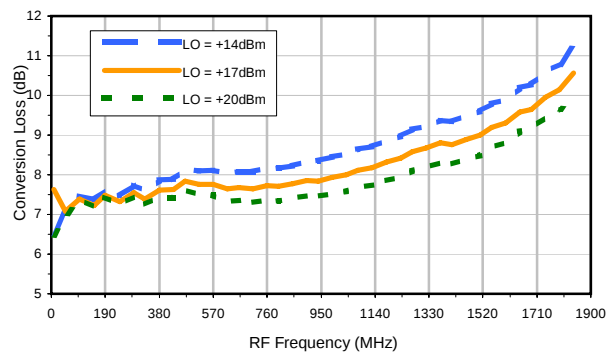
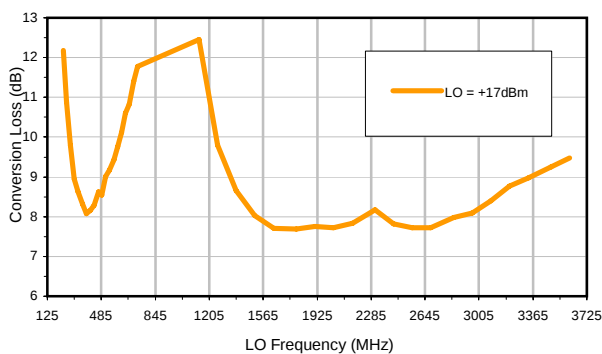


## Typical Performance Curves

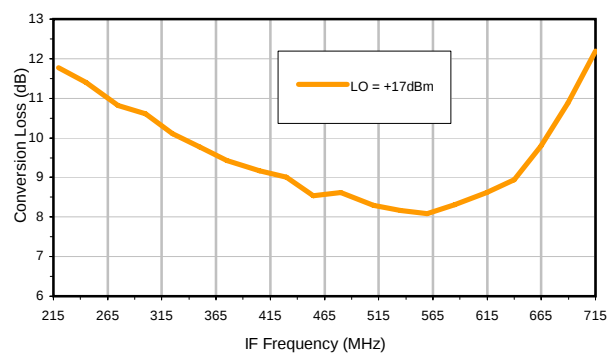
Conversion Loss @IF=1850 MHz



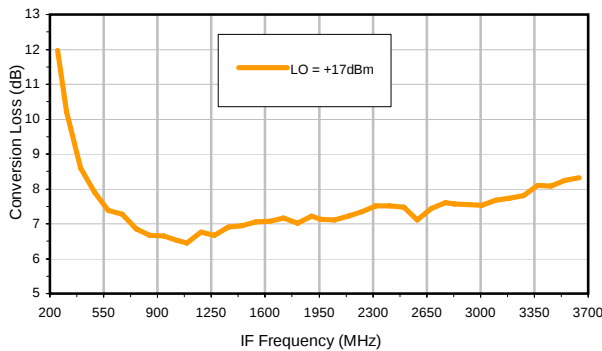
Conversion Loss vs. LO @ RF=945 MHz



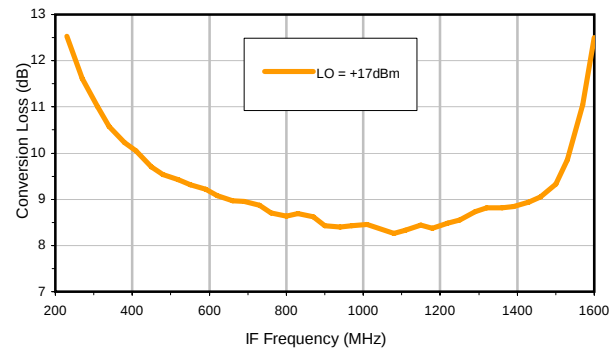
Conversion Loss vs. IF @ RF=945 MHz



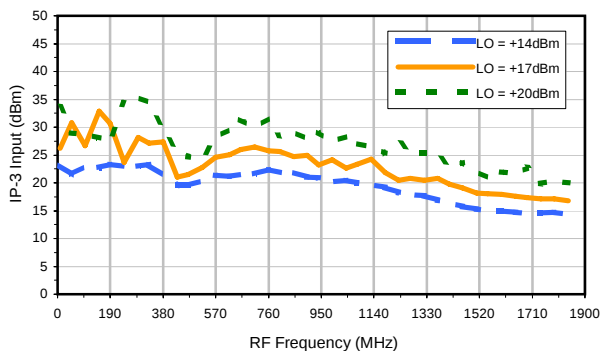
Conversion Loss vs. IF @ RF=50 MHz



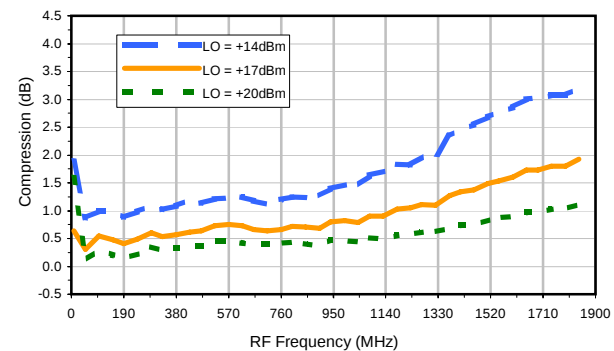
Conversion Loss vs. IF @ RF=1840.1 MHz



IP-3 Input

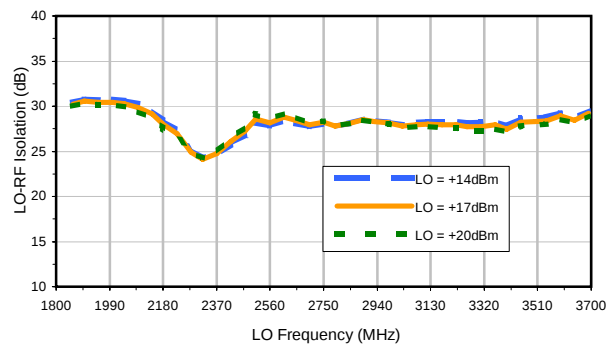


Compression @RF IN=+14 dBm

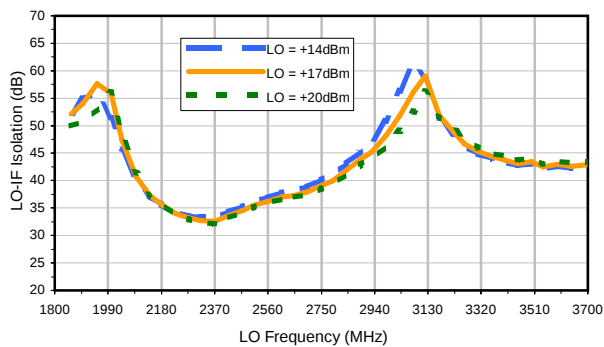


## Typical Performance Curves

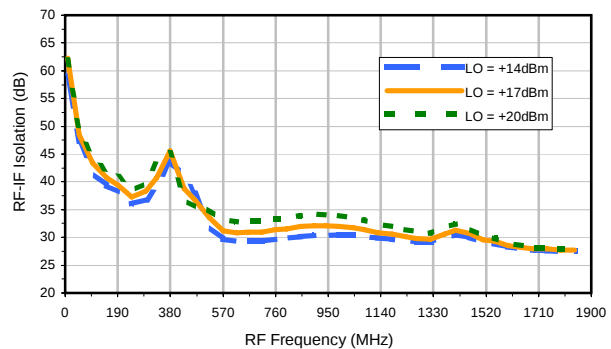
LO-RF Isolation



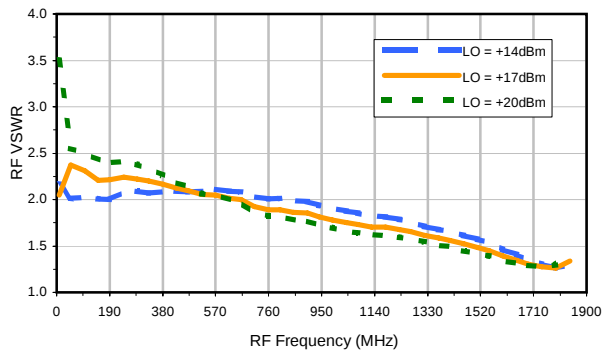
LO-IF Isolation



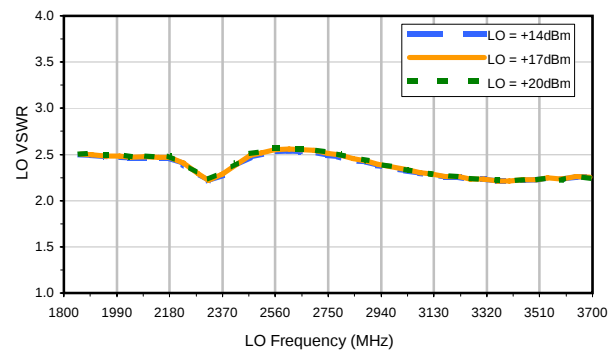
RF-IF Isolation



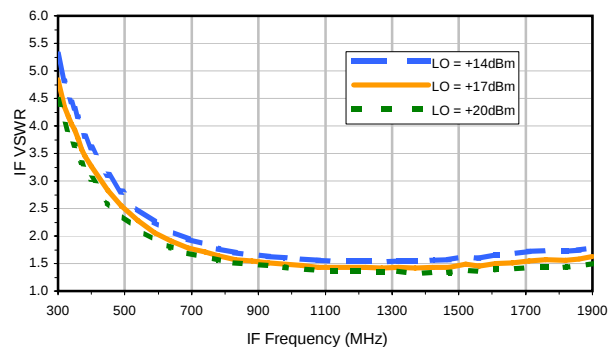
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

|        | (-dBm) | (-dBc) |        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0      | ----   | ----   | 17.49  | -1.59  | 16.54  | 9.00   | 26.80  | 35.31  | 22.32  | 45.89  | 53.00  | 55.94  |
| 1      | ----   | 40.58  | ----   | 31.94  | 20.53  | 39.85  | 28.71  | 57.47  | 35.82  | 81.58  | 55.53  | 67.43  |
| 2      | 120.30 | 59.15  | 65.84  | 67.62  | 75.75  | 61.09  | 82.00  | 85.82  | 71.59  | 82.80  | 95.53  | 90.49  |
| 3      | 121.15 | 109.03 | 85.77  | 97.96  | 86.49  | 99.57  | 91.19  | 106.72 | 91.69  | 103.05 | 113.79 | 94.04  |
| 4      | 136.34 | 119.27 | 109.29 | 112.01 | 107.54 | 105.74 | 113.48 | 110.05 | 103.26 | 98.15  | 96.87  | 96.39  |
| 5      | 129.34 | 109.49 | 118.36 | 108.49 | 110.95 | 102.47 | 102.48 | 102.76 | 104.64 | 106.96 | 110.00 | 112.73 |
| 6      | 122.62 | 107.88 | 113.15 | 108.26 | 116.01 | 109.37 | 106.96 | 104.54 | 106.20 | 96.12  | 98.95  | 98.51  |
| 7      | 125.82 | 113.18 | 109.06 | 109.14 | 108.74 | 107.77 | 106.42 | 107.17 | 116.63 | 108.91 | 97.14  | 103.51 |
| 8      | 120.53 | 106.49 | 112.52 | 107.02 | 104.56 | 104.13 | 109.19 | 101.16 | 103.86 | 97.33  | 100.36 | 98.05  |
| 9      | 120.75 | 111.11 | 120.10 | 104.57 | 104.19 | 100.19 | 104.57 | 115.22 | 102.10 | 121.08 | 95.86  | 102.95 |
| 10     | 126.76 | 111.22 | 102.93 | 106.39 | 104.56 | 96.96  | 108.69 | 101.92 | 98.10  | 105.75 | 94.77  | 94.37  |
| RF CAL | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |        |

### LO HARMONICS ORDER

Test conditions: RF IN: 70.10 MHz; -10 dBm.  
LO IN: 1920.10 MHz; +17.00 dBm  
IF OUT: 1850 MHz; -17.36 dBm

RF HARMONICS ORDER

|        | (-dBm) | (-dBc) |        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0      | ----   | ----   | 27.84  | 8.47   | 26.48  | 18.80  | 36.90  | 45.40  | 32.69  | 54.53  | 63.33  | 69.63  |
| 1      | ----   | 40.55  | ----   | 31.90  | 20.54  | 39.97  | 28.76  | 57.43  | 36.16  | 79.63  | 56.16  | 67.43  |
| 2      | 107.86 | 49.24  | 55.94  | 56.95  | 65.21  | 50.54  | 74.38  | 72.65  | 62.65  | 70.84  | 89.61  | 80.33  |
| 3      | 108.48 | 90.25  | 67.43  | 77.46  | 65.92  | 83.40  | 70.74  | 88.19  | 69.34  | 100.27 | 85.41  | 96.74  |
| 4      | 121.89 | 86.45  | 87.20  | 80.23  | 95.04  | 84.04  | 93.05  | 90.64  | 91.79  | 97.68  | 91.88  | 98.48  |
| 5      | 112.54 | 107.53 | 98.55  | 105.97 | 100.20 | 103.19 | 101.46 | 99.82  | 95.87  | 103.71 | 101.63 | 104.18 |
| 6      | 129.23 | 106.05 | 97.69  | 103.47 | 103.62 | 110.31 | 116.79 | 107.74 | 113.93 | 96.30  | 101.03 | 104.38 |
| 7      | 123.26 | 107.47 | 105.88 | 101.17 | 112.32 | 101.61 | 115.42 | 101.76 | 107.79 | 93.64  | 103.91 | 96.90  |
| 8      | 119.31 | 116.12 | 116.27 | 112.07 | 102.51 | 110.34 | 115.33 | 126.44 | 105.53 | 99.35  | 98.13  | 102.22 |
| 9      | 114.90 | 103.90 | 114.13 | 111.00 | 109.14 | 107.46 | 105.22 | 98.11  | 96.76  | 97.95  | 111.79 | 97.98  |
| 10     | 110.83 | 113.33 | 109.58 | 98.08  | 100.42 | 107.01 | 115.97 | 104.83 | 104.47 | 104.42 | 95.53  | 107.33 |
| RF CAL | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |        |

### LO HARMONICS ORDER

Test conditions: RF IN: 70.10 MHz; 0 dBm.  
LO IN: 1920.10 MHz; +17.00 dBm  
IF OUT: 1850 MHz; -7.33 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.



REV. X1

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IF/RF MICROWAVE COMPONENTS

SYM-ED14819/1

8/10/2012

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