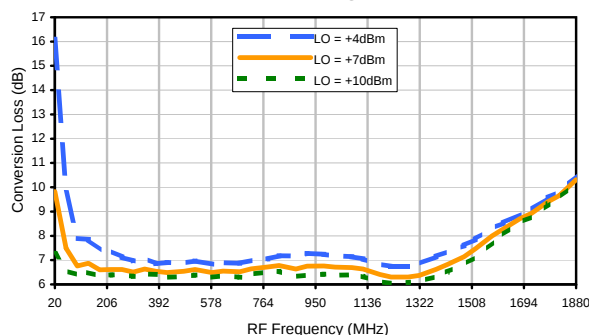


Frequency Mixer

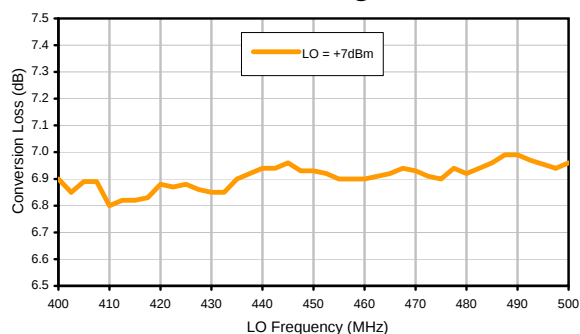
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Typical Performance Curves

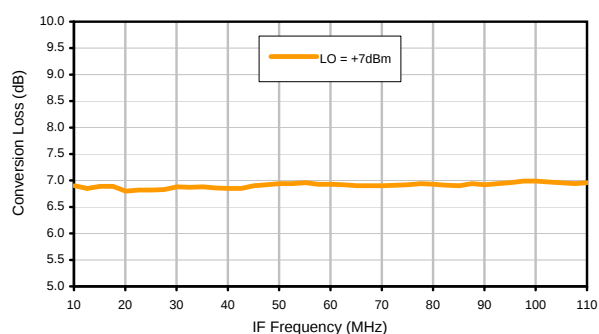
Conversion Loss @ IF=30MHz



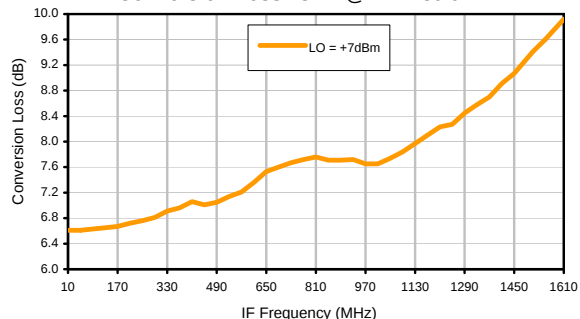
Conversion Loss vs. LO @ RF=389.9MHz



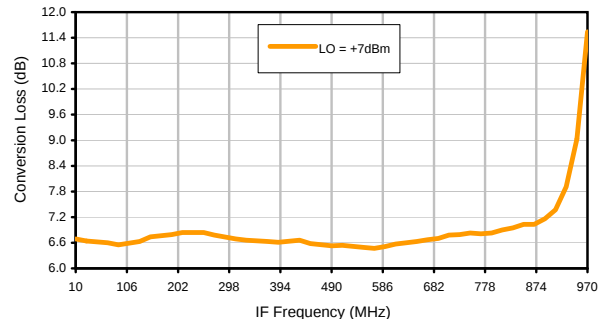
Conversion Loss vs. IF @ RF=389.9MHz



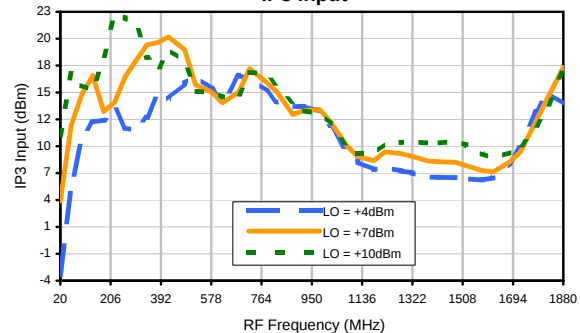
Conversion Loss vs. IF @ RF=189.9MHz



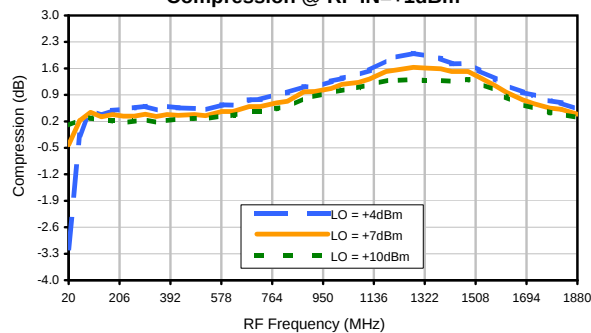
Conversion Loss vs. IF @ RF=1010.1MHz



IP3 Input



Compression @ RF IN=+1dBm



REV. X3

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IF/RF MICROWAVE COMPONENTS

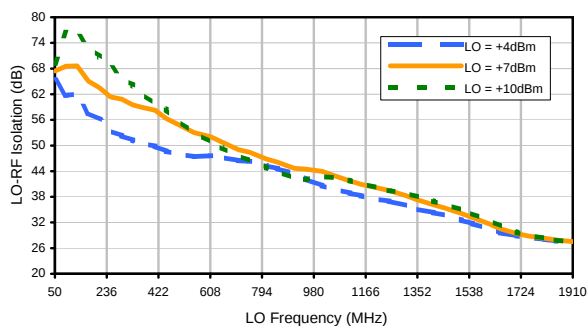
minicircuits.com

Frequency Mixer

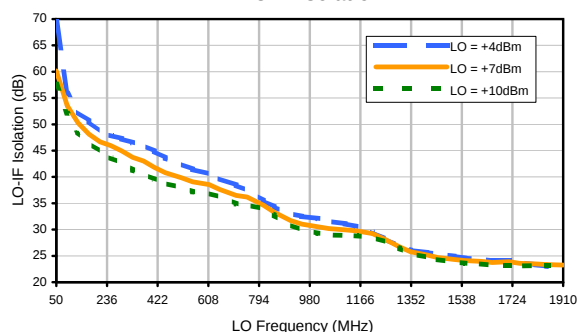
ADE-4

Typical Performance Curves

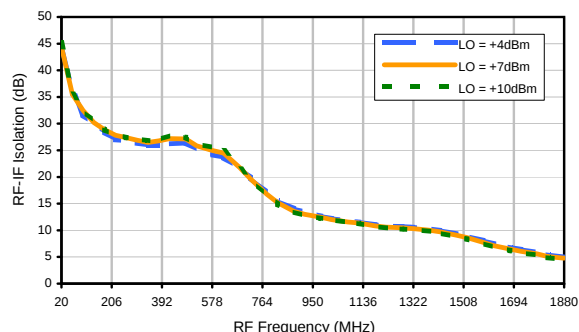
LO-RF Isolation



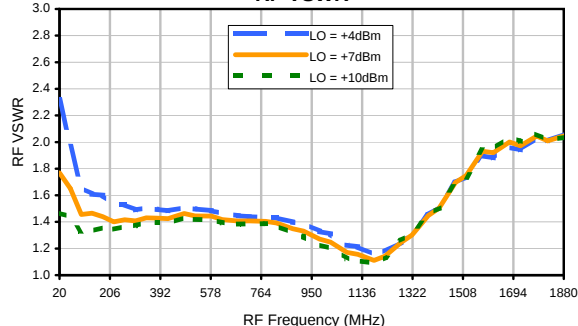
LO-IF Isolation



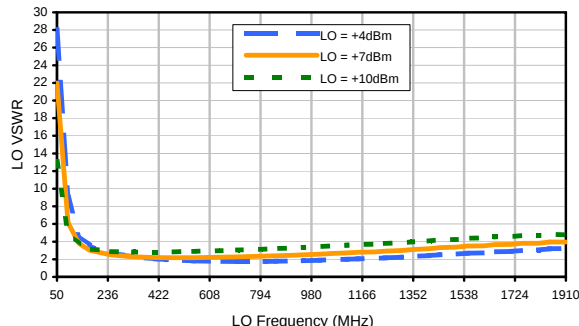
RF-IF Isolation



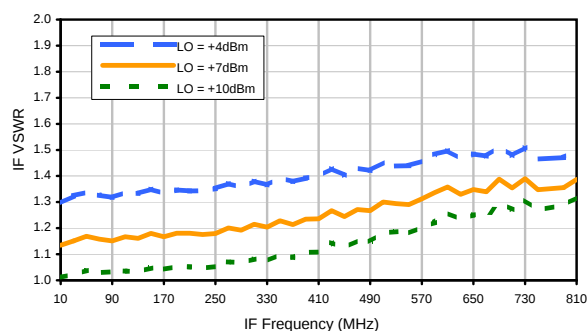
RF VSWR



LO VSWR



IF VSWR



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IF/RF MICROWAVE COMPONENTS

Frequency Mixer

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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	9	23	13	27	20	28	34	35	34	43
1	-	18	0	25	13	49	27	37	48	36	51	45
2	51	60	52	57	52	71	52	68	61	82	64	69
3	39	70	72	66	67	67	65	71	100	75	80	75
4	73	87	88	86	94	84	98	94	85	81	89	97
5	61	92	94	81	85	89	98	98	98	84	92	91
6	78	92	86	92	103	93	86	97	86	104	95	93
7	73	82	86	96	90	96	88	90	87	83	89	92
8	90	86	89	82	82	85	89	90	97	102	87	88
9	94	86	92	86	86	98	86	95	91	85	89	93
10	100	92	90	91	100	87	89	100	88	95	89	109
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions:

RF IN: 600 MHz; -14 dBm
LO IN: 630 MHz; +7.00 dBm
IF OUT: 30 MHz; -26.68 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	18	33	25	37	32	39	45	49	46	59
1	-	18	0	24	13	47	28	42	48	41	65	51
2	51	51	42	49	41	70	44	62	53	64	59	66
3	39	50	48	48	48	49	50	55	58	55	67	54
4	73	69	63	64	77	65	74	70	64	68	71	76
5	61	71	67	66	58	68	59	68	60	68	73	83
6	78	107	89	81	86	73	76	75	74	83	74	85
7	73	92	93	85	84	87	85	77	90	76	99	84
8	90	106	98	98	97	91	90	94	87	85	89	107
9	94	95	103	107	89	91	106	95	89	87	86	95
10	100	99	93	96	99	93	92	97	95	105	97	92
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions:

RF IN: 600 MHz; -4 dBm
LO IN: 630 MHz; +7.00 dBm
IF OUT: 30 MHz; -10.68 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.