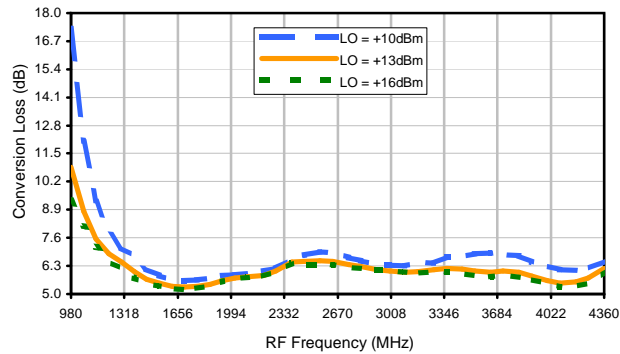


Frequency Mixer

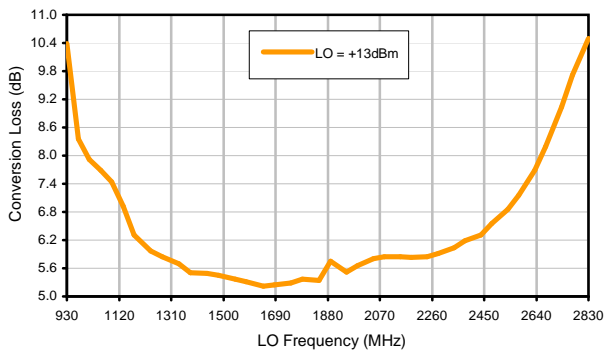
MBA-15MH+

Typical Performance Curves

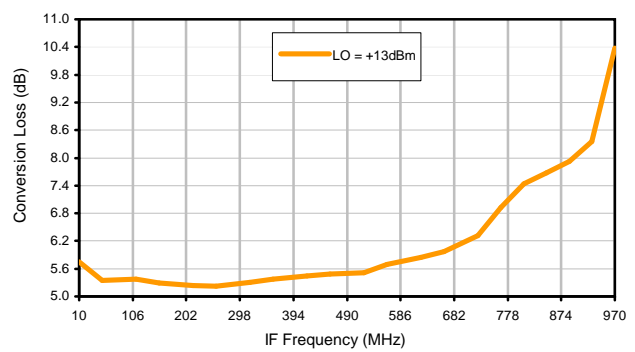
Conversion Loss @ IF=30MHz



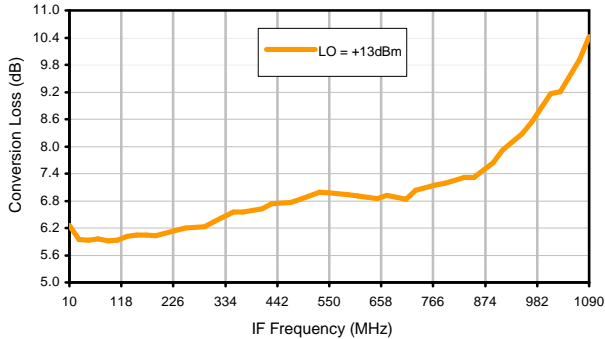
Conversion Loss vs. LO @ RF=1900MHz



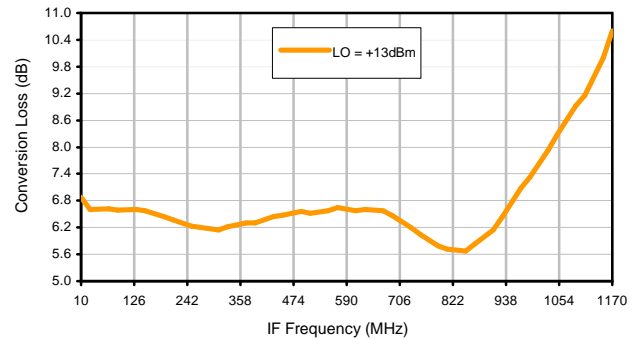
Conversion Loss vs. IF @ RF=1900MHz



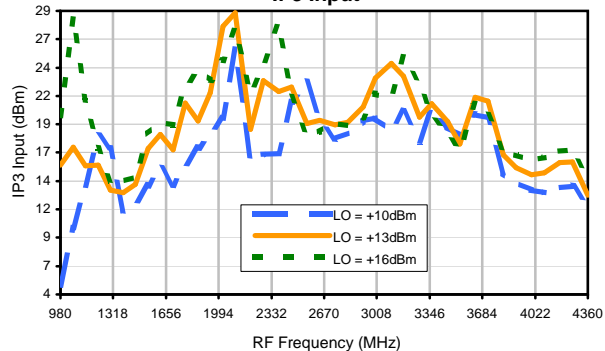
Conversion Loss vs. IF @ RF=1389.9MHz



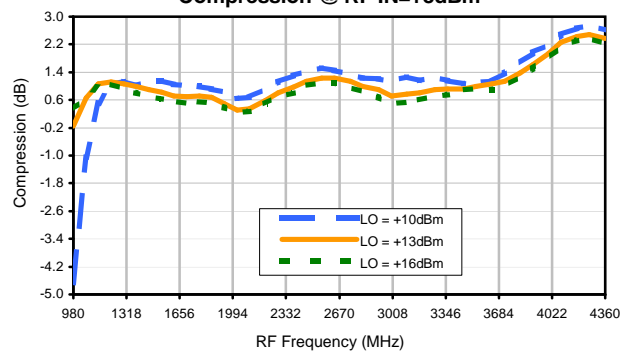
Conversion Loss vs. IF @ RF=2410.1MHz



IP3 Input

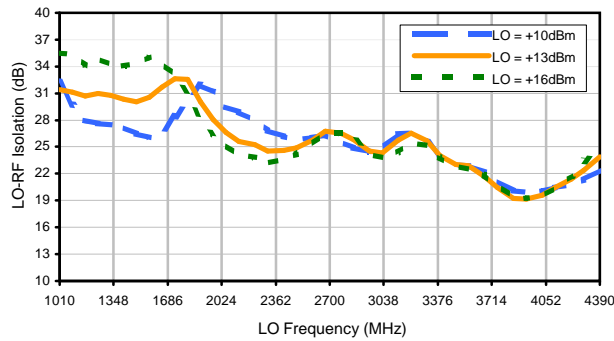


Compression @ RF IN=+8dBm

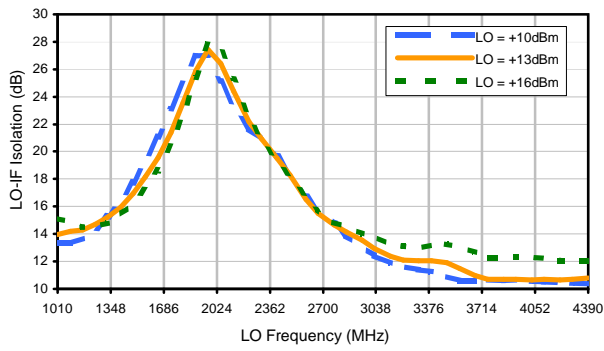


Typical Performance Curves

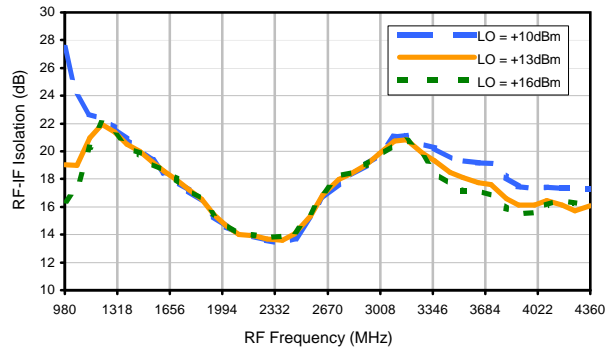
LO-RF Isolation



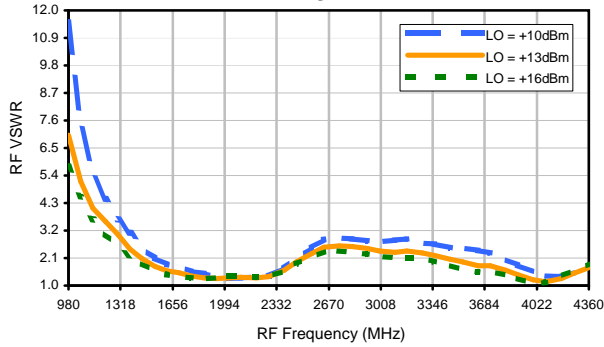
LO-IF Isolation



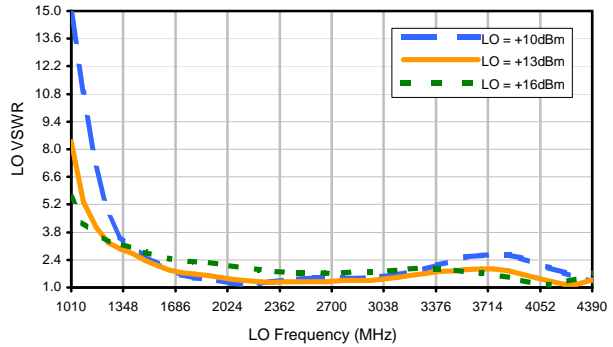
RF-IF Isolation



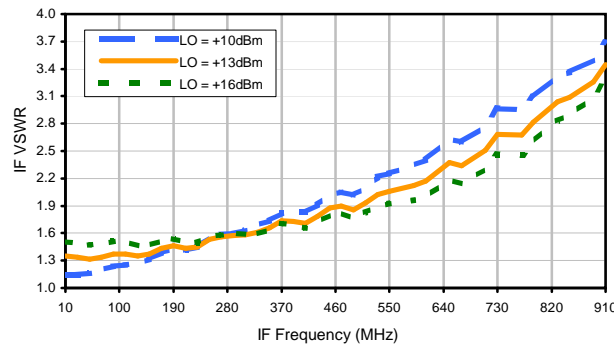
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0 | - | - | 2 | 9 | 1 | 24 | 11 | 46 | 25 | 39 | 45 | 40 |
| 1 | - | 11 | +0 | 23 | 15 | 22 | 25 | 34 | 52 | 44 | 47 | 52 |
| 2 | 73 | 53 | 52 | 45 | 48 | 54 | 42 | 56 | 42 | 61 | 54 | 58 |
| 3 | >90 | 56 | 58 | 63 | 62 | 59 | 55 | 54 | 63 | 68 | 63 | 74 |
| 4 | >90 | >77 | 75 | >77 | >77 | 66 | 74 | 74 | 74 | >77 | 71 | >77 |
| 5 | >90 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 |
| 6 | >90 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 |
| 7 | >90 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 |
| 8 | >90 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 |
| 9 | >90 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 |
| 10 | >90 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 | >77 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 1900 MHz; -7.00 dBm.
 LO IN: 1930 MHz; +13.00 dBm
 IF OUT: 30 MHz; -12.6 dBm

RF HARMONICS ORDER

| | (-dBm) | (-dBc) | | | | | | | | | | |
|----|--------|--------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 0 | - | - | 11 | 20 | 12 | 38 | 25 | 46 | 39 | 49 | 55 | 67 |
| 1 | - | 11 | +0 | 24 | 16 | 26 | 27 | 38 | 44 | 51 | 61 | 58 |
| 2 | 53 | 40 | 50 | 43 | 47 | 40 | 36 | 51 | 39 | 74 | 55 | 72 |
| 3 | 89 | 39 | 37 | 47 | 38 | 40 | 36 | 39 | 45 | 49 | 61 | 63 |
| 4 | >90 | 62 | 54 | 53 | 59 | 48 | 55 | 55 | 57 | 64 | 49 | 73 |
| 5 | >90 | 62 | 74 | 61 | 72 | 63 | 56 | 56 | 50 | 51 | 61 | 58 |
| 6 | >90 | 78 | 68 | 71 | 63 | 67 | 68 | 57 | 65 | 61 | 69 | 72 |
| 7 | >90 | 85 | 79 | 81 | >87 | 74 | 78 | 84 | 64 | 74 | 62 | 63 |
| 8 | >90 | 83 | >87 | 85 | 84 | 78 | 77 | 87 | 82 | 69 | 79 | 71 |
| 9 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | 85 | >87 | >87 | 79 | 81 |
| 10 | >90 | >87 | >87 | >87 | >87 | >87 | >87 | 84 | >87 | >87 | >87 | >87 |
| | RF CAL | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

LO HARMONICS ORDER

Test conditions: RF IN: 1900 MHz; 3.00 dBm.
 LO IN: 1930 MHz; +13.00 dBm
 IF OUT: 30 MHz; -2.77 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.