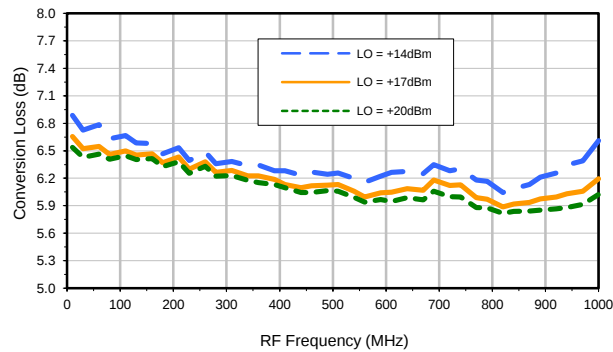
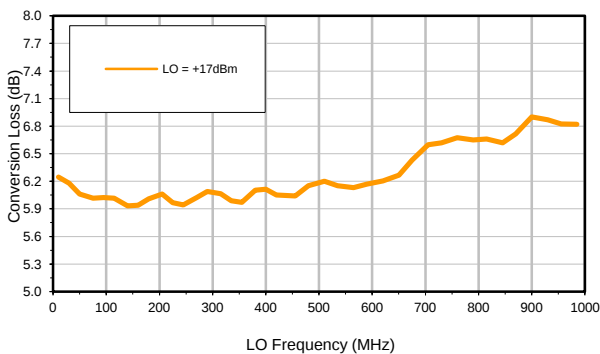


Typical Performance Curves

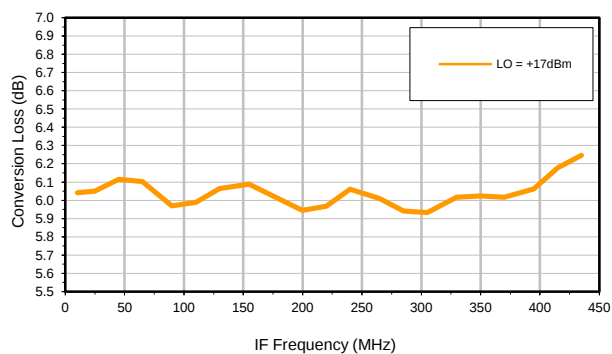
Conversion Loss @IF=30 MHz



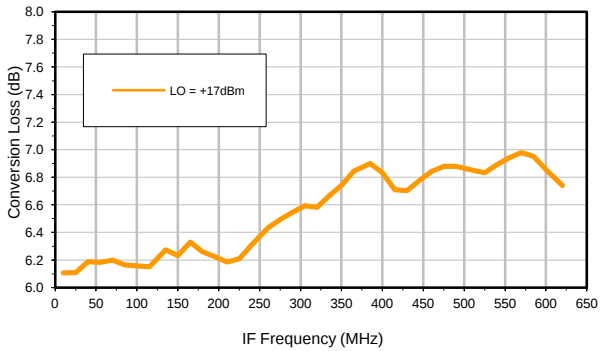
Conversion Loss vs. LO @ RF=445 MHz



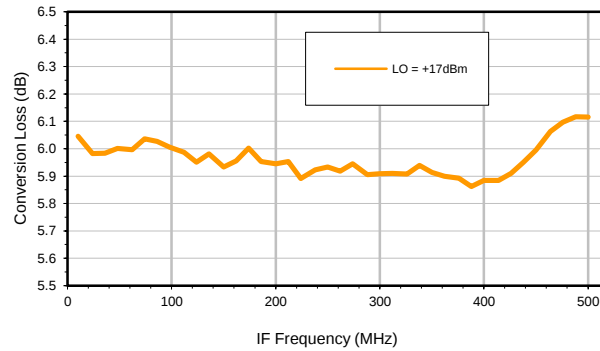
Conversion Loss vs. IF @ RF=445 MHz



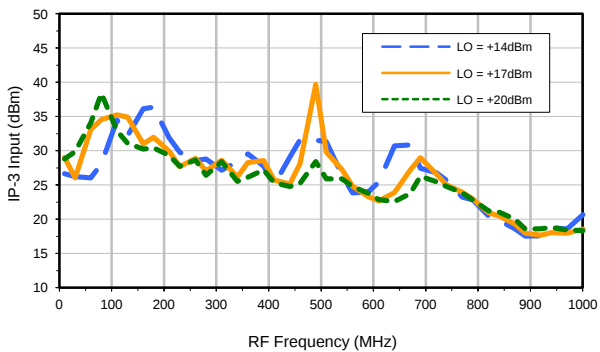
Conversion Loss vs. IF @ RF=380 MHz



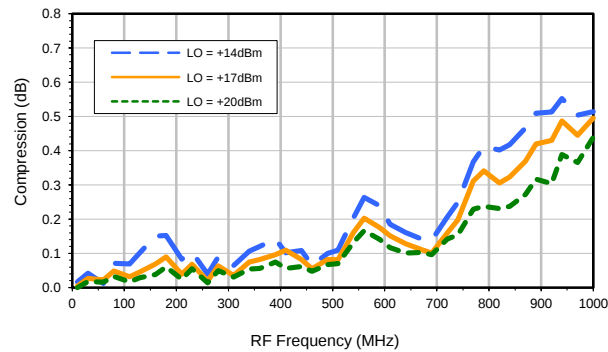
Conversion Loss vs. IF @ RF=510.1 MHz



IP-3 Input

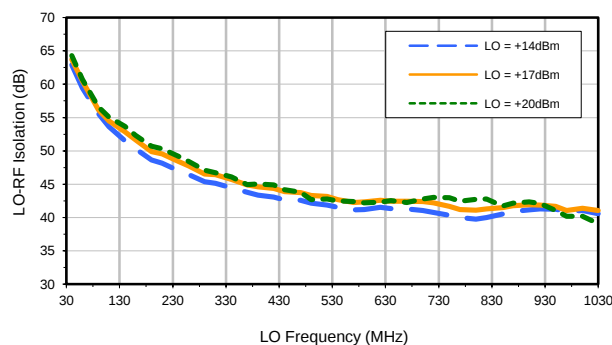


Compression @RF IN=+9 dBm

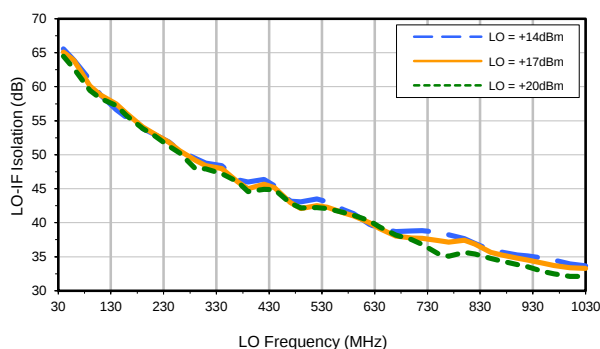


Typical Performance Curves

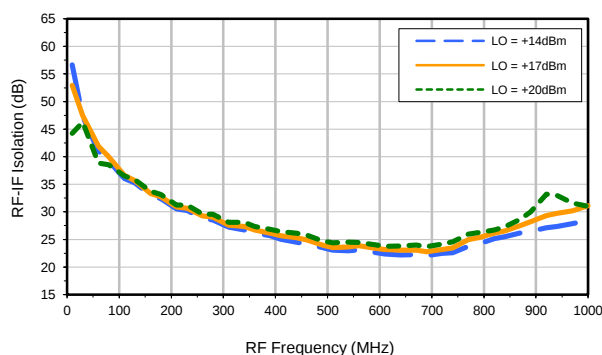
LO-RF Isolation



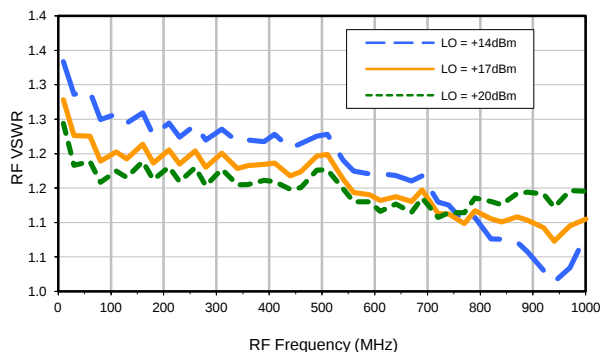
LO-IF Isolation



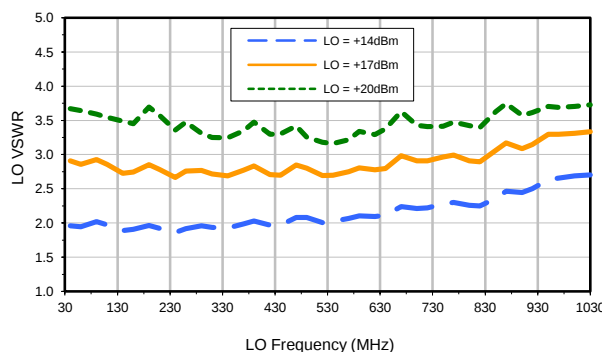
RF-IF Isolation



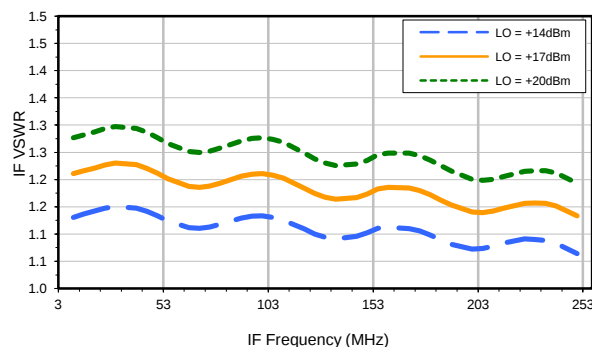
RF VSWR



LO VSWR



IF VSWR



Frequency Mixer

Harmonics Tables

ADE-ED14942/1

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	20.87	26.06	30.49	37.07	21.03	38.34	19.79	43.56	32.55	37.43
1	---	16.70	---	28.64	11.25	39.30	15.01	28.91	34.44	42.91	42.24	41.07
2	91.75	63.79	53.87	61.39	54.59	60.66	53.44	57.50	50.24	61.42	45.74	56.98
3	109.19	53.48	51.97	56.93	63.78	72.03	54.81	65.23	59.63	62.21	76.98	77.12
4	124.90	93.63	82.61	86.84	88.34	90.93	89.11	93.51	79.42	88.23	82.22	85.59
5	116.79	86.27	90.08	87.14	76.68	85.07	77.75	82.70	82.87	93.02	79.60	83.54
6	116.81	124.48	97.11	111.35	98.46	111.19	98.83	105.58	101.88	107.95	94.03	98.44
7	130.61	115.92	121.89	105.47	114.21	107.34	101.89	102.27	102.00	110.35	102.02	111.99
8	131.81	110.92	114.59	120.39	116.13	115.49	116.71	113.02	115.39	113.14	131.42	115.95
9	114.25	117.47	125.73	118.65	125.26	115.76	119.16	117.73	122.73	120.70	119.23	116.71
10	110.64	113.69	120.96	122.00	117.74	117.33	115.83	127.08	113.75	123.69	118.08	123.90
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 445 MHz; 0 dBm.
LO IN: 475 MHz; +17.00 dBm
IF OUT: 30 MHz; -5.82 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	28.83	38.33	38.94	56.76	32.47	54.27	31.79	57.68	47.50	59.41
1	---	20.04	---	33.11	12.11	40.64	19.69	40.76	39.91	53.80	50.37	65.85
2	90.27	53.39	50.31	44.74	63.67	53.91	43.78	54.50	48.23	61.43	49.84	56.87
3	107.88	24.45	17.85	46.31	28.00	75.20	31.53	49.15	36.65	49.30	55.89	57.73
4	99.71	55.34	58.84	63.78	57.69	60.85	60.91	61.05	59.04	61.52	56.52	68.62
5	99.67	42.77	45.47	42.85	37.41	43.79	44.38	50.76	44.81	52.30	49.77	55.36
6	98.83	78.33	62.07	56.10	63.36	67.96	58.63	63.90	58.33	62.90	63.24	71.80
7	106.66	48.02	45.99	49.37	51.13	50.06	55.66	51.21	50.12	58.37	52.35	62.10
8	105.24	76.11	72.62	66.83	75.87	66.87	76.57	69.59	70.09	78.68	65.22	77.37
9	99.10	68.70	61.60	58.72	58.75	73.31	67.75	60.03	53.96	57.02	58.25	67.21
10	97.50	83.18	74.88	75.29	73.93	75.75	70.00	65.50	66.33	69.28	66.69	79.00
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 445 MHz; 10 dBm.
LO IN: 475 MHz; +17.00 dBm
IF OUT: 30 MHz; 3.01 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 represents the Harmonics level of the RF Input Signal to the mixer



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site
The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. X1
ADE-ED14942/1
5/9/2013
Page 3 of 3