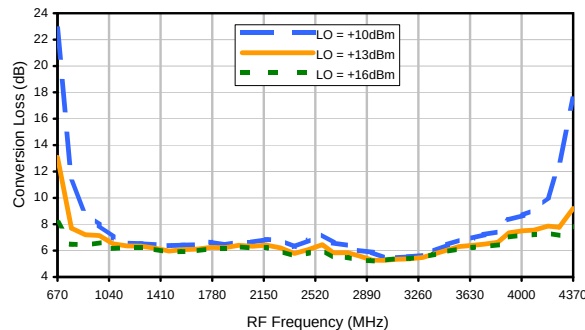


Frequency Mixer

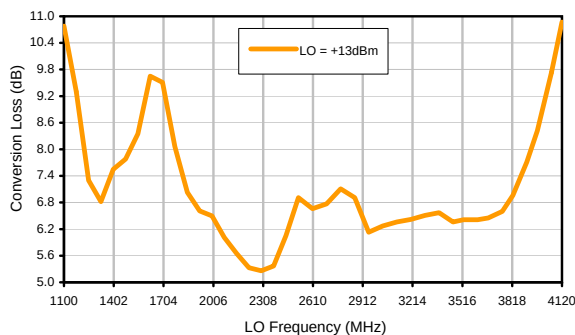
SIM-ED12399/13

Typical Performance Curves

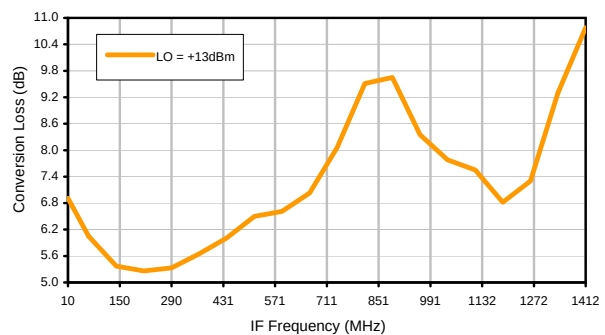
Conversion Loss @ IF=30MHz



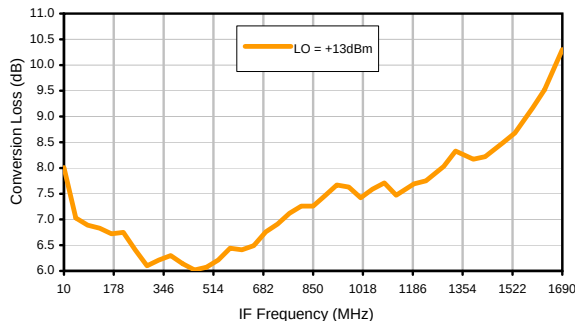
Conversion Loss vs. LO @ RF=2512MHz



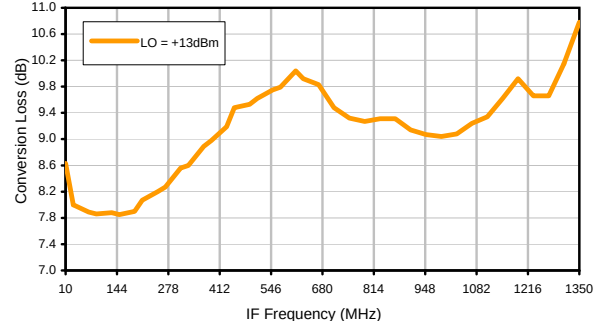
Conversion Loss vs. IF @ RF=2512MHz



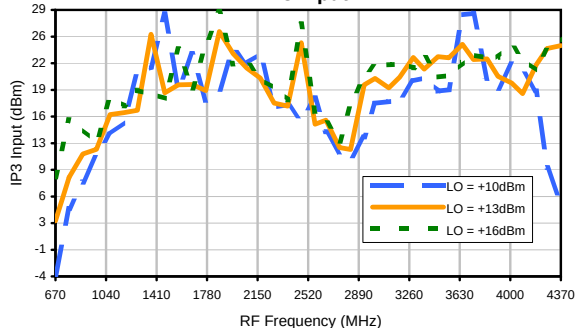
Conversion Loss vs. IF @ RF=813.9MHz



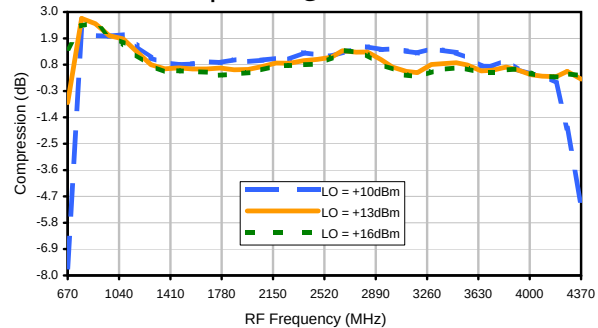
Conversion Loss vs. IF @ RF=4210.1MHz



IP3 Input



Compression @ RF IN=+9dBm

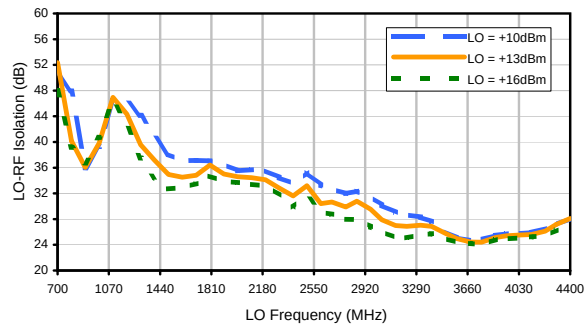


Frequency Mixer

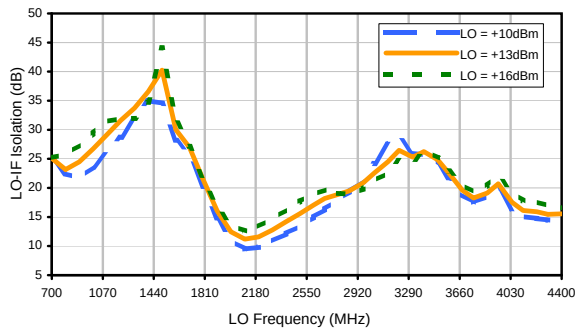
SIM-ED12399/13

Typical Performance Curves

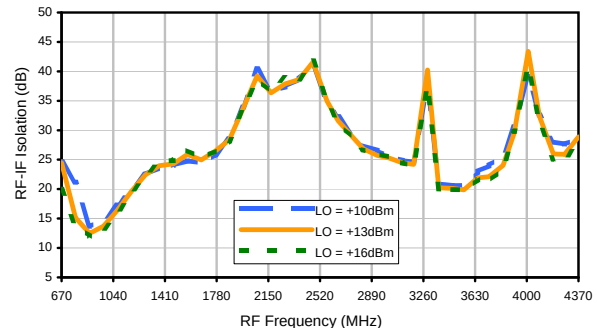
LO-RF Isolation



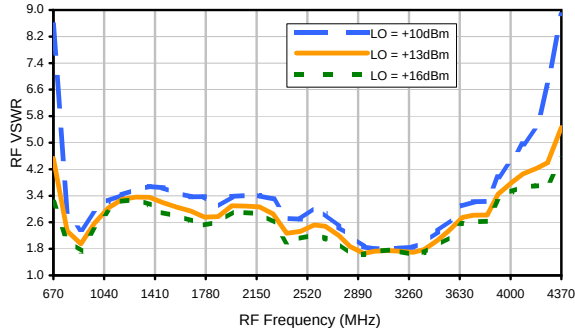
LO-IF Isolation



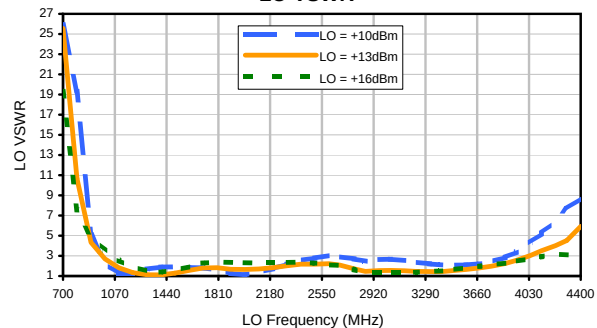
RF-IF Isolation



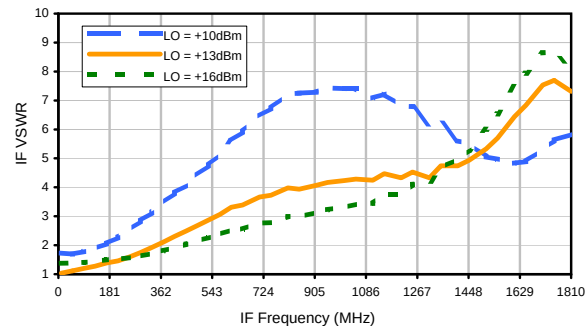
RF VSWR



LO VSWR



IF VSWR



Frequency Mixer

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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	+9	11	10	21	34	57	35	40	40	---
1	-	31	+0	38	19	31	35	71	45	68	49	60
2	73	52	52	55	49	62	51	64	72	71	67	73
3	>90	63	58	>78	59	>78	66	73	69	>78	76	>78
4	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
5	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
6	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
7	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
8	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
9	>90	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
10	---	---	>78	>78	>78	>78	>78	>78	>78	>78	>78	>78
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 2512 MHz; -6.00 dBm.
LO IN: 2542 MHz; +13.00 dBm
IF OUT: 30 MHz; -12.31 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	1	22	22	34	46	59	47	53	54	---
1	-	31	+0	40	19	35	37	70	51	69	56	65
2	53	43	44	46	40	56	45	52	65	69	63	67
3	86	40	34	59	35	58	45	46	49	78	59	76
4	>90	63	56	55	56	53	57	64	57	68	73	71
5	>90	66	56	60	54	72	52	73	63	68	64	85
6	>90	>88	87	74	77	66	71	60	73	71	72	80
7	>90	>88	>88	87	75	74	66	80	60	83	73	75
8	>90	>88	>88	>88	>88	82	83	76	83	70	78	86
9	>90	>88	>88	>88	>88	>88	87	82	80	>88	74	>88
10	---	---	>88	>88	>88	>88	>88	>88	>88	87	>88	76
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 2512 MHz; 4.00 dBm.
LO IN: 2542 MHz; +13.00 dBm
IF OUT: 30 MHz; -2.22 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.