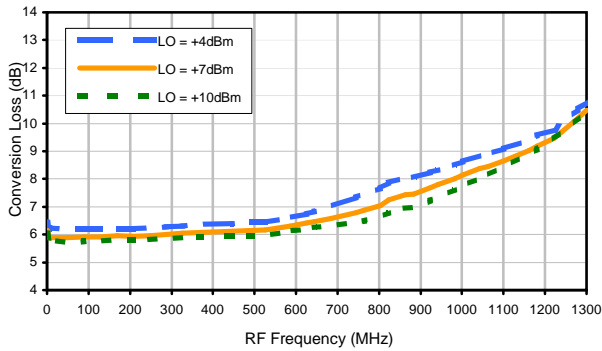


# Frequency Mixer

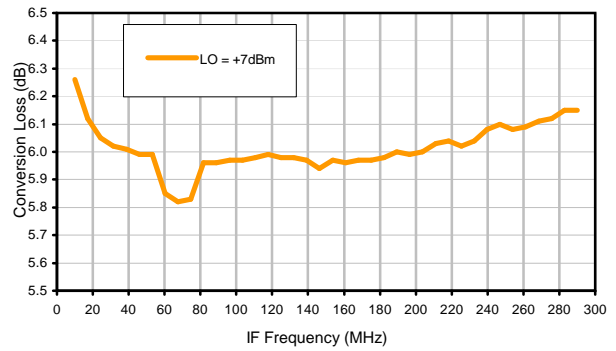
# RMS-1BM+

## Typical Performance Curves

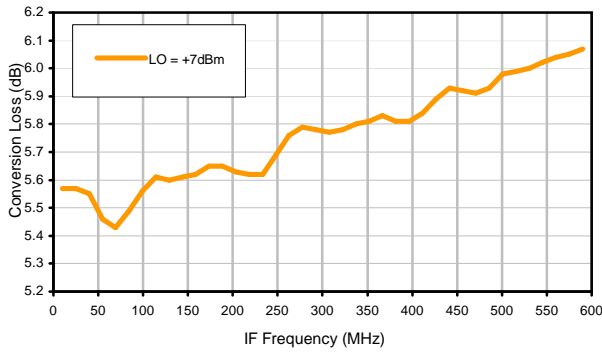
Conversion Loss @ IF=30MHz



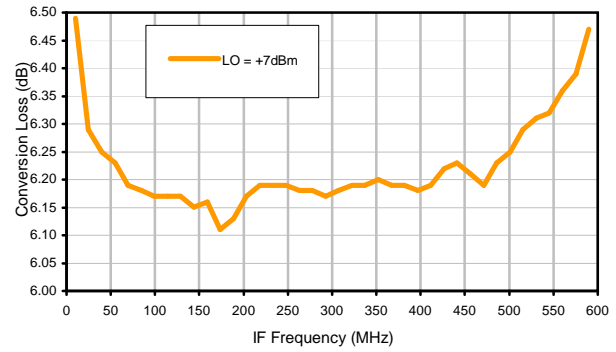
Conversion Loss vs. IF @ RF=300.1MHz



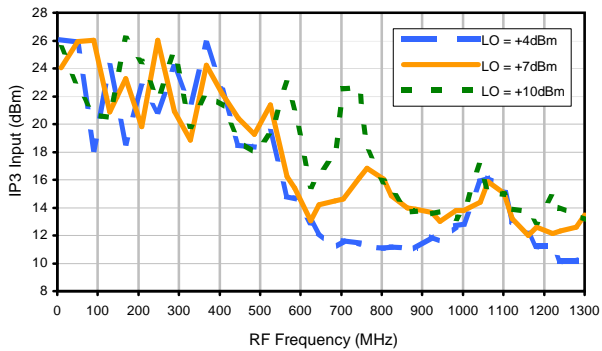
Conversion Loss vs. IF @ RF=10.1MHz



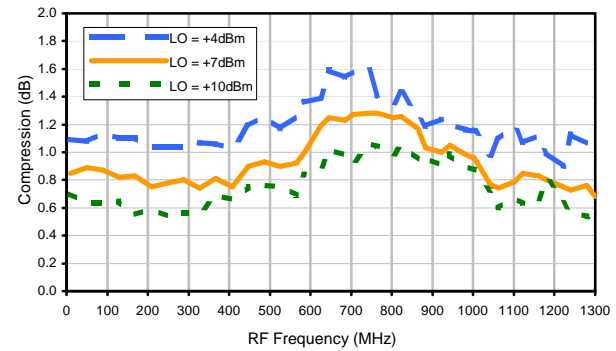
Conversion Loss vs. IF @ RF=600.1MHz



IP3 Input



Compression @ RF IN=+1dBm



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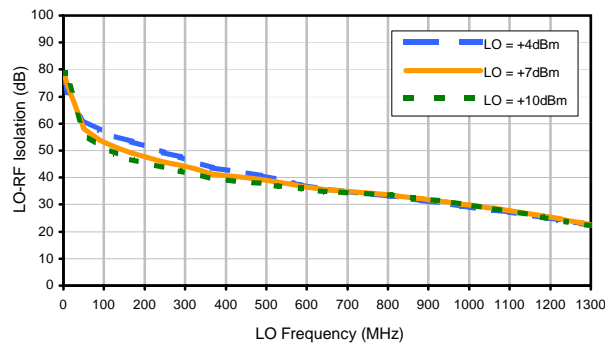


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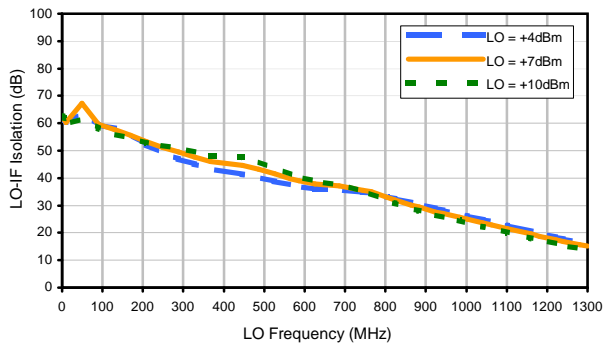


## Typical Performance Curves

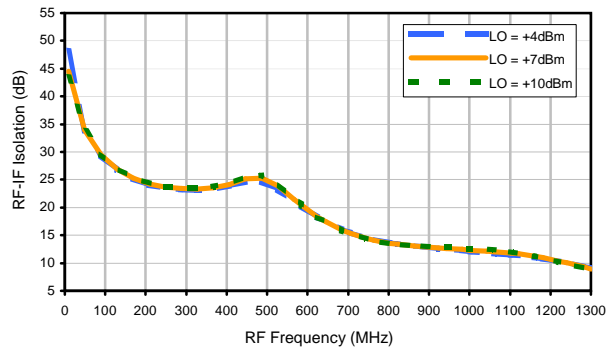
LO-RF Isolation



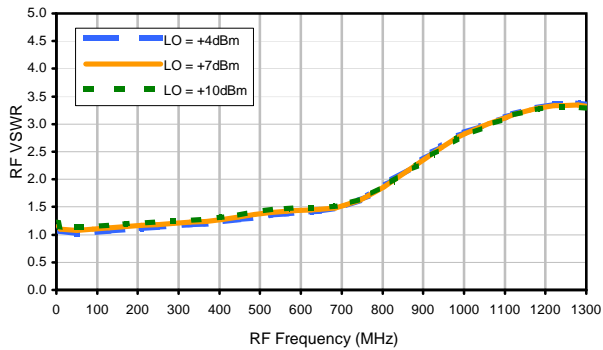
LO-IF Isolation



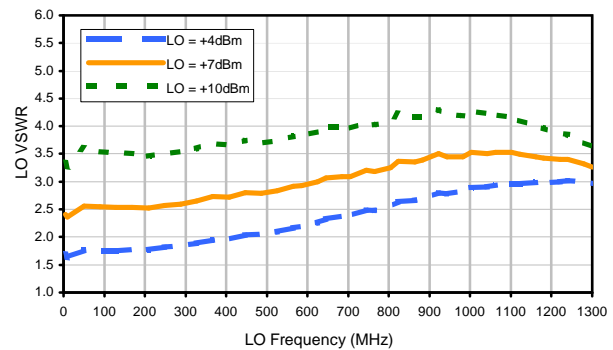
RF-IF Isolation



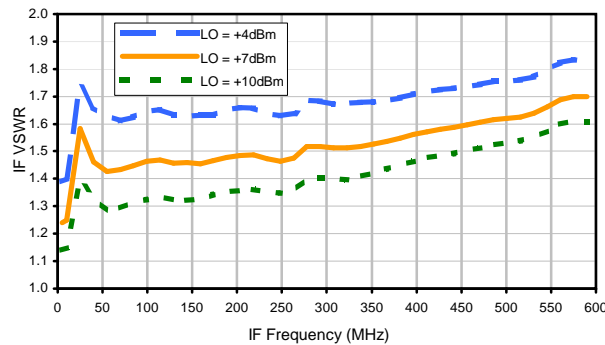
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	26	18	23	37	19	35	26	44	35	36
1	-	17	+0	27	12	30	19	37	35	39	39	39
2	103	65	69	63	68	63	67	66	60	71	59	68
3	127	77	74	79	69	77	64	80	71	80	70	75
4	111	95	97	96	90	88	89	96	93	91	100	97
5	114	107	109	113	88	88	88	89	98	106	91	99
6	119	109	102	102	98	101	89	92	102	94	102	106
7	114	104	112	103	102	108	90	83	95	102	99	103
8	110	102	107	106	102	103	101	94	83	98	97	100
9	117	100	102	104	110	107	111	101	106	83	86	97
10	111	106	106	109	104	107	114	109	107	99	78	99
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; -14.00 dBm.  
 LO IN: 330.01 MHz; +7.00 dBm  
 IF OUT: 29.91 MHz; -20.12 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	36	28	33	50	31	46	38	51	47	48
1	-	17	+0	27	12	31	19	40	35	44	40	44
2	99	57	59	58	59	76	58	64	50	65	54	72
3	115	56	51	55	54	60	48	62	48	64	56	56
4	111	68	73	64	87	62	97	61	70	65	70	71
5	113	77	68	67	60	68	57	66	56	95	58	73
6	120	86	95	78	84	81	81	84	79	85	85	78
7	131	87	85	84	75	97	78	82	81	79	77	86
8	119	95	95	94	92	84	92	85	91	87	98	83
9	116	97	103	100	93	90	90	107	94	91	93	112
10	118	100	113	106	104	104	98	91	107	91	99	100
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; -4.00 dBm.  
 LO IN: 330.01 MHz; +7.00 dBm  
 IF OUT: 29.91 MHz; -10.11 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.

REV. X2  
 RMS-1BM+  
 100817  
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