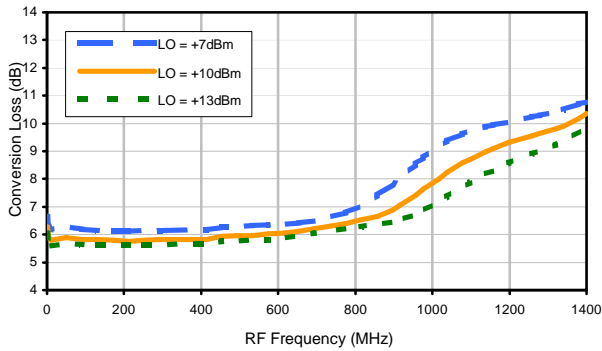


# Frequency Mixer

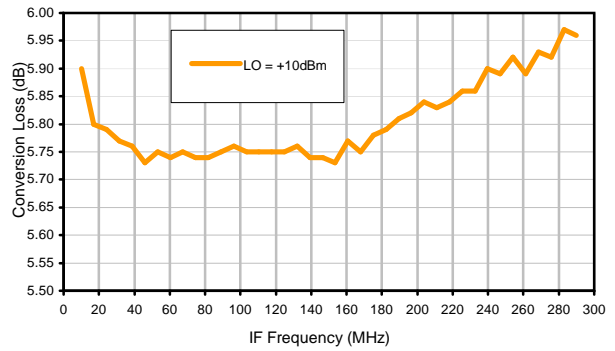
# TUF-1LHSM+

## Typical Performance Curves

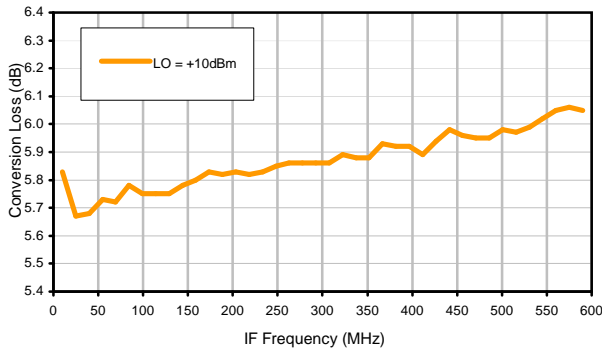
Conversion Loss @ IF=30MHz



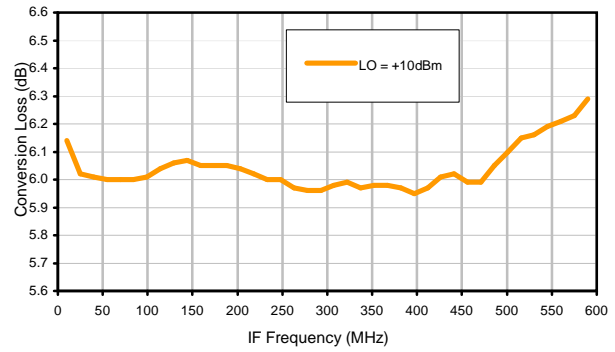
Conversion Loss vs. IF @ RF=300.1MHz



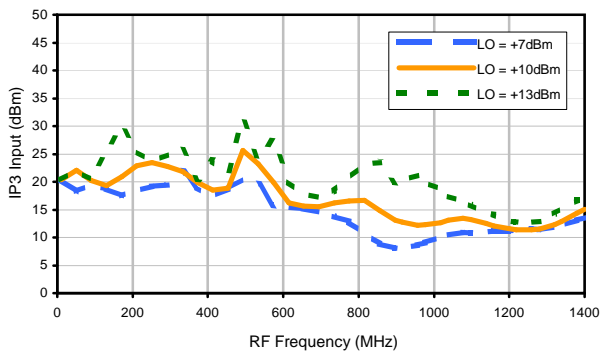
Conversion Loss vs. IF @ RF=10.1MHz



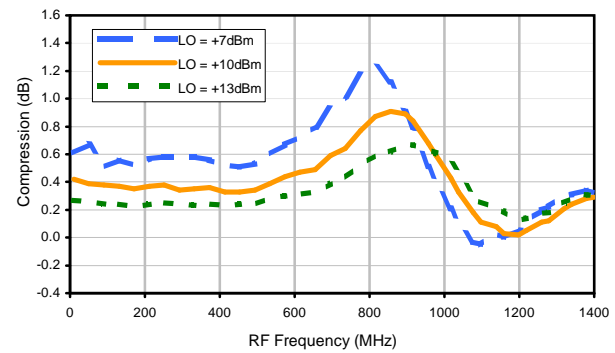
Conversion Loss vs. IF @ RF=600.1MHz



IP3 Input

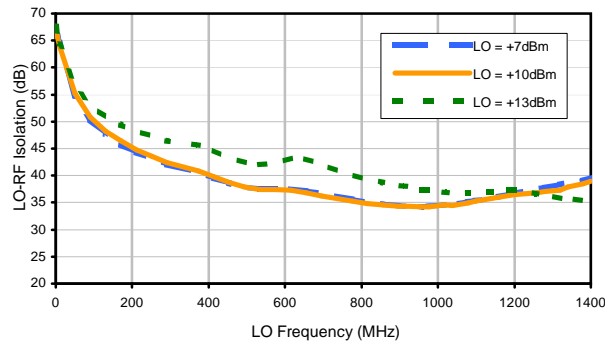


Compression @ RF IN=+5dBm

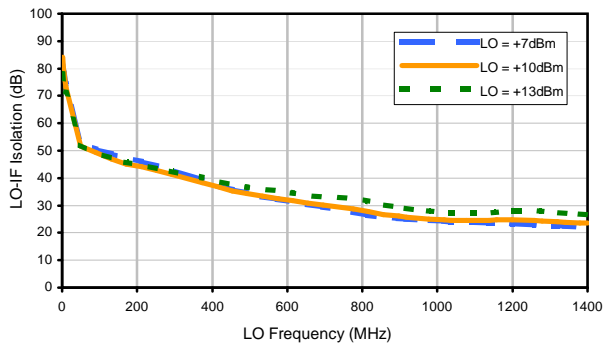


## Typical Performance Curves

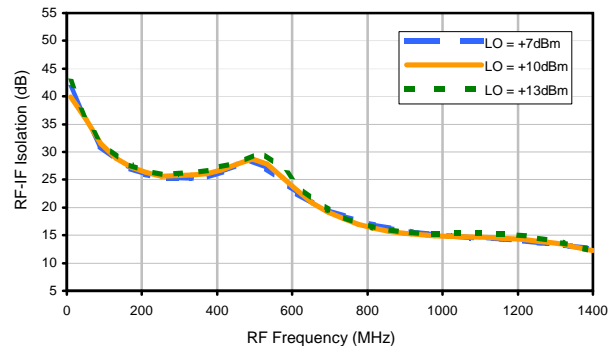
LO-RF Isolation



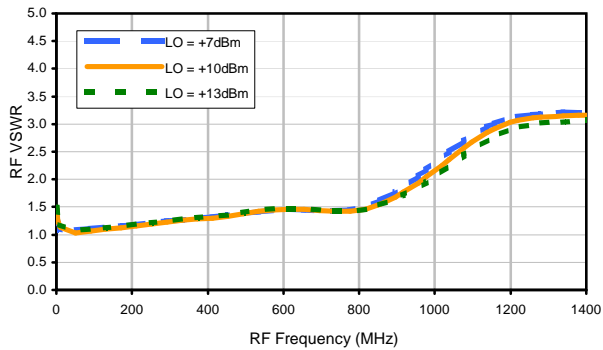
LO-IF Isolation



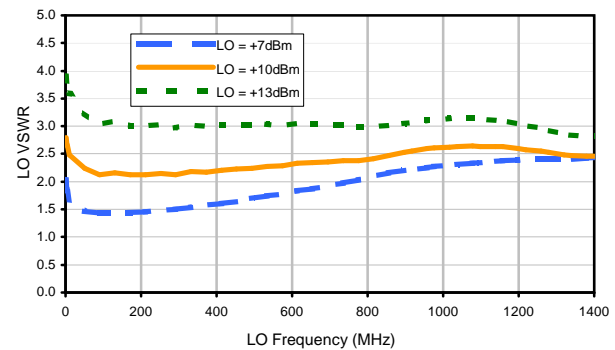
RF-IF Isolation



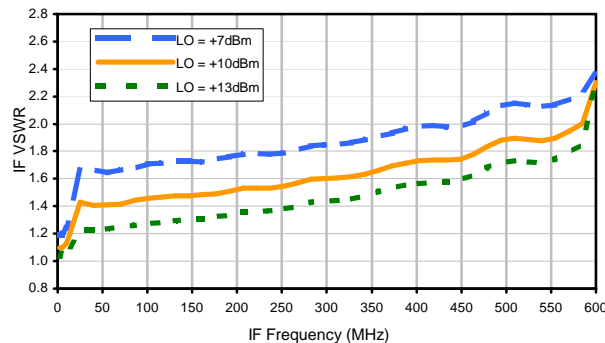
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	24	37	32	47	35	49	46	60	53	68
1	-	20	+0	29	12	34	20	36	32	48	49	48
2	85	67	47	64	46	64	46	70	48	60	62	74
3	>100	54	53	61	57	66	47	59	53	77	51	58
4	>100	76	65	75	64	80	65	76	63	87	63	75
5	>100	77	75	67	60	65	56	63	54	69	52	64
6	>100	85	79	88	83	92	86	94	85	90	80	94
7	>100	91	77	85	77	86	83	81	81	80	79	81
8	>100	>94	93	>94	>94	93	>94	>94	>94	>94	90	>94
9	>100	>94	90	91	81	84	80	88	79	93	81	92
10	>100	>94	>94	>94	>94	>94	>94	>94	>94	>94	81	>94
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; 0.00 dBm.  
 LO IN: 330.01 MHz; +10.00 dBm  
 IF OUT: 29.91 MHz; -5.99 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	16	28	19	38	22	34	32	50	34	47
1	-	20	+0	29	12	34	20	36	34	43	42	41
2	>100	69	52	69	53	70	52	84	54	67	66	79
3	>100	75	77	77	64	73	59	80	58	69	60	77
4	>100	>84	>84	>84	>84	>84	>84	>84	>84	>84	80	>84
5	>100	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84
6	>100	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84
7	>100	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84
8	>100	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84
9	>100	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84	>84
10	>100	>84	>84	>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: 300.1 MHz; -10.00 dBm.  
 LO IN: 330.01 MHz; +10.00 dBm  
 IF OUT: 29.91 MHz; -15.91 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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