123.46 | 91.44 | 96.38 | 95.72 | 96.33 | 95.16 | 98.21 | 99.49 | 99.71 | 98.19 | 99.42 | 100.63 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 2150 MHz; -15 dBm.
 LO IN: 2180 MHz; +13.00 dBm
 IF OUT: 30.00 MHz; -20.73 dBm

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | --- | --- | -3.17 | 17.86 | 14.22 | 33.22 | 22.86 | 43.75 | 40.30 | 62.08 | 54.14 | 62.06 |
| 1 | --- | 21.13 | --- | 45.12 | 13.64 | 29.11 | 38.22 | 39.89 | 50.54 | 53.45 | 68.88 | 78.49 |
| 2 | 112.72 | 55.04 | 54.85 | 59.61 | 48.71 | 53.70 | 52.26 | 59.98 | 59.12 | 71.81 | 74.19 | 71.56 |
| 3 | 118.93 | 60.67 | 55.68 | 71.85 | 63.67 | 78.21 | 67.45 | 63.76 | 69.32 | 80.16 | 79.17 | 87.14 |
| 4 | 121.53 | 99.81 | 86.09 | 93.33 | 98.39 | 91.85 | 89.26 | 87.03 | 82.40 | 91.37 | 93.46 | 84.17 |
| 5 | 119.34 | 98.21 | 108.32 | 99.53 | 104.17 | 109.09 | 102.23 | 110.12 | 97.98 | 109.60 | 105.88 | 108.25 |
| 6 | 119.64 | 107.28 | 109.63 | 110.10 | 108.49 | 109.54 | 102.70 | 109.38 | 109.68 | 108.36 | 104.63 | 108.72 |
| 7 | 117.79 | 105.52 | 107.68 | 109.54 | 109.28 | 109.85 | 89.57 | 109.92 | 86.63 | 110.65 | 92.96 | 107.08 |
| 8 | 117.37 | 106.74 | 106.61 | 106.03 | 83.90 | 77.83 | 48.71 | 64.64 | 80.47 | 81.97 | 79.67 | 81.11 |
| 9 | 114.80 | 105.00 | 104.93 | 107.08 | 105.51 | 106.58 | 100.67 | 105.35 | 89.32 | 108.82 | 95.19 | 100.93 |
| 10 | 111.97 | 102.89 | 105.26 | 104.51 | 107.34 | 108.58 | 109.48 | 107.41 | 107.52 | 108.91 | 111.36 | 107.98 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 2150 MHz; -5 dBm.
 LO IN: 2180 MHz; +13.00 dBm
 IF OUT: 30.00 MHz; -10.86 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 represents the Harmonics level of the RF Input Signal to the mixer