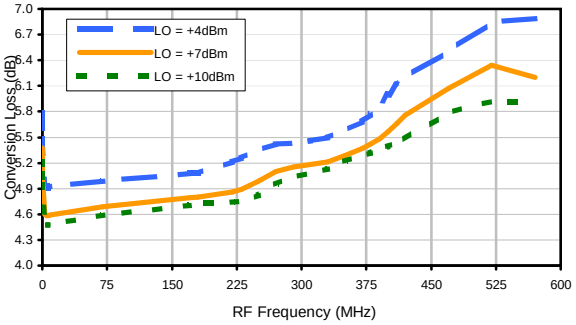
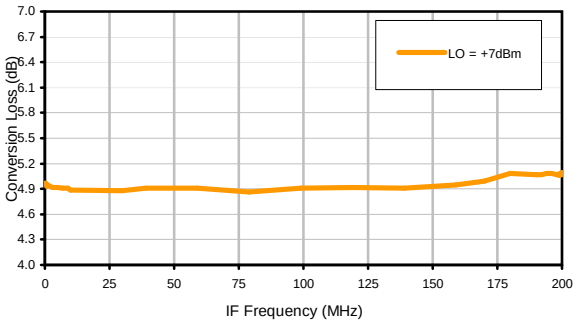
Frequency Mixer TUF-R3SM+

Typical Performance Curves

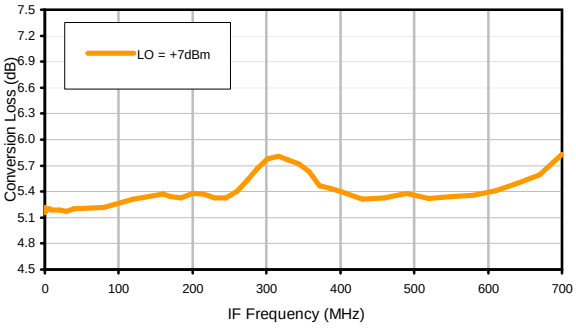
Conversion Loss @ IF=30 MHz



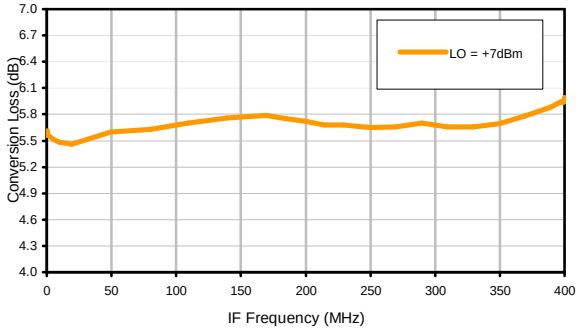
Conversion Loss vs. IF @ RF=200 MHz



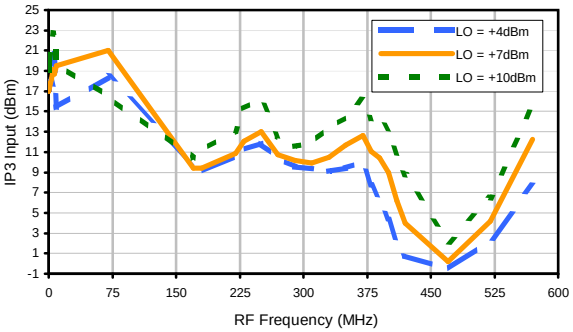
Conversion Loss vs. IF @ RF=.15 MHz



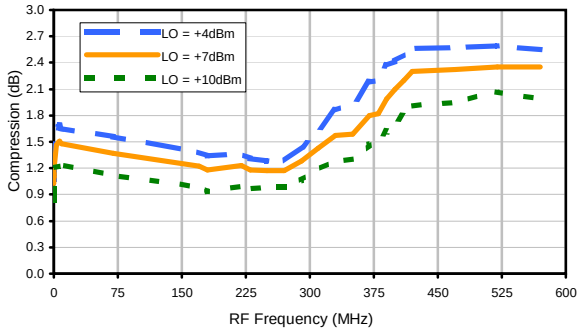
Conversion Loss vs. IF @ RF=400 MHz



IP3 Input

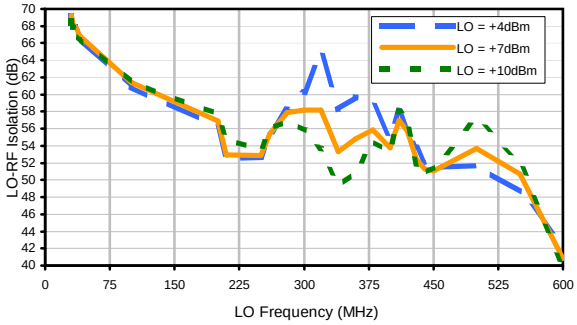


Compression @ RF IN = +1 dBm

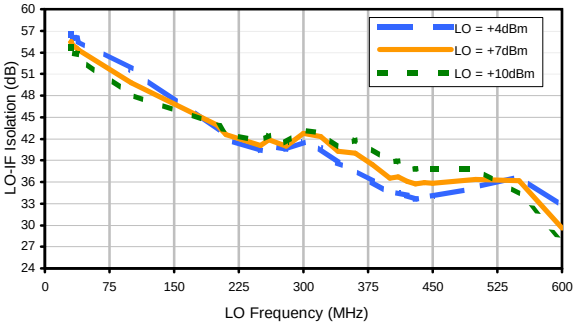


Typical Performance Curves

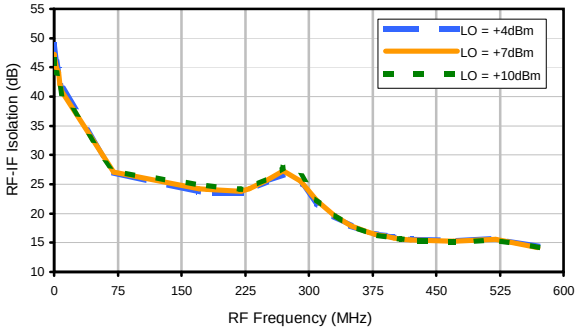
LO-RF Isolation



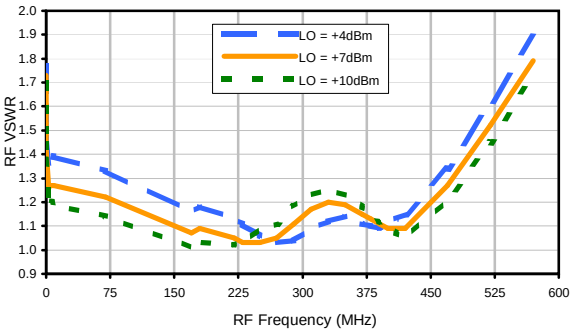
LO-IF Isolation



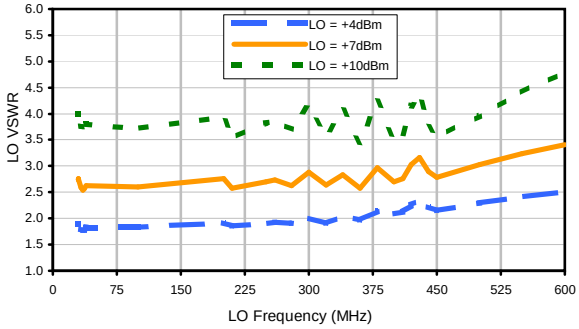
RF-IF Isolation



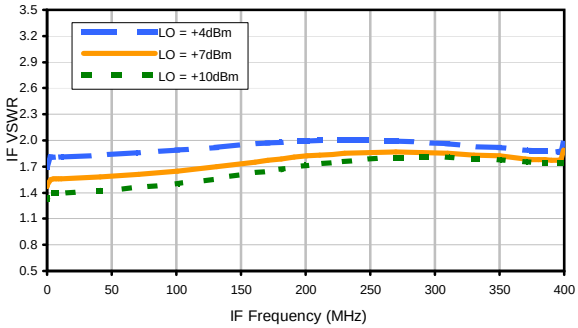
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	13	26	17	37	18	47	23	42	47	53
1	-	19	+0	25	12	34	18	40	42	48	50	47
2	> 90	61	52	61	52	68	56	69	59	> 71	56	> 71
3	> 90	59	52	59	53	60	51	60	62	69	> 71	> 71
4	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
5	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
6	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
7	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
8	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
9	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
10	> 90	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71	> 71
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 200.00 MHz; -14.00 dBm.
LO IN: 230.00 MHz; +7.00 dBm
IF OUT: 30.00 MHz; -18.97 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	22	37	27	45	28	58	35	57	55	65
1	-	19	+0	28	12	33	20	49	43	55	51	54
2	73	56	44	64	46	58	54	69	52	69	53	68
3	> 90	50	36	45	37	46	34	69	42	55	60	61
4	> 90	62	67	70	63	> 81	57	72	57	78	70	> 81
5	> 90	68	59	61	51	59	50	57	53	57	75	67
6	> 90	> 81	80	> 81	> 81	79	73	76	70	76	70	> 81
7	> 90	> 81	74	> 81	66	69	67	69	62	73	61	67
8	> 90	> 81	> 81	> 81	78	> 81	> 81	78	> 81	75	> 81	> 81
9	> 90	> 81	> 81	> 81	> 81	> 81	> 81	79	78	> 81	> 81	79
10	> 90	> 81	> 81	> 81	> 81	> 81	> 81	> 81	> 81	79	> 81	> 81
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 200.00 MHz; -4.00 dBm.
LO IN: 230.00 MHz; +7.00 dBm
IF OUT: 30.00 MHz; -9.23 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.