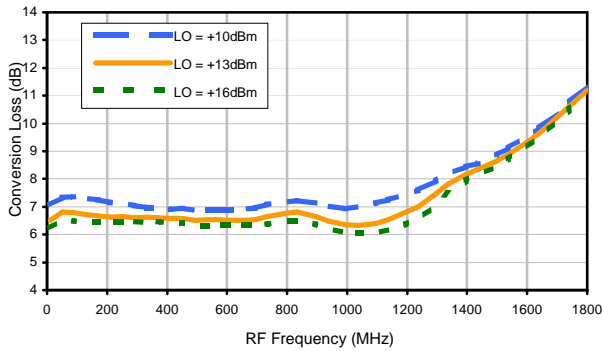


Frequency Mixer

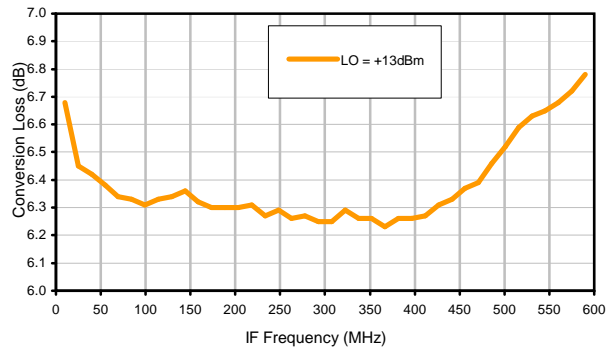
ADE-12MH+

Typical Performance Curves

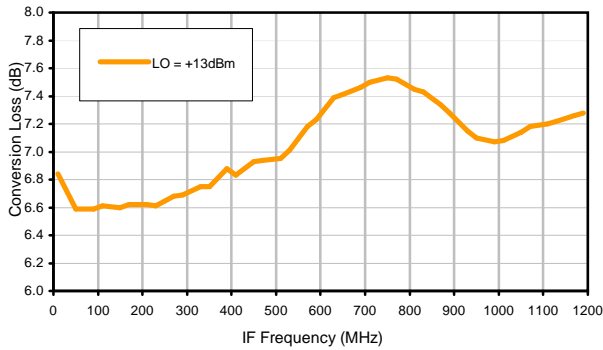
Conversion Loss @ IF=30MHz



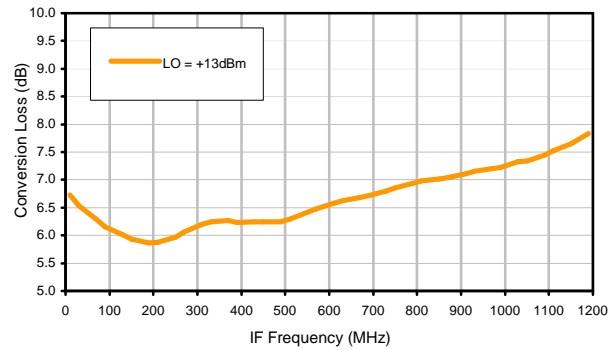
Conversion Loss vs. IF @ RF=600.1MHz



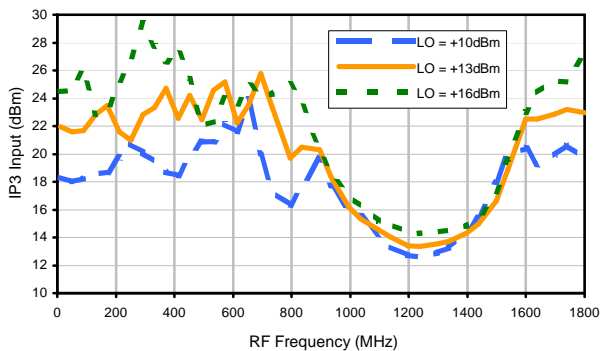
Conversion Loss vs. IF @ RF=10.1MHz



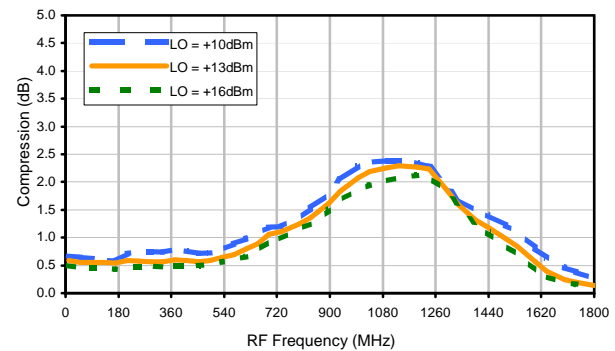
Conversion Loss vs. IF @ RF=1200.1MHz



IP3 Input

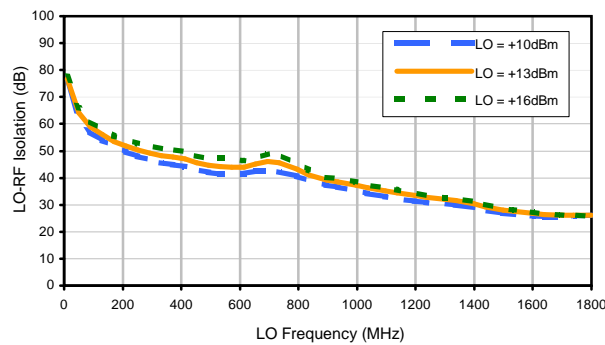


Compression @ RF IN=+9dBm

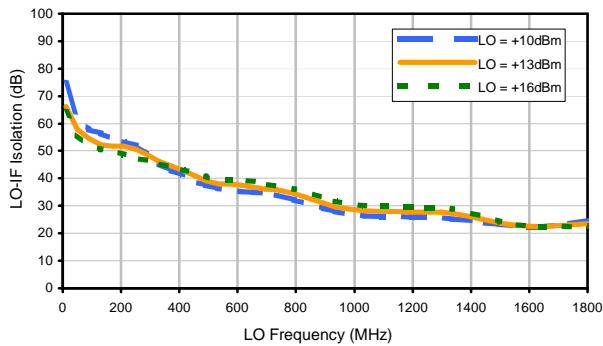


Typical Performance Curves

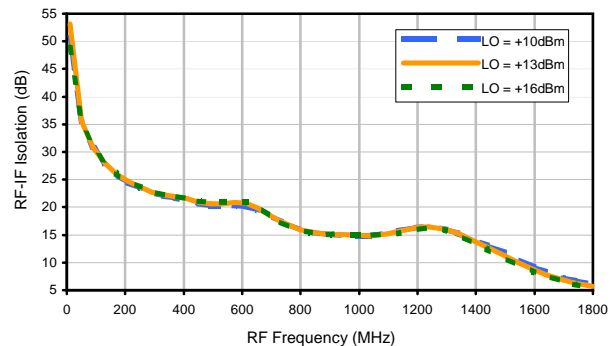
LO-RF Isolation



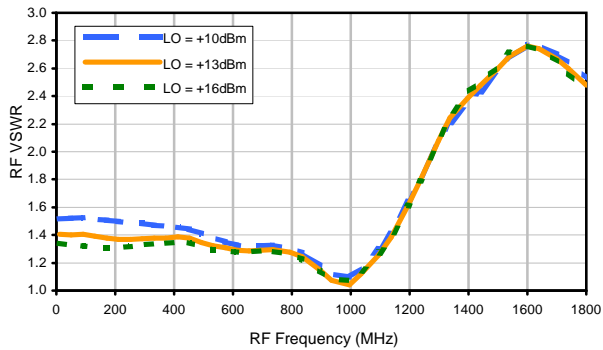
LO-IF Isolation



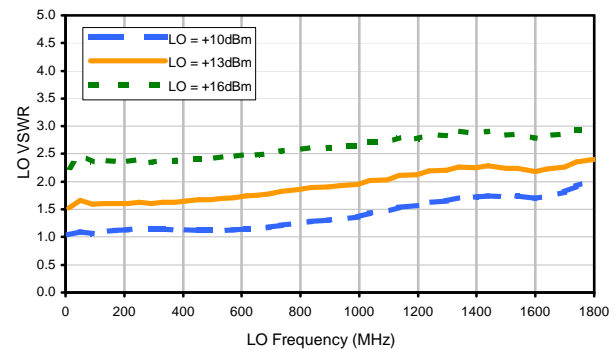
RF-IF Isolation



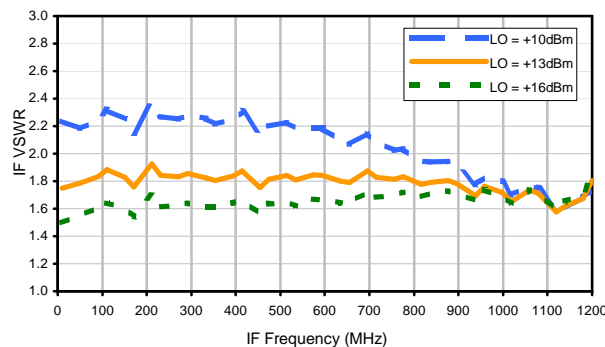
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | - | - | 11 | 22 | 11 | 29 | 22 | 30 | 22 | 45 | 41 | 70 |
| 1 | - | 14 | +0 | 36 | 12 | 32 | 30 | 43 | 50 | 37 | 62 | 54 |
| 2 | 97 | 65 | 57 | 61 | 57 | 66 | 58 | 67 | 64 | 65 | 59 | 78 |
| 3 | >100 | 67 | 70 | 66 | 63 | 68 | 59 | 69 | 75 | 85 | 84 | 84 |
| 4 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 5 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 6 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 7 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 8 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 9 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| 10 | >100 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 | >87 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 600.1 MHz; -6.00 dBm.
 LO IN: 630.01 MHz; +13.00 dBm
 IF OUT: 29.91 MHz; -12.54 dBm

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|----|----|----|----|----|
| 0 | - | - | 21 | 33 | 22 | 42 | 33 | 41 | 34 | 58 | 62 | 73 |
| 1 | - | 15 | +0 | 32 | 12 | 33 | 30 | 48 | 57 | 43 | 68 | 61 |
| 2 | 81 | 54 | 51 | 62 | 45 | 53 | 46 | 54 | 54 | 61 | 51 | 66 |
| 3 | >100 | 44 | 45 | 53 | 49 | 48 | 40 | 54 | 63 | 59 | 60 | 54 |
| 4 | >100 | 78 | 67 | 60 | 66 | 60 | 72 | 59 | 61 | 74 | 79 | 71 |
| 5 | >100 | 71 | 73 | 71 | 57 | 60 | 55 | 64 | 54 | 58 | 69 | 75 |
| 6 | >100 | 95 | 96 | 85 | 74 | 74 | 73 | 75 | 67 | 71 | 77 | 80 |
| 7 | >100 | 91 | 94 | >97 | 84 | 76 | 77 | 77 | 75 | 70 | 73 | 82 |
| 8 | >100 | 96 | 92 | 97 | 97 | 95 | 92 | 81 | 82 | 82 | 79 | 76 |
| 9 | >100 | >97 | >97 | 96 | >97 | >97 | >97 | 89 | 81 | 83 | 82 | 80 |
| 10 | >100 | >97 | >97 | >97 | >97 | >97 | >97 | 96 | 89 | 87 | 90 | 88 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 600.1 MHz; 4.00 dBm.
 LO IN: 630.01 MHz; +13.00 dBm
 IF OUT: 29.91 MHz; -2.57 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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