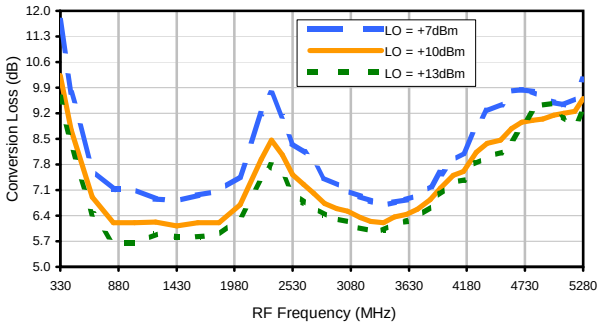
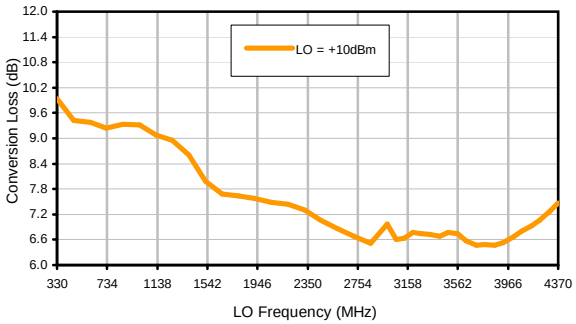
Frequency Mixer MCA-50LH+

Typical Performance Curves

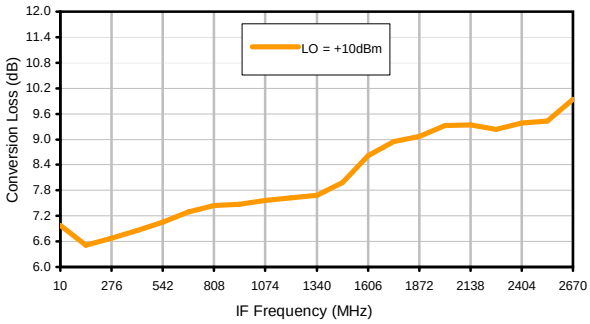
Conversion Loss @ IF=30MHz



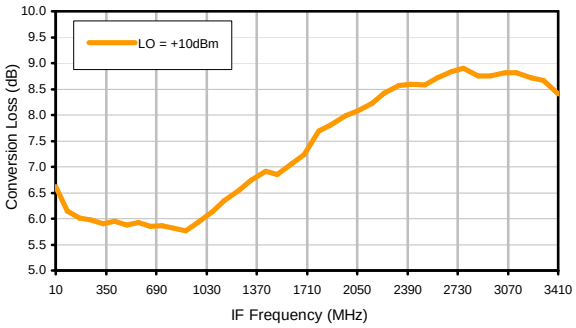
Conversion Loss vs. LO @ RF=3000MHz



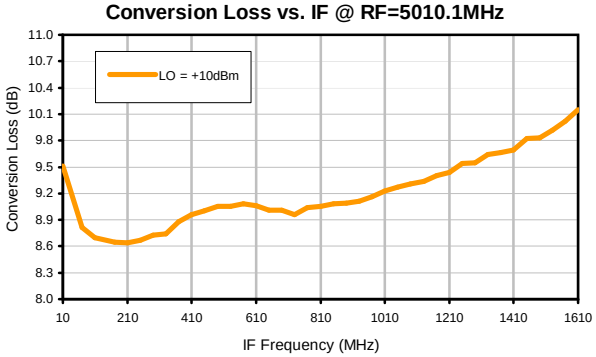
Conversion Loss vs. IF @ RF=3000MHz



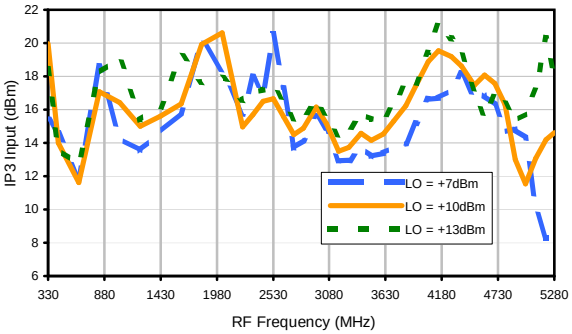
Conversion Loss vs. IF @ RF=989.9MHz



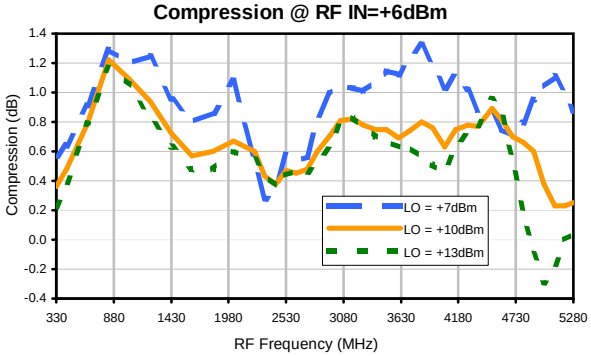
Conversion Loss vs. IF @ RF=5010.1MHz



IP3 Input

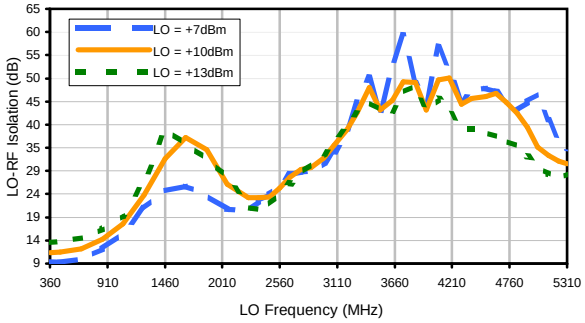


Compression @ RF IN=+6dBm

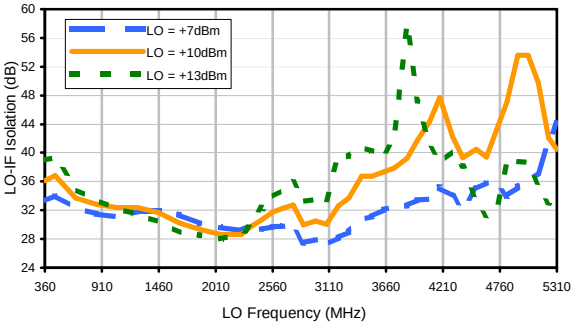


Typical Performance Curves

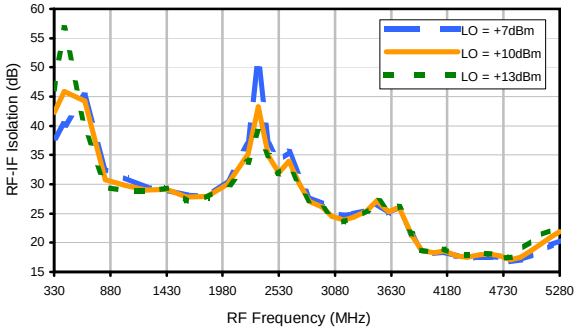
LO-RF Isolation



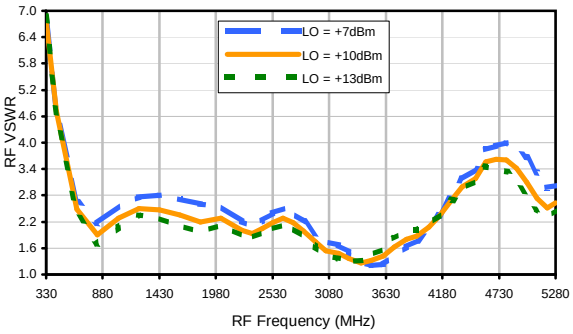
LO-IF Isolation



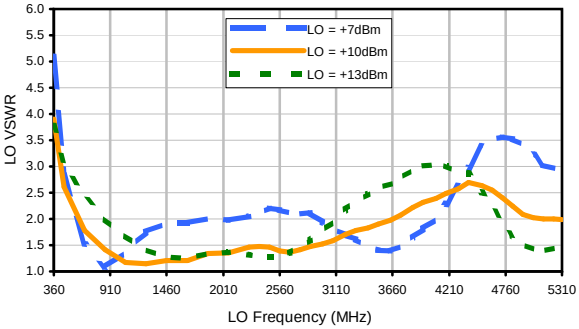
RF-IF Isolation



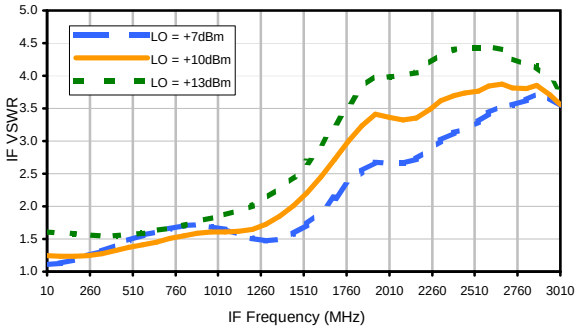
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	5	16	23	28	24	44	28	---	---	---
1	-	19	+0	37	23	37	43	49	57	52	---	---
2	72	63	55	48	51	62	65	69	61	69	56	---
3	>90	>74	67	>74	59	74	71	>74	>74	>74	>74	>74
4	>90	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74
5	>90	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74
6	>90	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74
7	>90	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74
8	---	---	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74
9	---	---	>74	>74	>74	>74	>74	>74	>74	>74	>74	>74
10	---	---	---	>74	>74	>74	>74	>74	>74	>74	>74	>74
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 3000 MHz; -9.00 dBm.
LO IN: 3030 MHz; +10.00 dBm
IF OUT: 30 MHz; -15.62 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	15	26	36	38	36	58	45	---	---	---
1	-	19	+0	34	23	39	47	53	68	59	---	---
2	52	56	42	38	40	51	61	62	55	71	53	---
3	>90	58	47	60	38	58	51	60	64	65	74	65
4	>90	81	66	65	67	59	57	69	74	72	72	79
5	>90	83	>84	80	73	77	61	75	70	78	>84	80
6	>90	>84	>84	>84	84	>84	81	76	73	>84	>84	>84
7	>90	>84	>84	>84	>84	>84	>84	>84	77	>84	84	>84
8	---	---	>84	>84	>84	>84	>84	>84	>84	>84	84	>84
9	---	---	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84
10	---	---	---	>84	>84	>84	>84	>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: 3000 MHz; 1.00 dBm.
LO IN: 3030 MHz; +10.00 dBm
IF OUT: 30 MHz; -5.68 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.