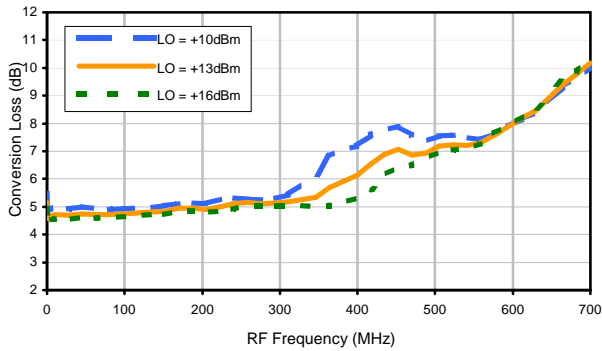


# Frequency Mixer

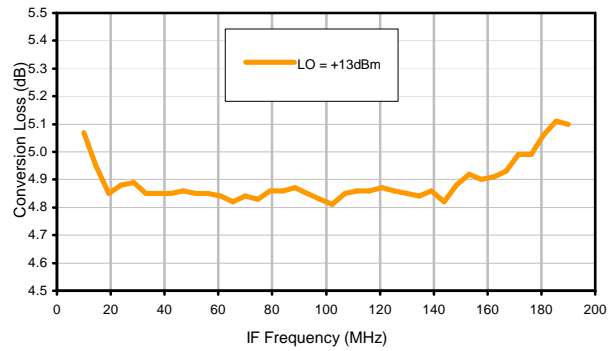
# TUF-3MH

## Typical Performance Curves

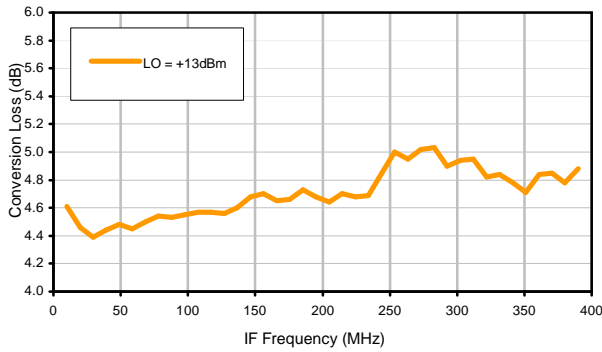
Conversion Loss @ IF=30MHz



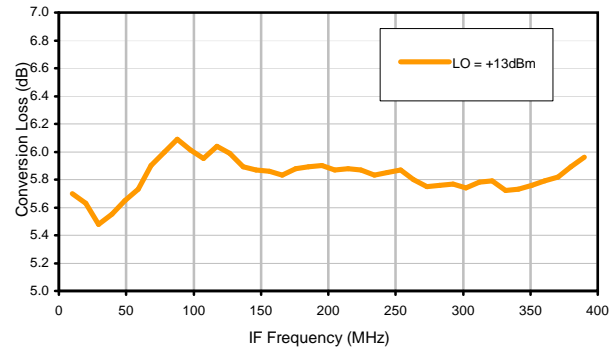
Conversion Loss vs. IF @ RF=200.1MHz



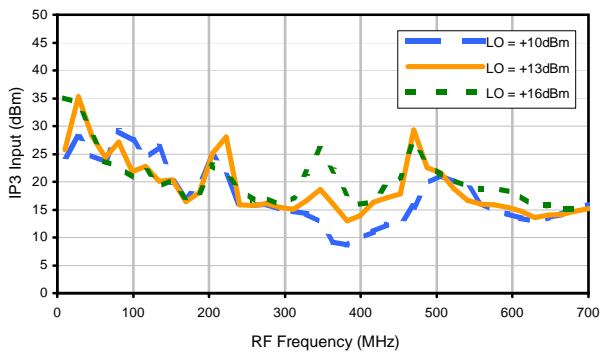
Conversion Loss vs. IF @ RF=10.1MHz



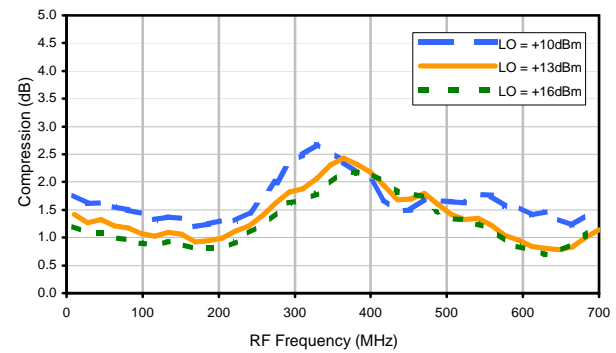
Conversion Loss vs. IF @ RF=400.1MHz



IP3 Input



Compression @ RF IN=+9dBm



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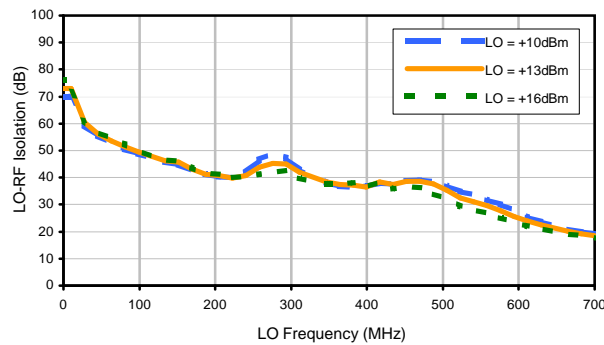


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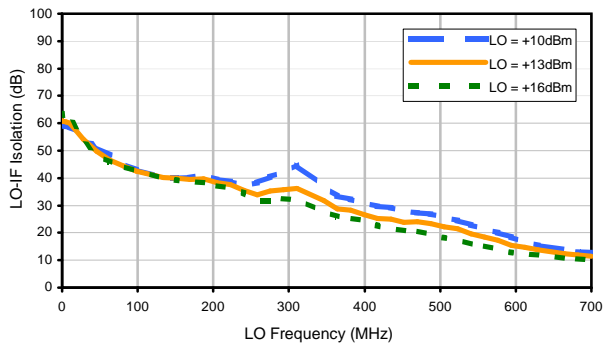


## Typical Performance Curves

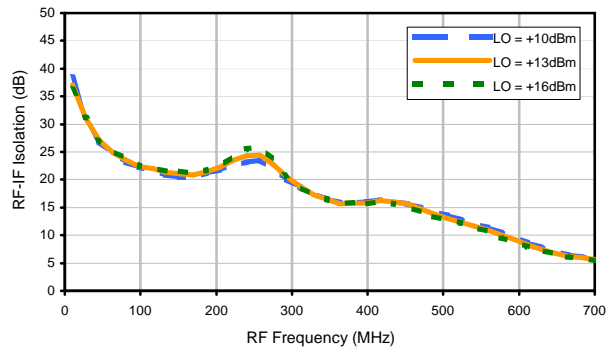
LO-RF Isolation



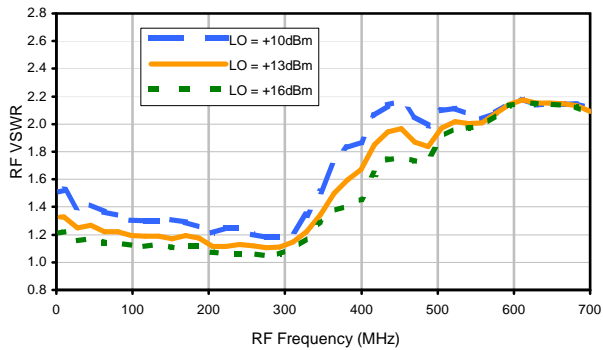
LO-IF Isolation



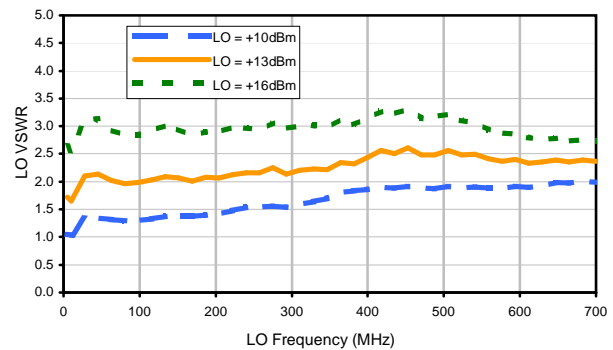
RF-IF Isolation



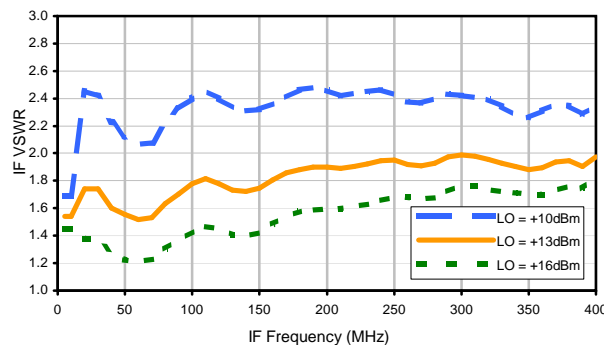
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	21	33	20	43	34	51	38	45	39	50
1	-	17	+0	24	12	36	29	46	37	47	41	53
2	92	49	40	49	42	44	41	60	53	55	46	57
3	>100	43	38	45	43	49	40	58	52	51	46	51
4	>100	62	59	53	53	53	52	60	57	76	65	78
5	>100	65	54	49	46	54	46	56	47	61	58	62
6	>100	75	77	76	80	64	63	62	61	66	70	69
7	>100	76	>99	76	70	59	61	64	61	67	63	89
8	>100	87	83	94	88	75	74	69	90	66	65	72
9	>100	80	78	80	77	78	67	64	67	72	69	72
10	>100	88	89	88	91	89	86	83	77	74	85	75
	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; +13.00 dBm  
 IF OUT: 29.91 MHz; -1.32 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	12	23	8	30	25	34	22	33	29	37
1	-	17	+0	23	11	34	30	39	36	41	32	43
2	>100	50	48	47	48	49	47	65	54	62	59	62
3	>100	80	72	74	59	64	58	78	60	65	57	67
4	>100	>89	76	76	73	73	70	74	77	85	72	86
5	>100	>89	84	>89	85	>89	80	83	80	87	>89	88
6	>100	>89	>89	>89	>89	>89	79	>89	>89	>89	>89	>89
7	>100	>89	>89	>89	>89	>89	>89	81	>89	>89	>89	>89
8	>100	>89	>89	>89	>89	>89	>89	88	67	88	>89	>89
9	>100	>89	>89	>89	>89	>89	>89	>89	>89	80	>89	>89
10	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 200.1 MHz; -6.00 dBm.  
 LO IN: 230.01 MHz; +13.00 dBm  
 IF OUT: 29.91 MHz; -11.3 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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