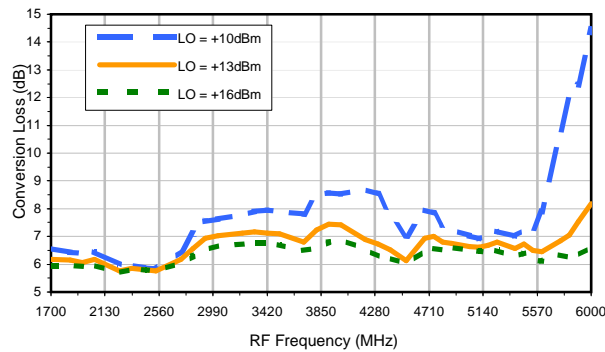


# Frequency Mixer

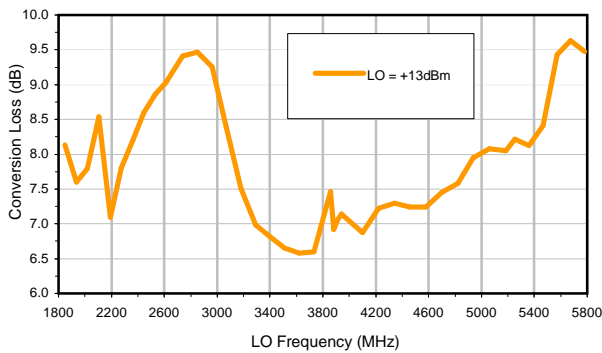
# MCA1T-60MH+

## Typical Performance Curves

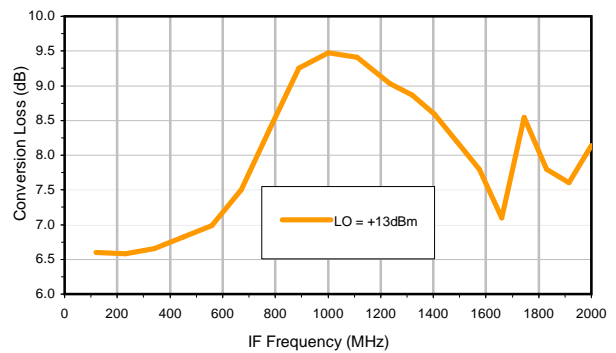
Conversion Loss @IF=30 MHz



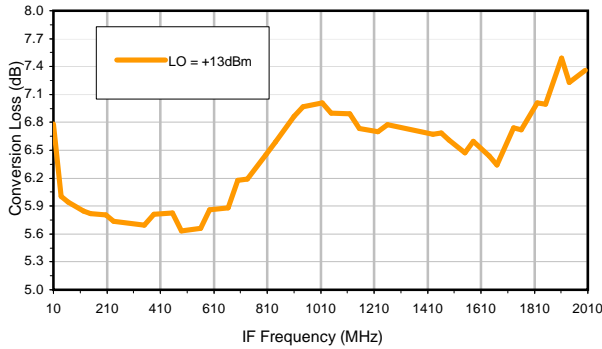
Conversion Loss vs. LO @ RF=3850 MHz



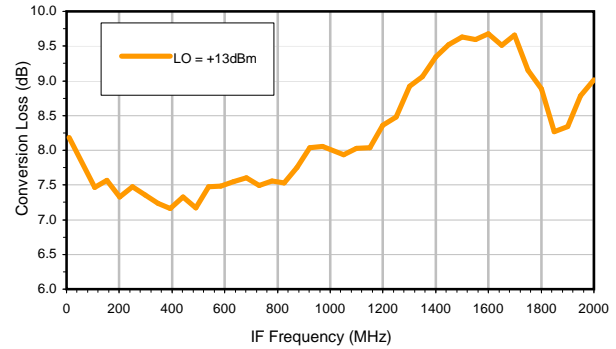
Conversion Loss vs. IF @ RF=3850 MHz



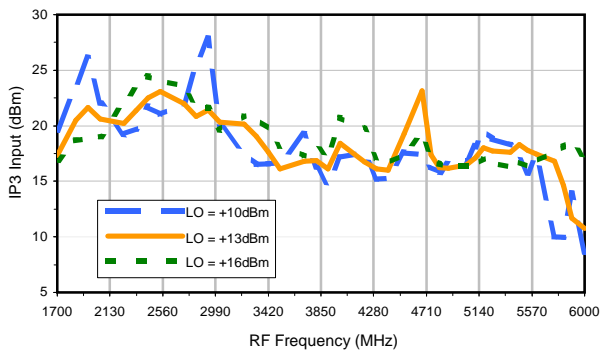
Conversion Loss vs. IF @ RF=1700 MHz



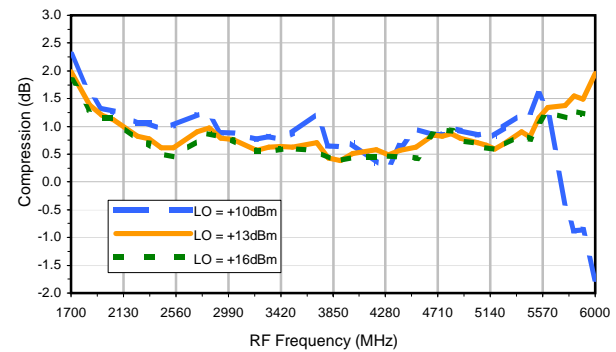
Conversion Loss vs. IF @ RF=6000 MHz



IP3 Input

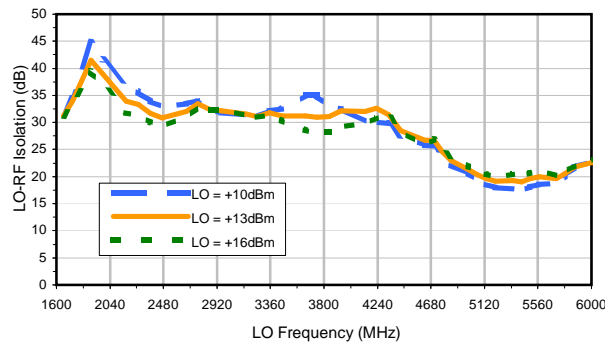


Compression @RF IN=+9 dBm

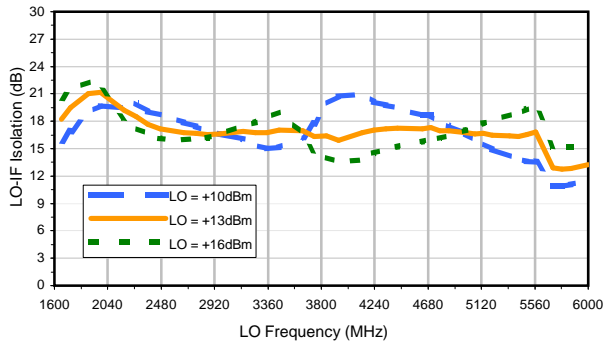


## Typical Performance Curves

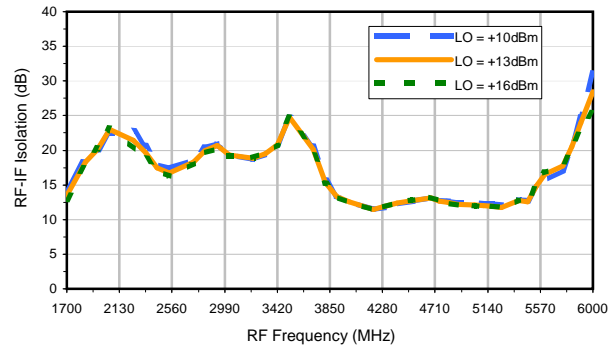
### LO-RF Isolation



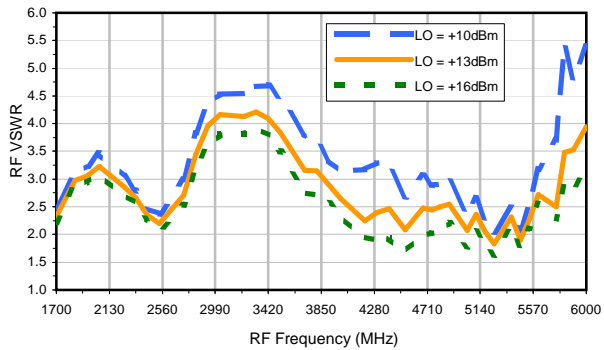
### LO-IF Isolation



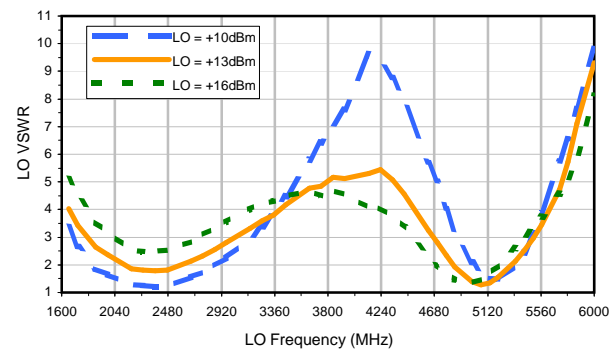
### RF-IF Isolation



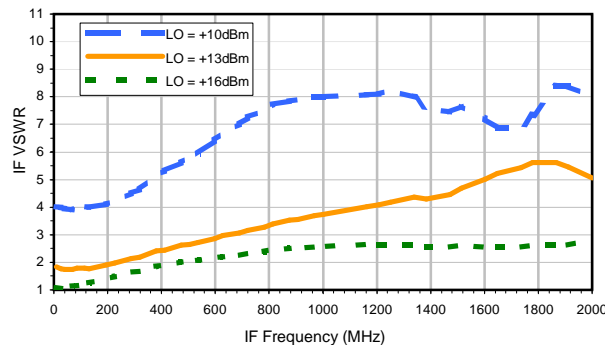
### RF VSWR



### LO VSWR



### IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	+9	23	22	49	18	49	---	---	---	---
1	-	9	+0	25	22	42	45	53	51	---	---	---
2	76	49	43	49	42	49	67	52	50	69	---	---
3	>90	66	59	71	56	63	61	73	70	70	>77	---
4	>90	>77	>77	>77	>77	>77	76	>77	>77	>77	74	>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	---	---	>77	>77	>77	>77	>77	>77	>77	>77	>77	>77
8	---	---	---	>77	76	>77	>77	>77	>77	>77	>77	>77
9	---	---	---	---	>77	75	>77	>77	>77	>77	>77	>77
10	---	---	---	---	---	>77	>77	>77	>77	>77	>77	>77
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 3800 MHz; -6.00 dBm.  
 LO IN: 3830 MHz; +13.00 dBm  
 IF OUT: 30 MHz; -13.04 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	1	33	34	47	35	75	---	---	---	---
1	-	9	+0	29	21	53	48	52	68	---	---	---
2	56	38	36	39	35	42	57	49	48	83	---	---
3	86	46	38	51	43	42	48	56	61	66	69	---
4	>90	61	68	61	54	58	51	56	76	61	62	81
5	>90	>87	76	75	61	82	51	64	55	75	68	68
6	>90	>87	74	81	80	82	73	78	67	74	85	73
7	---	---	>87	>87	>87	>87	70	>87	72	67	79	81
8	---	---	---	>87	81	>87	>87	>87	77	83	73	76
9	---	---	---	---	>87	>87	>87	>87	83	>87	78	79
10	---	---	---	---	---	>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: 3800 MHz; 4.00 dBm.  
 LO IN: 3830 MHz; +13.00 dBm  
 IF OUT: 30 MHz; -3.09 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.