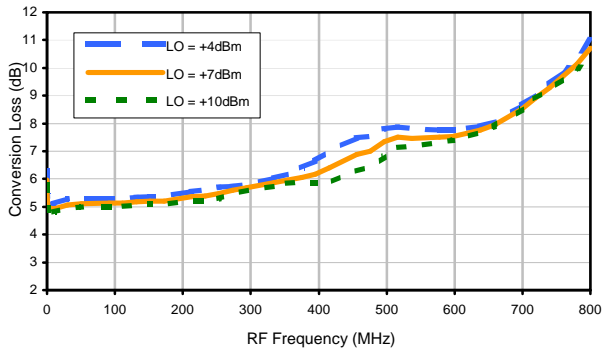


# Frequency Mixer

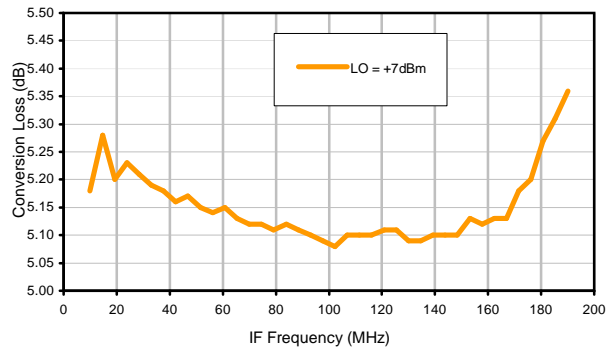
# SBL-1-1+

## Typical Performance Curves

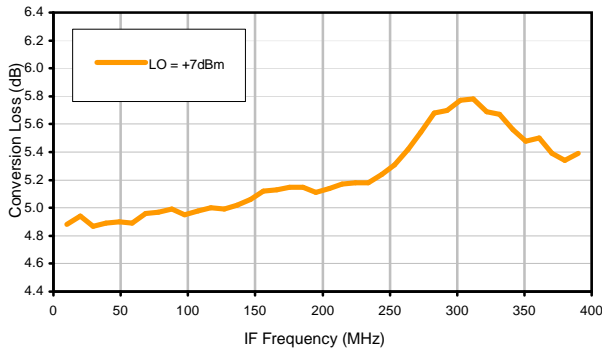
Conversion Loss @ IF=30MHz



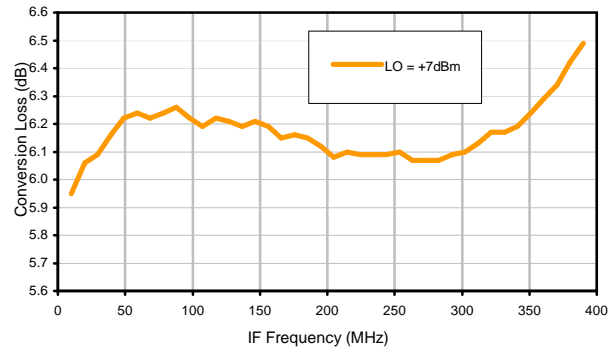
Conversion Loss vs. IF @ RF=200.1MHz



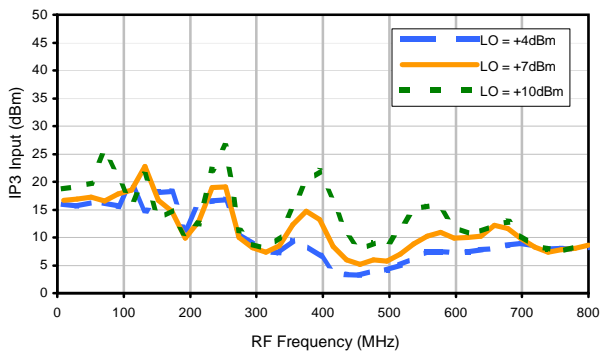
Conversion Loss vs. IF @ RF=10.1MHz



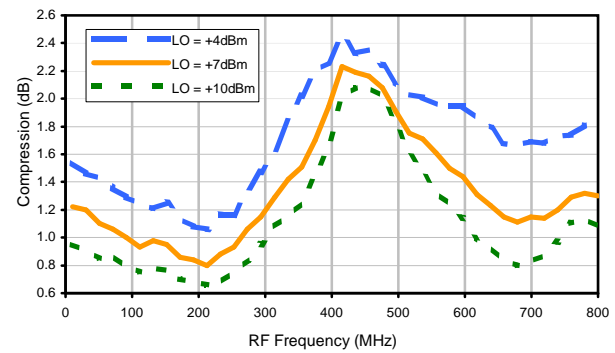
Conversion Loss vs. IF @ RF=400.1MHz



IP3 Input



Compression @ RF IN=+1dBm



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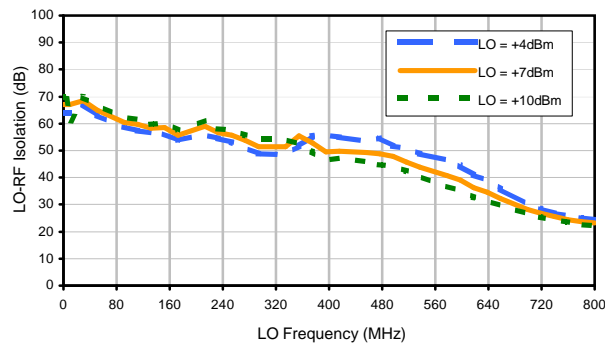


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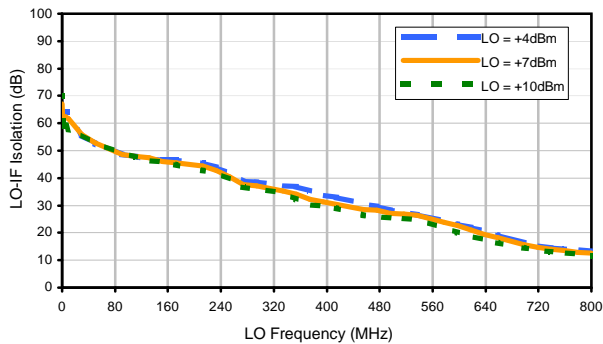


## Typical Performance Curves

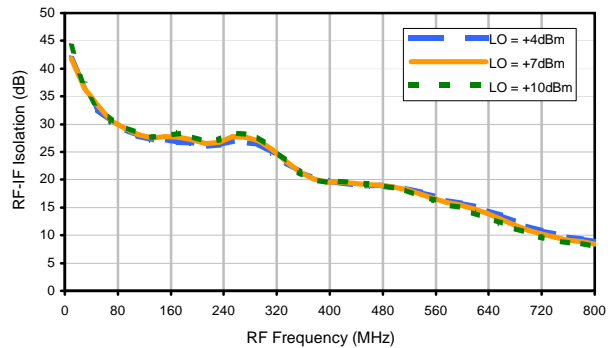
LO-RF Isolation



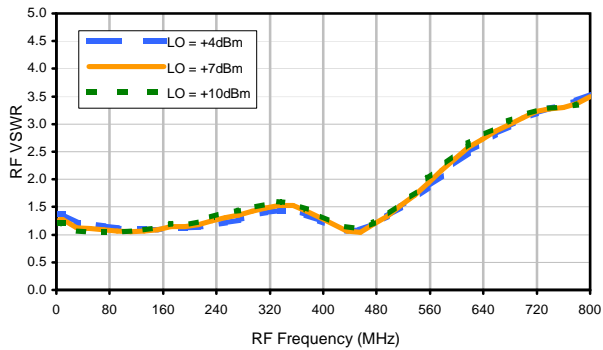
LO-IF Isolation



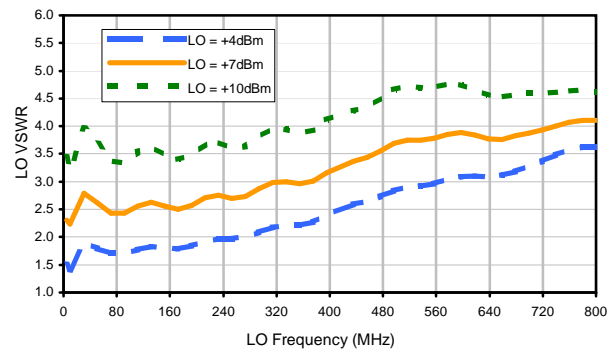
RF-IF Isolation



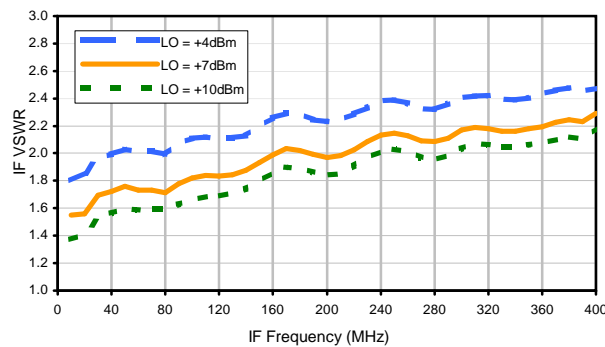
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	16	32	15	36	18	39	25	48	35	55
1	-	22	+0	30	12	48	21	44	34	52	41	51
2	>100	71	50	69	50	67	48	66	57	72	62	74
3	>100	65	54	65	57	70	53	67	68	73	66	80
4	>100	>81	>81	>81	>81	>81	>81	>81	78	>81	>81	>81
5	>100	>81	>81	>81	>81	79	>81	>81	>81	>81	>81	>81
6	>100	>81	>81	>81	>81	>81	76	>81	>81	>81	>81	>81
7	>100	>81	>81	>81	>81	>81	>81	68	81	>81	>81	>81
8	>100	>81	>81	>81	>81	>81	>81	>81	57	>81	>81	>81
9	>100	>81	>81	>81	>81	>81	>81	>81	>81	71	>81	>81
10	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	79	>81
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 200.1 MHz; -14.00 dBm.  
 LO IN: 230.01 MHz; +7.00 dBm  
 IF OUT: 29.91 MHz; -19.3 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	25	44	27	46	29	51	37	57	49	73
1	-	23	+0	32	12	44	24	52	36	60	46	58
2	99	61	45	65	47	61	50	66	56	65	56	74
3	>100	48	36	48	40	51	35	58	44	57	51	66
4	>100	76	62	84	60	81	59	74	55	75	71	81
5	>100	85	65	74	52	66	50	65	54	63	83	69
6	>100	88	73	86	72	81	81	83	75	87	68	84
7	>100	>91	73	89	66	75	64	78	62	>91	60	76
8	>100	>91	>91	>91	90	>91	90	>91	68	>91	88	>91
9	>100	>91	87	>91	85	90	80	89	83	>91	82	>91
10	>100	>91	>91	>91	>91	>91	>91	>91	>91	>91	>91	>91
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 200.1 MHz; -4.00 dBm.  
 LO IN: 230.01 MHz; +7.00 dBm  
 IF OUT: 29.91 MHz; -9.42 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.

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