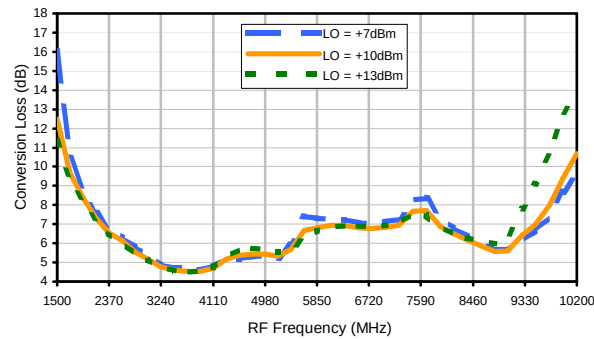


# Frequency Mixer

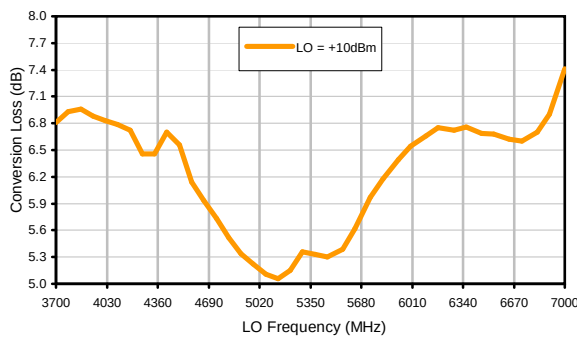
ZMX-7GLHR

## Typical Performance Curves

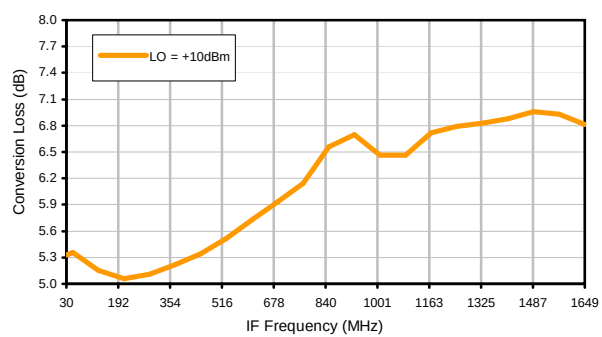
Conversion Loss @ IF=30MHz



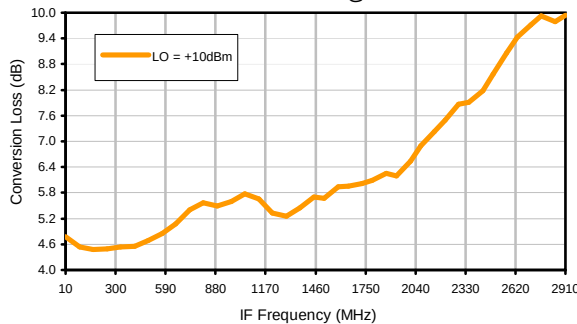
Conversion Loss vs. LO @ RF=5350MHz



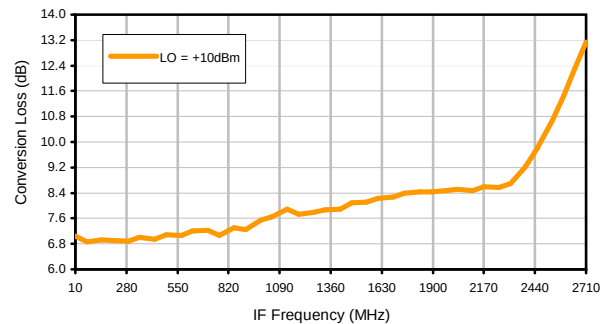
Conversion Loss vs. IF @ RF=5350MHz



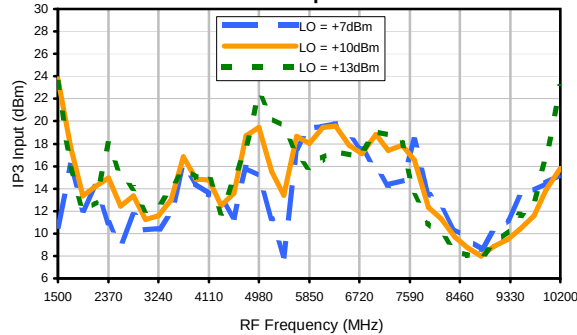
Conversion Loss vs. IF @ RF=3690MHz



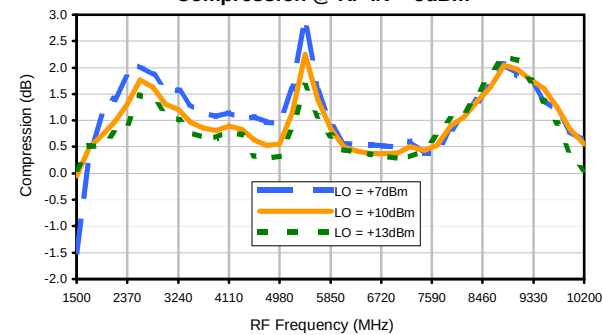
Conversion Loss vs. IF @ RF=7010.1MHz



IP3 Input

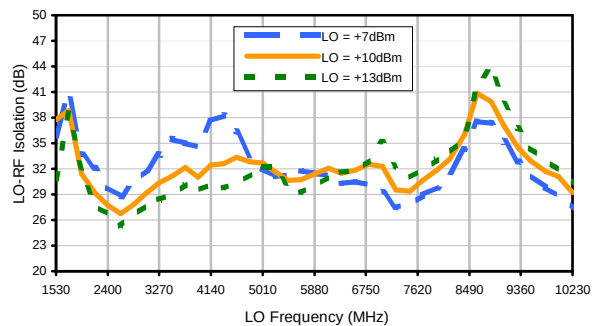


Compression @ RF IN=+5dBm

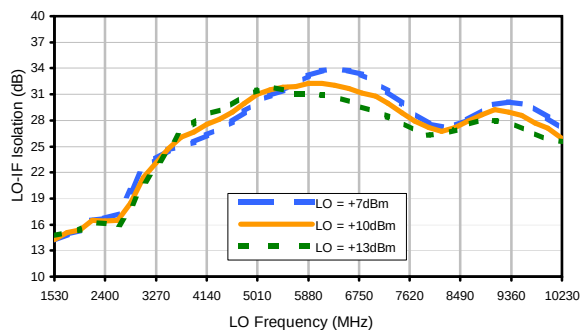


## Typical Performance Curves

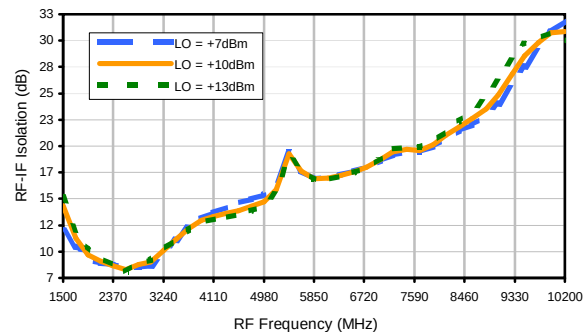
LO-RF Isolation



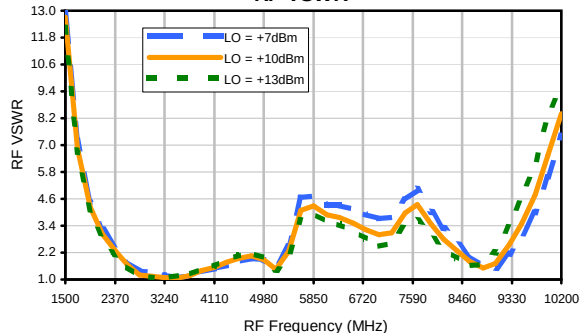
LO-IF Isolation



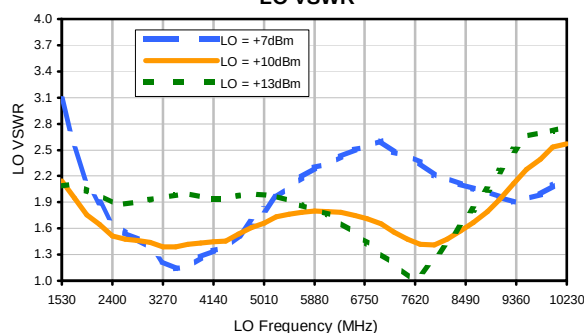
RF-IF Isolation



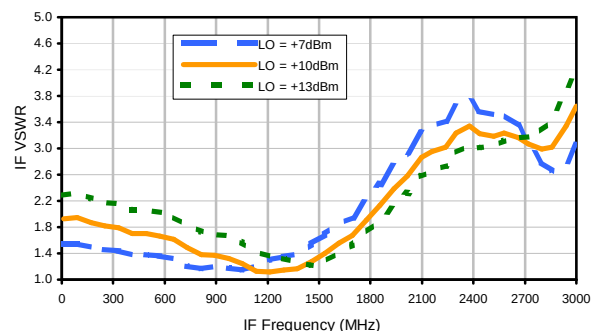
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

| RF HARMONICS ORDER | (-dBm) | (-dBc) |     |     |     |     |     |     |     |     |     |     |
|--------------------|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 0      | -      | -   | 6   | 18  | 22  | 33  | --- | --- | --- | --- | --- |
|                    | 1      | -      | 13  | +0  | 40  | 23  | 41  | 60  | --- | --- | --- | --- |
|                    | 2      | 84     | 57  | 62  | 56  | 61  | 64  | 68  | 72  | --- | --- | --- |
|                    | 3      | >90    | >75 | 73  | >75 | 54  | 74  | 64  | >75 | >75 | --- | --- |
|                    | 4      | >90    | >75 | >75 | >75 | >75 | >75 | >75 | >75 | >75 | >75 | --- |
|                    | 5      | ---    | --- | >75 | >75 | >75 | >75 | >75 | >75 | >75 | >75 | --- |
|                    | 6      | ---    | --- | --- | >75 | >75 | >75 | >75 | >75 | >75 | >75 | 74  |
|                    | 7      | ---    | --- | --- | --- | >75 | >75 | >75 | >75 | >75 | >75 | >75 |
|                    | 8      | ---    | --- | --- | --- | --- | >75 | >75 | >75 | >75 | >75 | >75 |
|                    | 9      | ---    | --- | --- | --- | --- | --- | >75 | >75 | >75 | >75 | >75 |
|                    | 10     | ---    | --- | --- | --- | --- | --- | --- | >75 | >75 | >75 | >75 |
|                    | RF CAL | 0      | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |

## LO HARMONICS ORDER

Test conditions:

RF IN: 5350 MHz; -10.00 dBm.

LO IN: 5380 MHz; +10.00 dBm

IF OUT: 30 MHz; -15.49 dBm

| RF HARMONICS ORDER | (-dBm) | (-dBc) |     |     |     |     |     |     |     |     |     |     |
|--------------------|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    | 0      | -      | -   | 15  | 28  | 32  | 43  | --- | --- | --- | --- | --- |
|                    | 1      | -      | 12  | +0  | 43  | 24  | 43  | 62  | --- | --- | --- | --- |
|                    | 2      | 64     | 50  | 48  | 58  | 49  | 67  | 58  | 65  | --- | --- | --- |
|                    | 3      | 89     | 59  | 50  | 51  | 29  | 49  | 45  | 61  | >84 | --- | --- |
|                    | 4      | >90    | 76  | 77  | 67  | 71  | 65  | 68  | 74  | >84 | >84 | --- |
|                    | 5      | ---    | --- | 81  | >84 | 73  | 66  | 47  | 68  | 62  | 76  | >84 |
|                    | 6      | ---    | --- | --- | >84 | >84 | 71  | 80  | 72  | 84  | 80  | >84 |
|                    | 7      | ---    | --- | --- | --- | >84 | >84 | 73  | >84 | 61  | 83  | 77  |
|                    | 8      | ---    | --- | --- | --- | --- | >84 | >84 | 82  | >84 | 72  | >84 |
|                    | 9      | ---    | --- | --- | --- | --- | --- | >84 | >84 | 84  | >84 | 64  |
|                    | 10     | ---    | --- | --- | --- | --- | --- | --- | >84 | >84 | >84 | 80  |
|                    | RF CAL | 0      | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |

## LO HARMONICS ORDER

Test conditions:

RF IN: 5350 MHz; 0.00 dBm.

LO IN: 5380 MHz; +10.00 dBm

IF OUT: 30 MHz; -5.89 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.