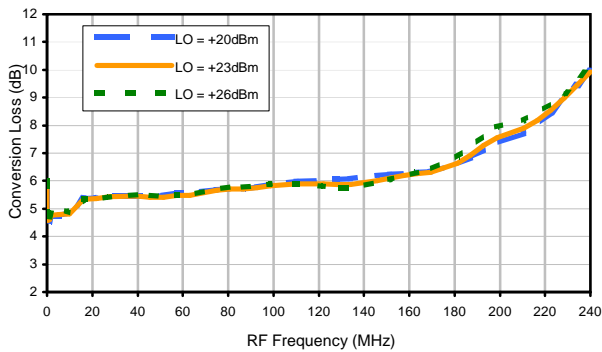


Frequency Mixer

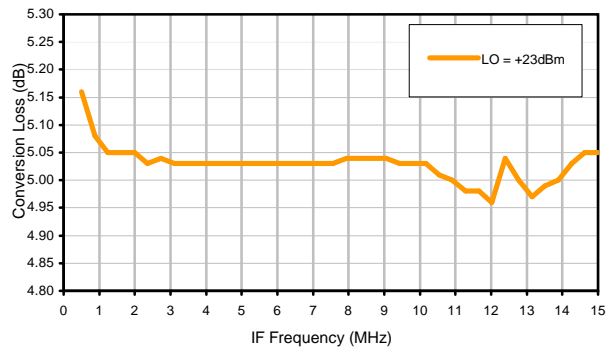
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Typical Performance Curves

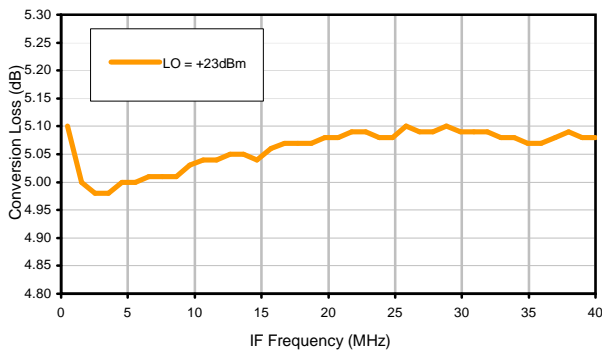
Conversion Loss @ IF=30MHz



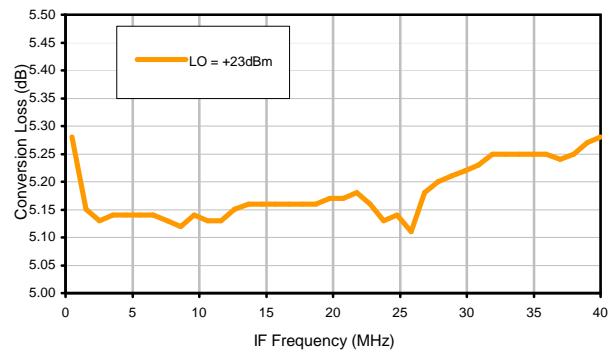
Conversion Loss vs. IF @ RF=25.1MHz



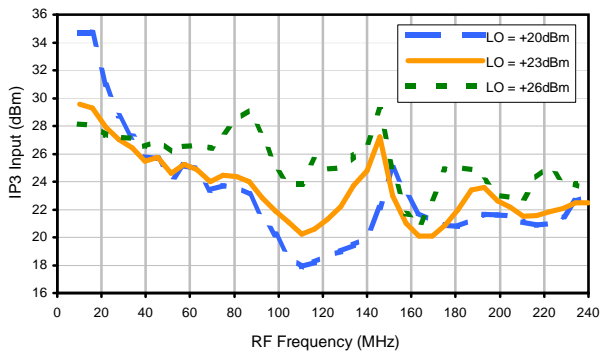
Conversion Loss vs. IF @ RF=10.1MHz



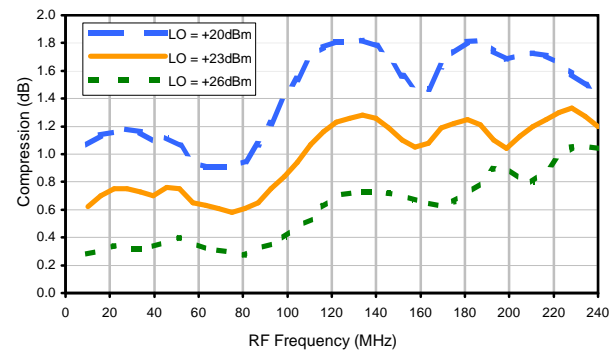
Conversion Loss vs. IF @ RF=50.1MHz



IP3 Input



Compression @ RF IN=+14.99dBm



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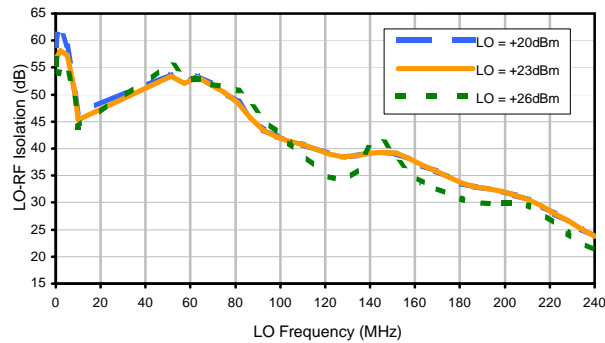


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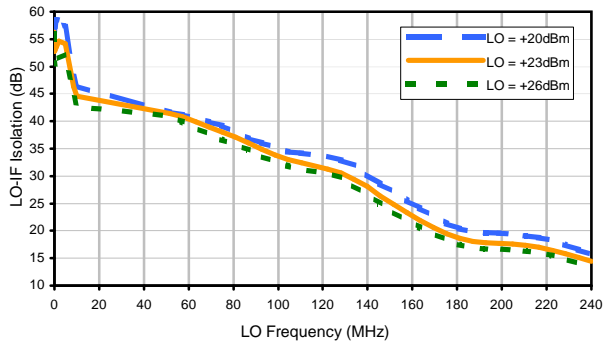


Typical Performance Curves

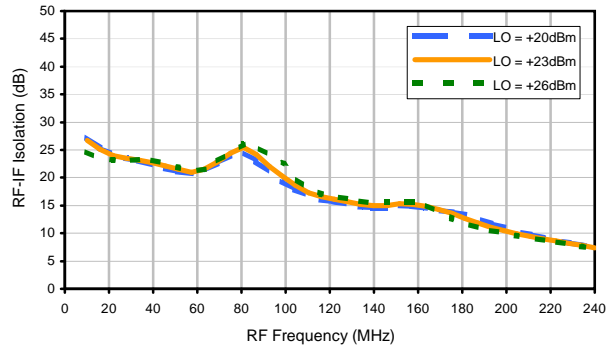
LO-RF Isolation



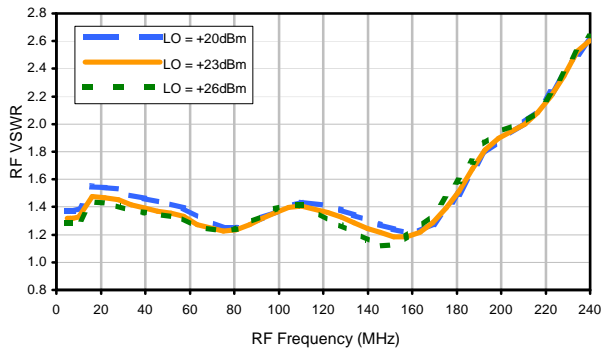
LO-IF Isolation



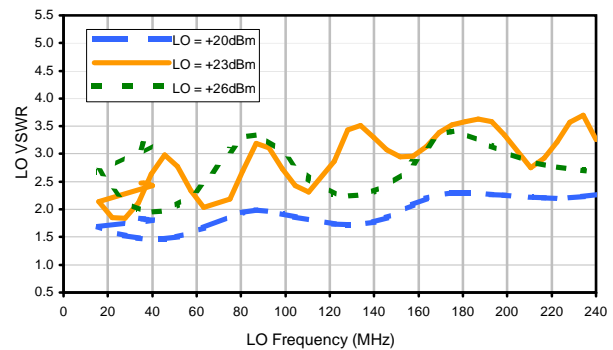
RF-IF Isolation



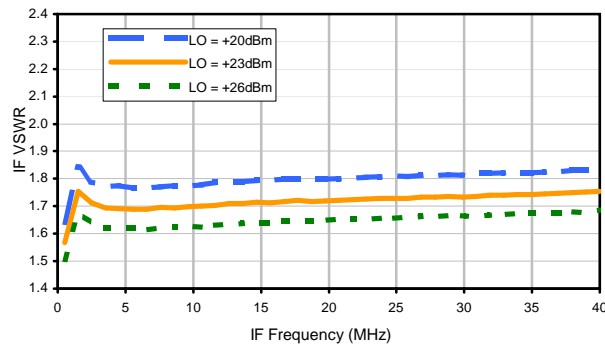
RF VSWR



LO VSWR



IF VSWR



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Harmonics Tables

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 0 | - | - | 14 | 31 | 25 | 33 | 17 | 30 | 19 | 40 | 30 | 51 |
| 1 | - | 17 | +0 | 27 | 10 | 31 | 16 | 42 | 21 | 37 | 31 | 48 |
| 2 | 87 | 65 | 57 | 69 | 61 | 69 | 63 | 70 | 50 | 62 | 51 | 69 |
| 3 | 106 | 60 | 68 | 64 | 70 | 67 | 69 | 61 | 64 | 62 | 59 | 65 |
| 4 | >123 | 86 | 90 | 88 | 85 | 92 | 92 | 84 | 77 | 86 | 79 | 86 |
| 5 | >123 | 78 | 76 | 82 | 71 | 83 | 69 | 88 | 69 | 87 | 70 | 82 |
| 6 | >123 | 90 | 89 | 93 | 87 | 94 | 87 | 112 | 91 | 92 | 91 | 87 |
| 7 | >122 | 91 | 82 | 90 | 82 | 89 | 77 | 88 | 77 | 97 | 78 | 95 |
| 8 | >122 | 101 | 99 | 103 | 103 | 105 | 105 | 104 | 96 | 107 | 99 | 97 |
| 9 | >122 | 95 | 87 | 95 | 87 | 96 | 88 | 97 | 84 | 95 | 85 | 101 |
| 10 | >122 | 107 | 108 | 106 | 112 | 107 | 106 | 109 | 103 | 108 | 101 | >119 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 30.1 MHz; .01.00 dBm.
 LO IN: 40.01 MHz; +22.9.00 dBm
 IF OUT: 9.91 MHz; -5.29 dBm

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|----|----|----|----|----|-----|----|-----|----|----|
| 0 | - | - | 24 | 42 | 34 | 47 | 28 | 42 | 32 | 51 | 43 | 67 |
| 1 | - | 18 | +0 | 29 | 11 | 34 | 18 | 47 | 24 | 43 | 34 | 57 |
| 2 | 76 | 74 | 53 | 68 | 56 | 60 | 55 | 58 | 46 | 60 | 51 | 67 |
| 3 | 88 | 46 | 52 | 47 | 45 | 48 | 40 | 46 | 40 | 50 | 41 | 51 |
| 4 | >123 | 74 | 76 | 95 | 71 | 87 | 71 | 72 | 67 | 77 | 57 | 70 |
| 5 | >122 | 69 | 65 | 70 | 55 | 73 | 53 | 70 | 53 | 62 | 56 | 58 |
| 6 | >123 | 89 | 74 | 85 | 75 | 83 | 81 | 86 | 76 | 79 | 78 | 79 |
| 7 | >122 | 69 | 70 | 74 | 70 | 76 | 69 | 74 | 65 | 71 | 61 | 69 |
| 8 | >123 | 85 | 82 | 84 | 87 | 86 | 82 | 92 | 82 | 85 | 91 | 89 |
| 9 | >123 | 77 | 76 | 82 | 75 | 77 | 76 | 81 | 80 | 91 | 79 | 94 |
| 10 | >123 | 94 | 89 | 94 | 93 | 93 | 95 | 109 | 91 | 103 | 88 | 88 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 30.1 MHz; 9.98.00 dBm.
 LO IN: 40.01 MHz; +22.9.00 dBm
 IF OUT: 9.91 MHz; 4.68 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.

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