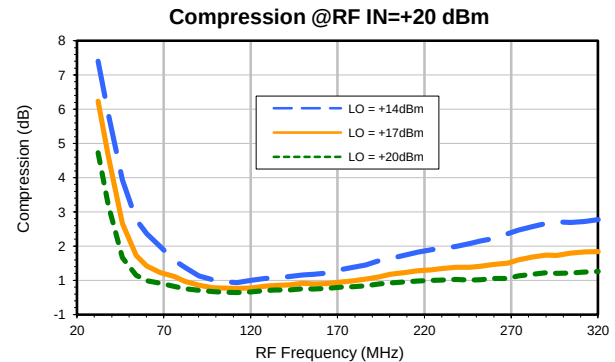
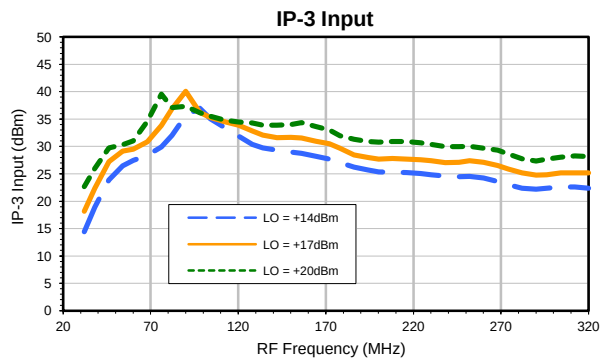
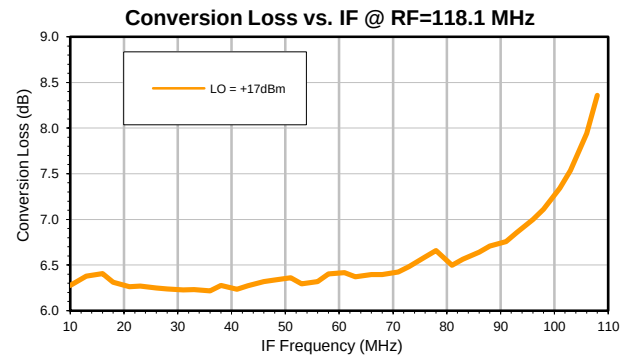
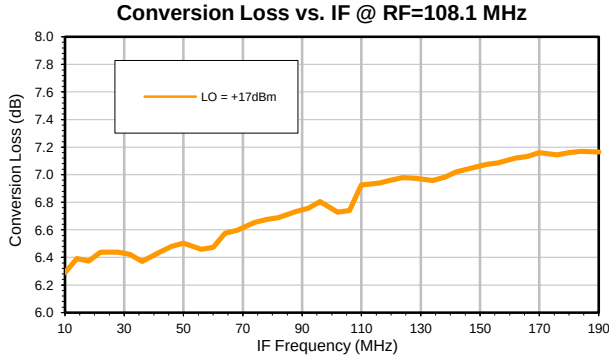
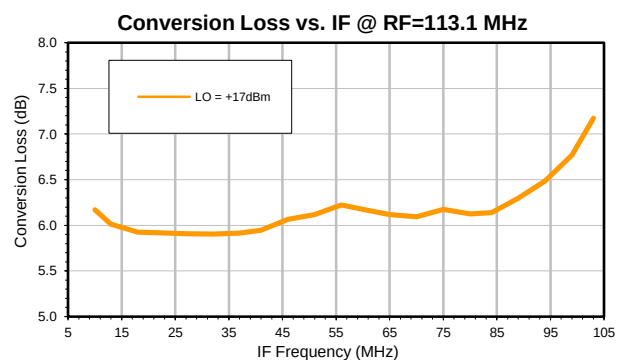
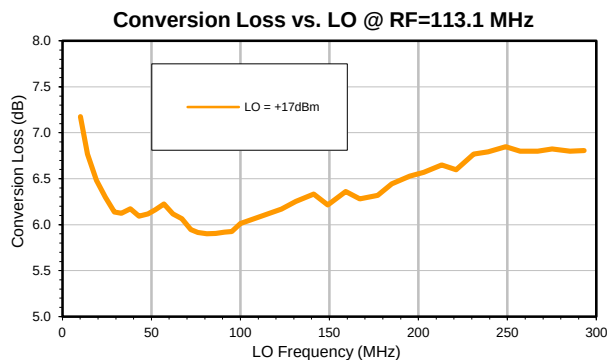
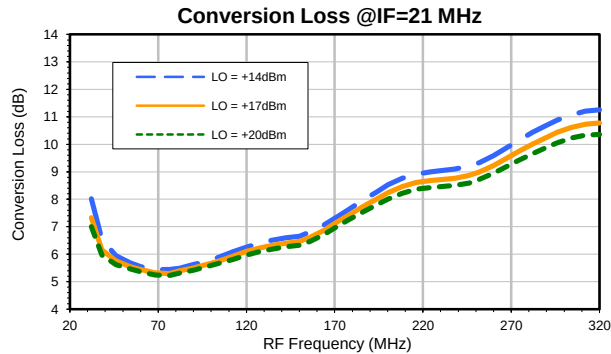


# Frequency Mixer

## Typical Performance Curves

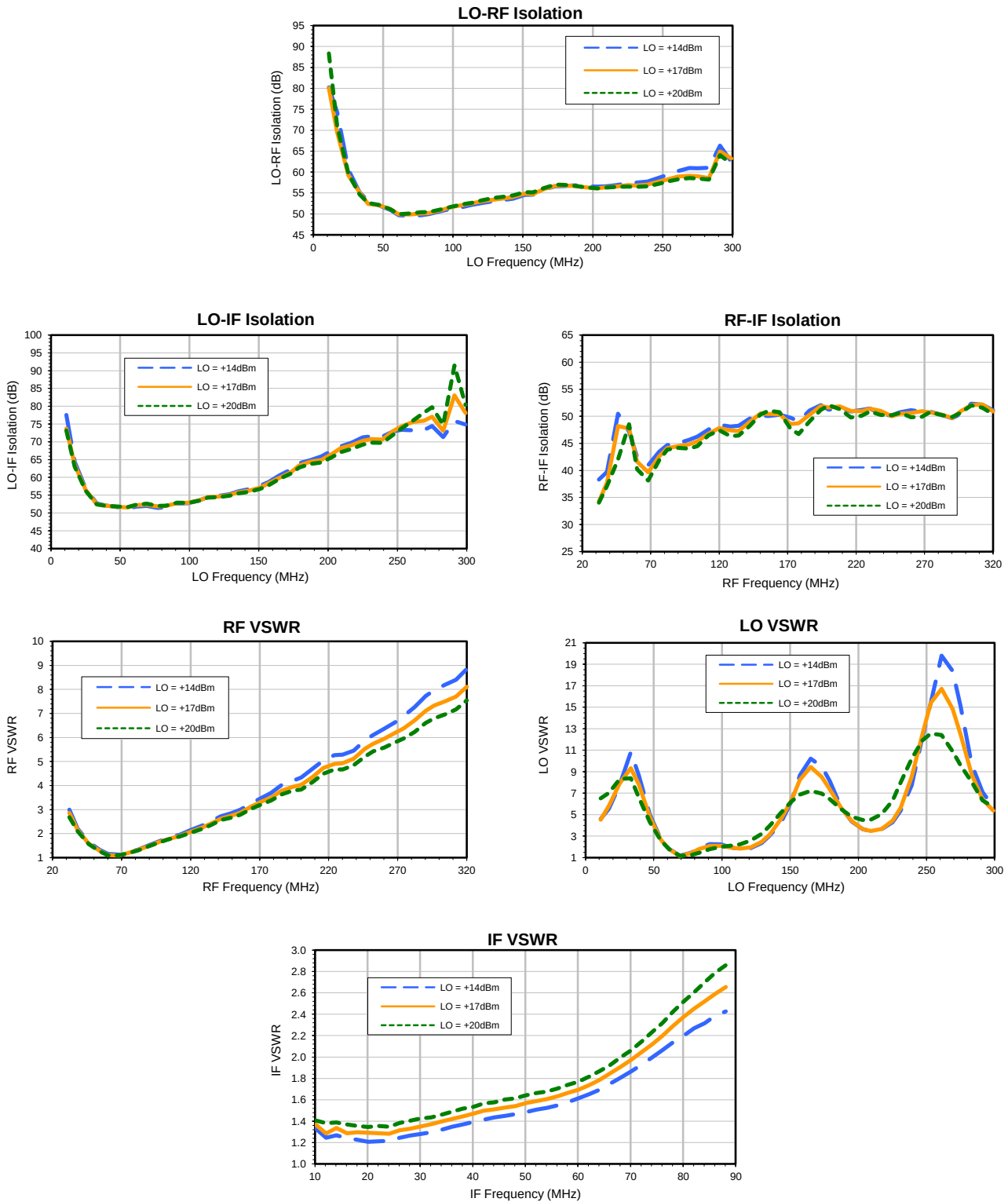
MWJ-ED16207/1



# Frequency Mixer

## Typical Performance Curves

MWJ-ED16207/1



# Frequency Mixer

## Harmonics Tables

MWJ-ED16207/1

RF HARMONICS ORDER

|    | (-dBm) | (-dBc) |        |        |        |        |        |        |        |        |        |        |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0  | ---    | ---    | 27.38  | 21.53  | 23.88  | 28.53  | 30.12  | 37.20  | 33.15  | 46.70  | 38.23  | 39.68  |
| 1  | ---    | 39.43  | ---    | 36.91  | 11.69  | 38.06  | 15.17  | 39.45  | 17.29  | 41.49  | 19.95  | 51.12  |
| 2  | 102.06 | 49.64  | 52.44  | 56.64  | 56.15  | 55.38  | 49.11  | 51.94  | 52.03  | 55.81  | 56.67  | 78.06  |
| 3  | 96.62  | 89.40  | 67.25  | 92.85  | 68.75  | 82.93  | 71.83  | 75.77  | 66.97  | 74.20  | 67.68  | 71.97  |
| 4  | 118.30 | 100.82 | 114.32 | 106.86 | 108.62 | 99.56  | 104.66 | 105.29 | 94.57  | 94.84  | 93.40  | 94.30  |
| 5  | 117.50 | 107.23 | 101.69 | 110.16 | 103.79 | 112.23 | 100.68 | 106.98 | 105.53 | 106.75 | 108.32 | 106.31 |
| 6  | 115.64 | 109.36 | 110.19 | 112.91 | 112.44 | 110.30 | 112.27 | 109.97 | 108.08 | 108.07 | 108.81 | 107.33 |
| 7  | 115.94 | 118.76 | 108.28 | 115.96 | 106.51 | 115.43 | 105.80 | 114.60 | 108.82 | 107.50 | 107.16 | 107.07 |
| 8  | 117.13 | 119.00 | 115.53 | 118.51 | 118.89 | 117.00 | 115.22 | 116.63 | 117.83 | 110.76 | 115.88 | 108.83 |
| 9  | 115.51 | 117.86 | 113.66 | 118.05 | 108.39 | 118.34 | 103.69 | 117.08 | 100.17 | 114.83 | 92.18  | 108.16 |
| 10 | 116.60 | 118.31 | 119.01 | 118.58 | 117.51 | 119.14 | 118.47 | 118.67 | 118.29 | 115.03 | 116.35 | 111.80 |
|    | RF CAL | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |

LO HARMONICS ORDER

Test conditions:      RF IN: 113.1 MHz; 0 dBm.  
                              LO IN: 90.1 MHz; +17 dBm  
                              IF OUT: 23 MHz; -5.97 dBm

RF HARMONICS ORDER

|    | (-dBm) | (-dBc) |        |        |        |        |        |        |        |        |        |        |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0  | ---    | ---    | 38.73  | 36.21  | 33.41  | 39.08  | 36.73  | 42.55  | 42.94  | 45.30  | 44.65  | 42.28  |
| 1  | ---    | 36.73  | ---    | 38.52  | 11.94  | 39.24  | 15.57  | 42.43  | 17.87  | 46.47  | 20.81  | 45.76  |
| 2  | 81.24  | 39.62  | 41.05  | 48.06  | 47.43  | 43.34  | 39.06  | 43.04  | 43.41  | 49.32  | 48.14  | 51.22  |
| 3  | 87.51  | 66.60  | 53.07  | 66.47  | 54.79  | 59.08  | 55.43  | 55.33  | 51.39  | 54.13  | 52.28  | 51.62  |
| 4  | 111.99 | 72.92  | 81.56  | 88.27  | 72.78  | 68.88  | 70.99  | 71.60  | 68.34  | 71.56  | 66.72  | 68.70  |
| 5  | 114.10 | 77.92  | 68.49  | 80.23  | 69.12  | 82.02  | 73.37  | 82.31  | 70.70  | 81.71  | 70.82  | 77.30  |
| 6  | 112.40 | 86.09  | 88.43  | 90.30  | 93.01  | 91.01  | 92.57  | 99.30  | 91.50  | 86.40  | 83.57  | 82.59  |
| 7  | 111.43 | 89.67  | 87.32  | 90.12  | 84.67  | 92.87  | 84.76  | 95.67  | 92.49  | 91.42  | 85.89  | 90.24  |
| 8  | 111.39 | 98.79  | 101.21 | 98.03  | 101.71 | 99.82  | 102.20 | 100.26 | 98.71  | 96.12  | 109.71 | 101.57 |
| 9  | 111.73 | 110.18 | 101.62 | 109.78 | 102.51 | 107.63 | 100.19 | 105.75 | 100.27 | 105.42 | 94.49  | 107.87 |
| 10 | 111.85 | 109.32 | 110.52 | 107.26 | 107.38 | 105.29 | 105.49 | 105.96 | 106.94 | 108.52 | 107.67 | 106.54 |
|    | RF CAL | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |

LO HARMONICS ORDER

Test conditions:      RF IN: 113.1 MHz; 10 dBm.  
                              LO IN: 90.1 MHz; +17 dBm  
                              IF OUT: 23 MHz; 4.03 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