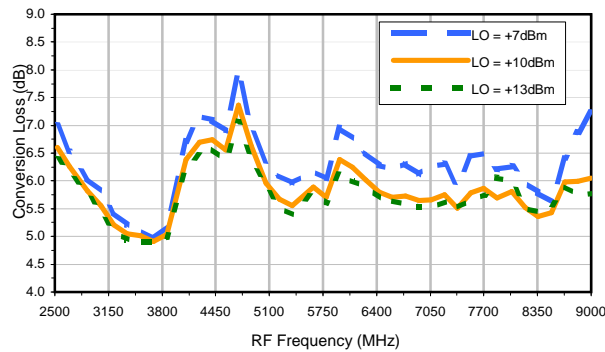


# Frequency Mixer

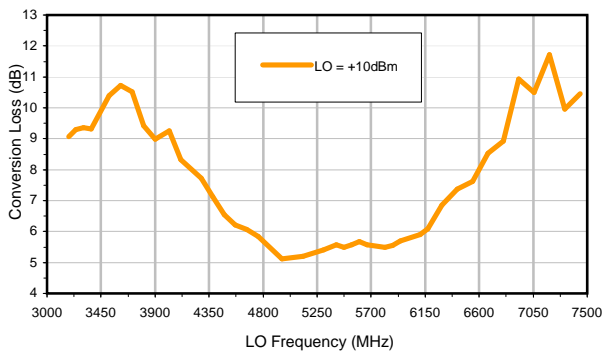
# MCA1T-80LH+

## Typical Performance Curves

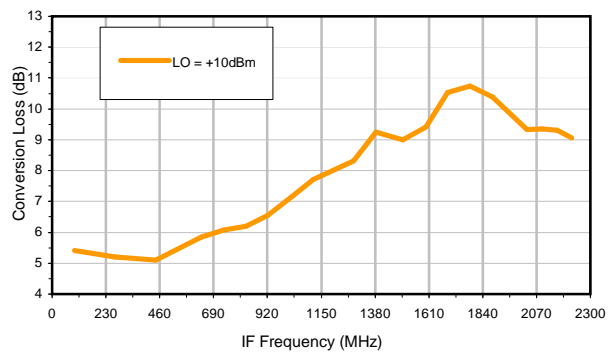
Conversion Loss @IF=30.1 MHz



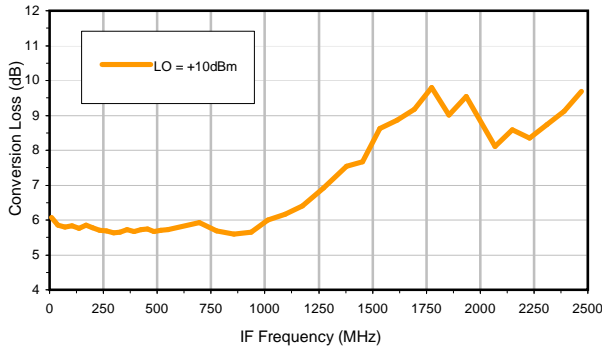
Conversion Loss vs. LO @ RF=5400 MHz



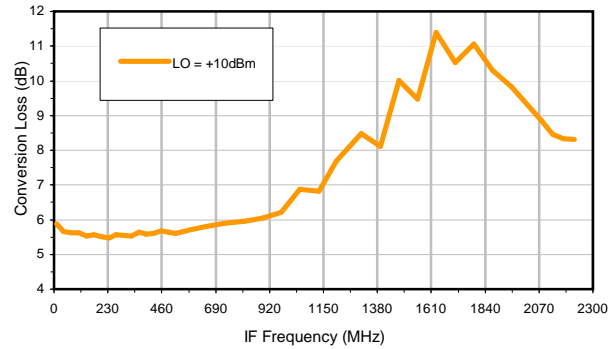
Conversion Loss vs. IF @ RF=5400 MHz



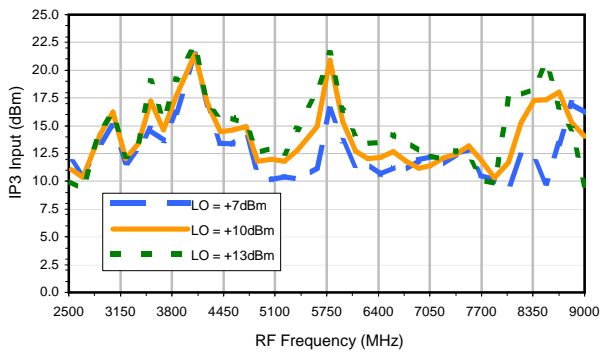
Conversion Loss vs. IF @ RF=2800 MHz



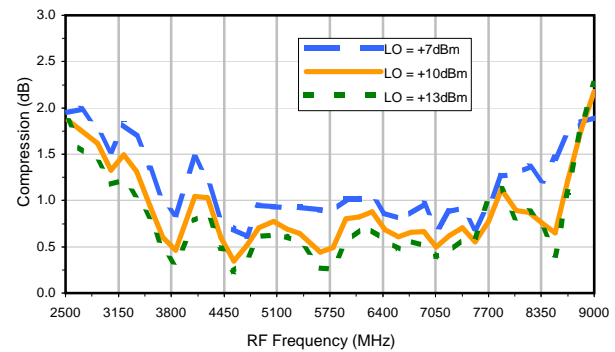
Conversion Loss vs. IF @ RF=8000 MHz



IP3 Input

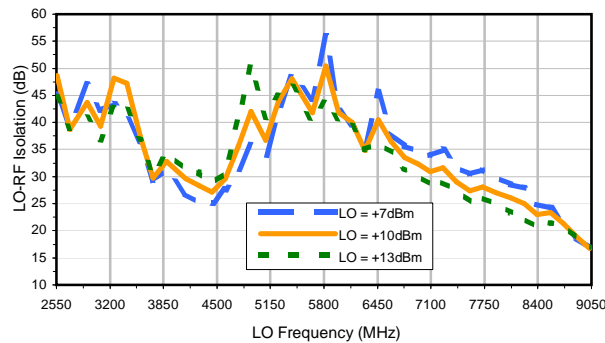


Compression @RF IN=+5 dBm

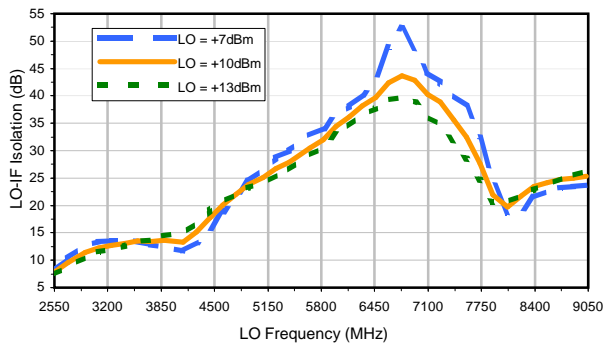


## Typical Performance Curves

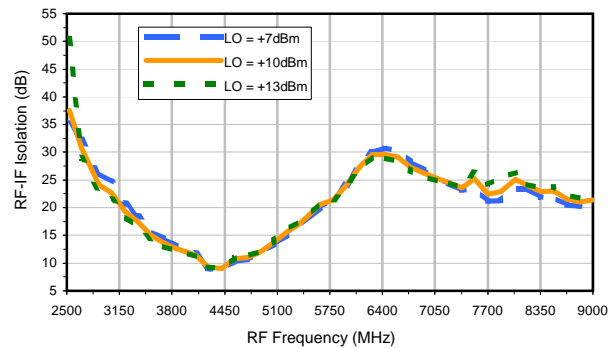
LO-RF Isolation



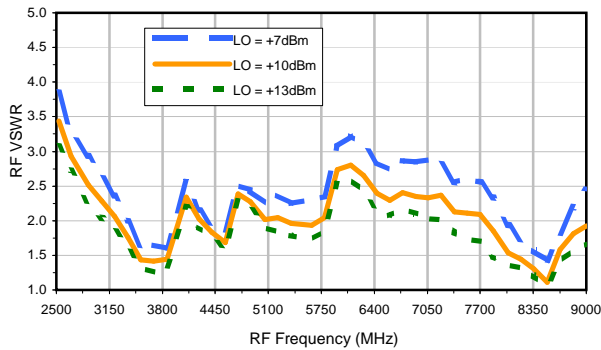
LO-IF Isolation



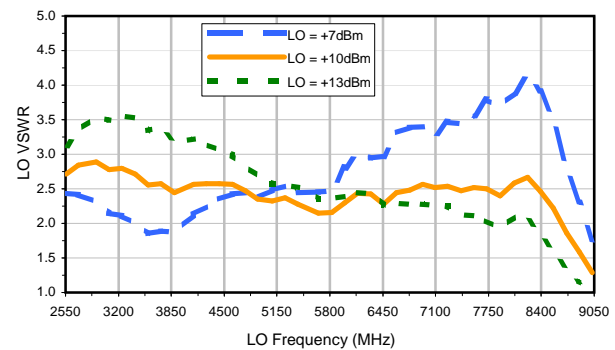
RF-IF Isolation



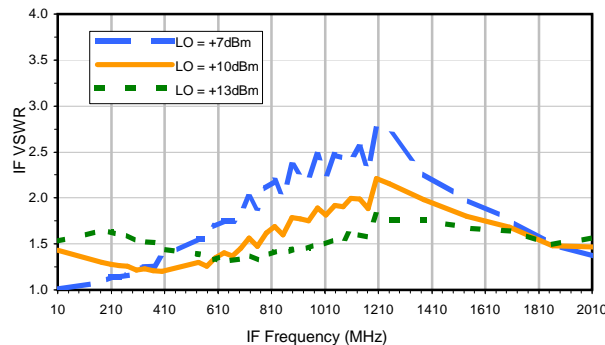
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	3	26	17	49	---	---	---	---	---	---
1	-	13	+0	44	26	48	52	---	---	---	---	---
2	83	68	61	53	63	66	61	60	---	---	---	---
3	>90	>74	67	>74	58	>74	72	>74	>74	---	---	---
4	89	>74	>74	>74	>74	>74	>74	>74	>74	>74	---	---
5	---	---	>74	>74	>74	>74	>74	>74	>74	>74	>74	---
6	---	---	---	>74	>74	>74	>74	>74	>74	>74	>74	>74
7	---	---	---	---	>74	>74	>74	>74	>74	>74	>74	>74
8	---	---	---	---	---	>74	>74	>74	>74	>74	>74	>74
9	---	---	---	---	---	---	>74	>74	>74	>74	>74	>74
10	---	---	---	---	---	---	---	>74	>74	>74	>74	>74
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 5400 MHz; -10.00 dBm.  
 LO IN: 5430 MHz; +10.00 dBm  
 IF OUT: 30 MHz; -15.81 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	13	37	28	50	---	---	---	---	---	---
1	-	13	+0	51	26	51	56	---	---	---	---	---
2	63	56	52	47	55	60	55	57	---	---	---	---
3	88	53	46	62	37	60	52	60	70	---	---	---
4	>90	64	82	73	80	57	75	69	70	63	---	---
5	---	---	>84	>84	77	>84	67	76	71	75	>84	---
6	---	---	---	77	>84	83	>84	70	>84	80	84	75
7	---	---	---	---	>84	>84	>84	>84	80	>84	>84	>84
8	---	---	---	---	---	>84	>84	>84	>84	>84	>84	>84
9	---	---	---	---	---	---	>84	>84	>84	>84	>84	>84
10	---	---	---	---	---	---	---	>84	>84	>84	>84	>84
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 5400 MHz; 0.00 dBm.  
 LO IN: 5430 MHz; +10.00 dBm  
 IF OUT: 30 MHz; -6.02 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.