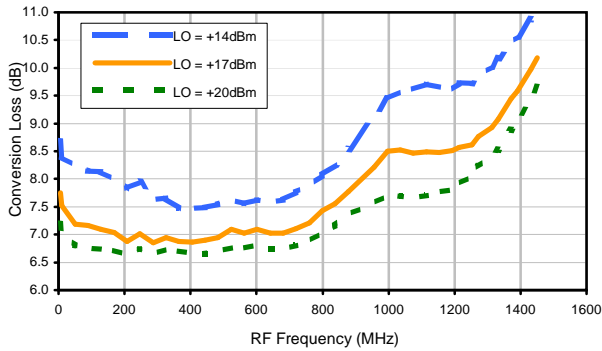


Frequency Mixer

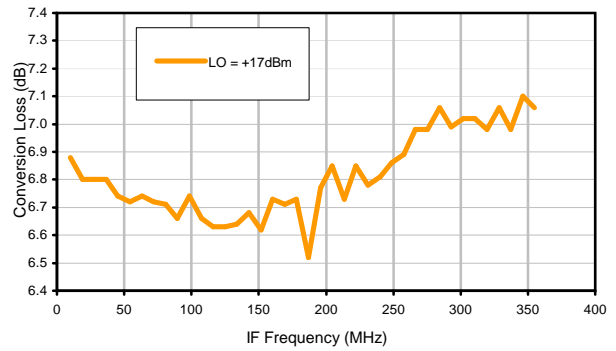
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Typical Performance Curves

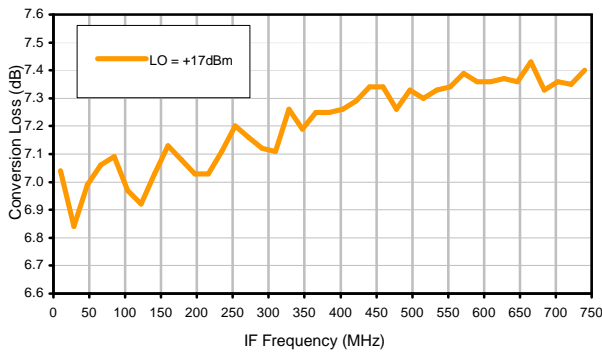
Conversion Loss @ IF=30MHz



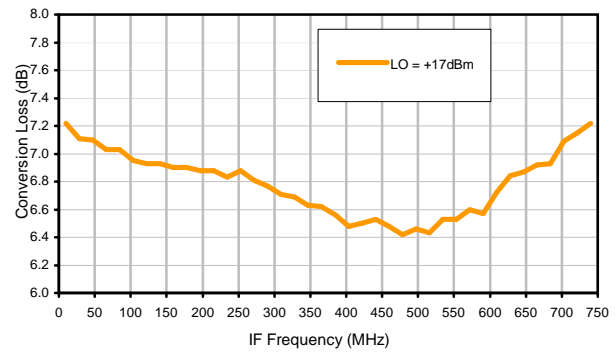
Conversion Loss vs. IF @ RF=375.1MHz



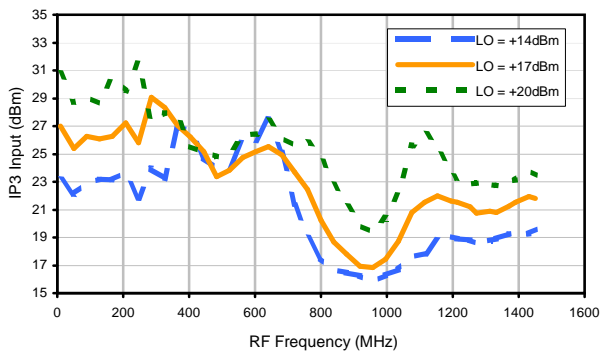
Conversion Loss vs. IF @ RF=10.1MHz



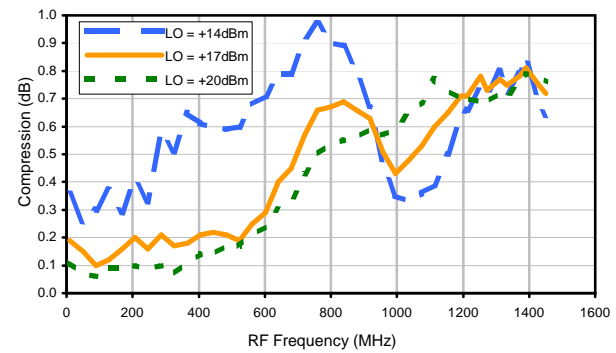
Conversion Loss vs. IF @ RF=750.1MHz



IP3 Input

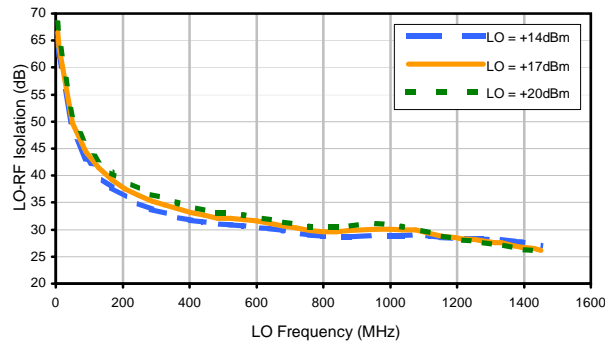


Compression @ RF IN=+14dBm

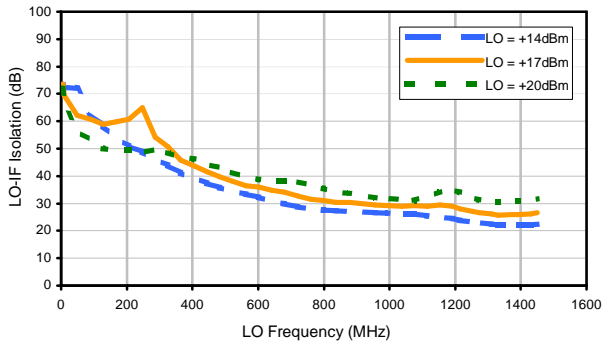


Typical Performance Curves

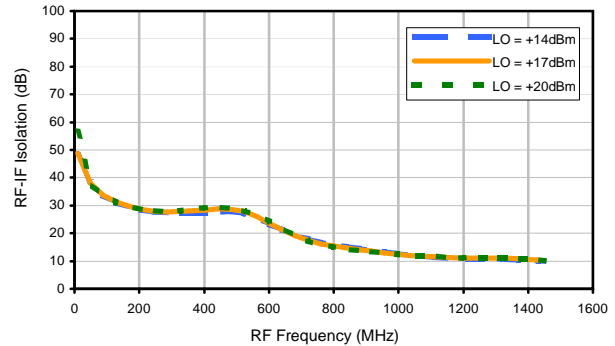
LO-RF Isolation



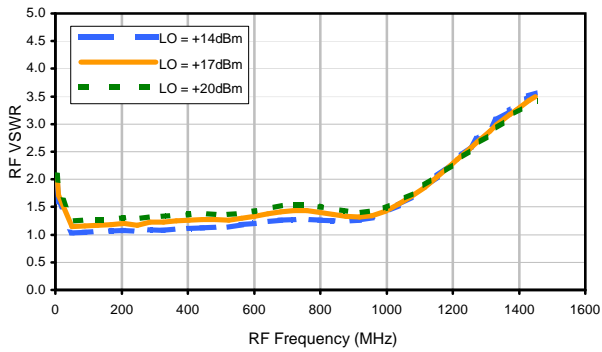
LO-IF Isolation



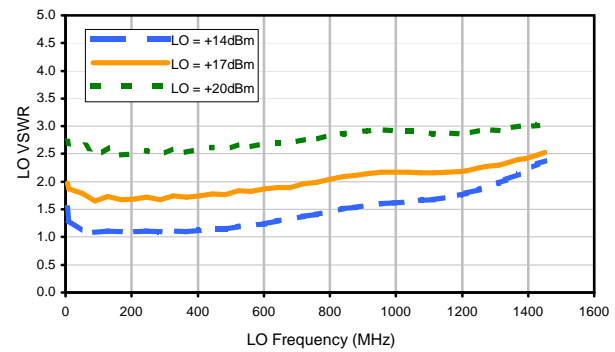
RF-IF Isolation



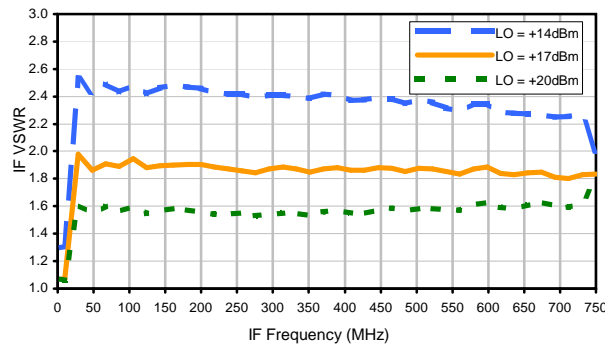
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | - | - | 20 | 34 | 11 | 23 | 19 | 35 | 32 | 52 | 46 | 54 |
| 1 | - | 21 | +0 | 31 | 15 | 30 | 26 | 45 | 30 | 44 | 35 | 45 |
| 2 | 98 | 56 | 45 | 56 | 46 | 69 | 45 | 54 | 50 | 68 | 76 | 62 |
| 3 | >100 | 73 | 63 | 65 | 55 | 64 | 50 | 73 | 49 | 62 | 53 | 79 |
| 4 | >100 | 83 | 77 | 84 | 75 | 89 | 77 | 80 | 75 | 77 | 70 | 80 |
| 5 | >100 | 87 | 82 | 87 | 79 | 88 | 75 | >92 | 77 | 90 | 75 | 86 |
| 6 | >100 | >92 | >92 | >92 | >92 | >92 | 88 | >92 | 88 | >92 | 86 | >92 |
| 7 | >100 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 |
| 8 | >100 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 |
| 9 | >100 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 |
| 10 | >100 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | >92 | 91 | >92 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 370.1 MHz; -1.00 dBm.
 LO IN: 400.01 MHz; +17.00 dBm
 IF OUT: 29.91 MHz; -8.06 dBm

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|------|----|----|----|----|----|----|----|----|
| 0 | - | - | 31 | 43 | 23 | 38 | 35 | 47 | 48 | 59 | 50 | 62 |
| 1 | - | 21 | +0 | 29 | 15 | 32 | 24 | 40 | 37 | 50 | 44 | 51 |
| 2 | 85 | 50 | 42 | 50 | 40 | 56 | 38 | 51 | 42 | 73 | 58 | 72 |
| 3 | >100 | 53 | 44 | 64 | 47 | 56 | 38 | 55 | 41 | 55 | 43 | 60 |
| 4 | >100 | 64 | 57 | 66 | 56 | 70 | 60 | 78 | 55 | 67 | 63 | 69 |
| 5 | >100 | 66 | 62 | 63 | 56 | 61 | 52 | 61 | 50 | 85 | 48 | 60 |
| 6 | >100 | 75 | 67 | 90 | 70 | 73 | 78 | 72 | 71 | 68 | 64 | 66 |
| 7 | >100 | 90 | 80 | 72 | 79 | 76 | 70 | 75 | 65 | 77 | 65 | 86 |
| 8 | >100 | 91 | 89 | 86 | 84 | 83 | 92 | 87 | 80 | 79 | 74 | 77 |
| 9 | >100 | 97 | 88 | 90 | 78 | 78 | 75 | 81 | 73 | 83 | 73 | 86 |
| 10 | >100 | >102 | 101 | >102 | 97 | 92 | 93 | 86 | 87 | 86 | 81 | 83 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 370.1 MHz; 9.00 dBm.
 LO IN: 400.01 MHz; +17.00 dBm
 IF OUT: 29.91 MHz; 1.94 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. X2
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