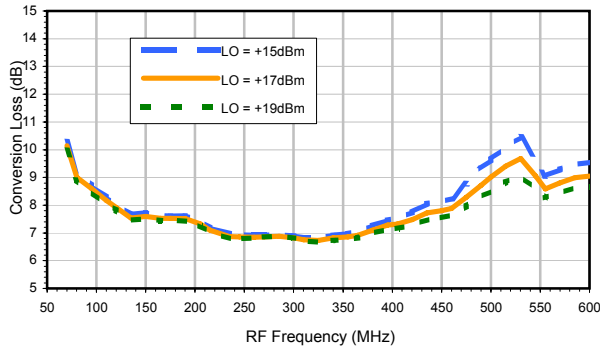
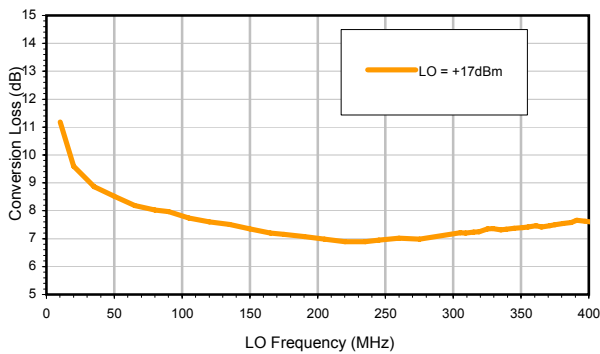


Typical Performance Curves

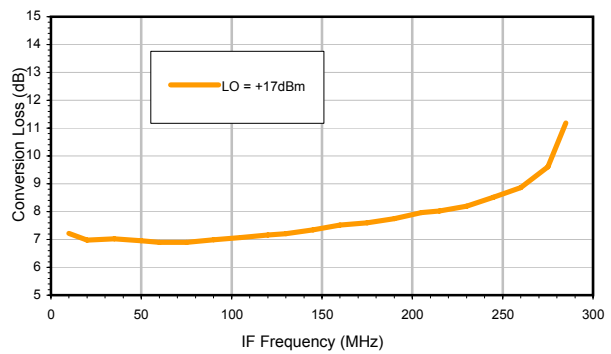
Conversion Loss @IF=30 MHz



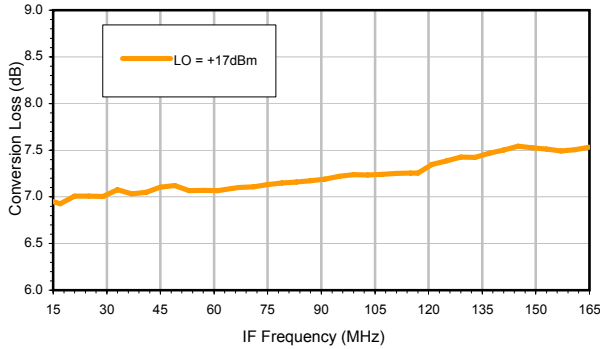
Conversion Loss vs. LO @ RF=310.1 MHz



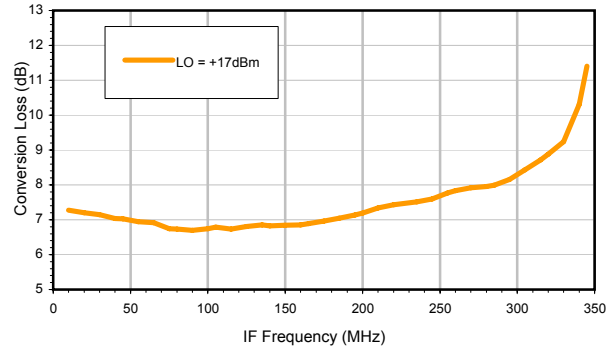
Conversion Loss vs. IF @ RF=310.1 MHz



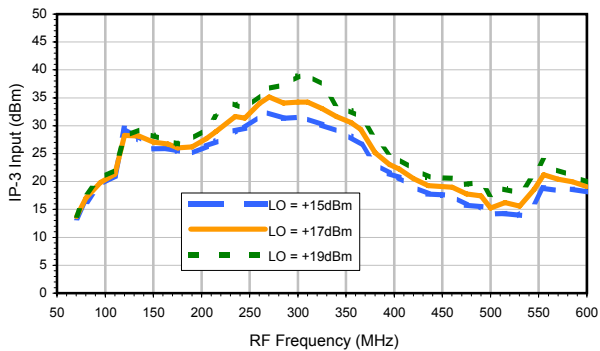
Conversion Loss vs. IF @ RF=285.1 MHz



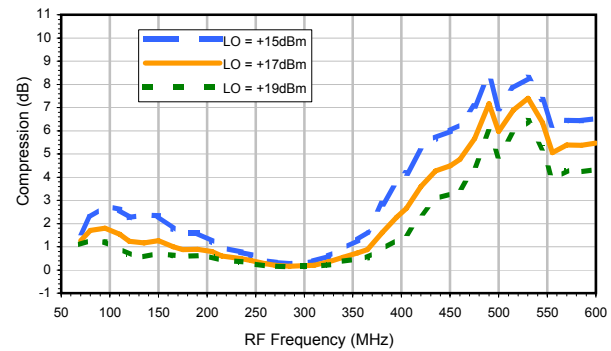
Conversion Loss vs. IF @ RF=335 MHz



IP-3 Input



Compression @RF IN= +20 dBm

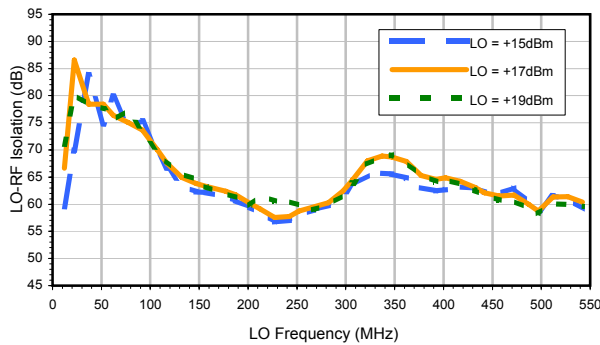


Frequency Mixer

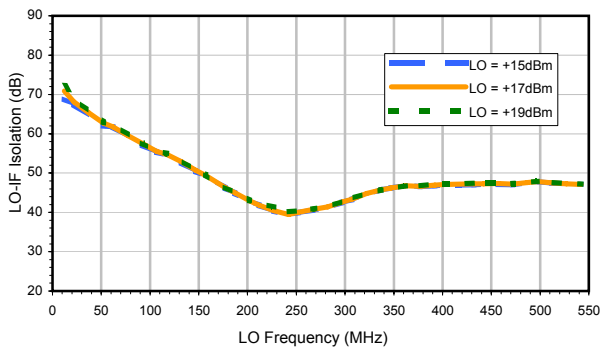
Typical Performance Curves

HJK-351H+

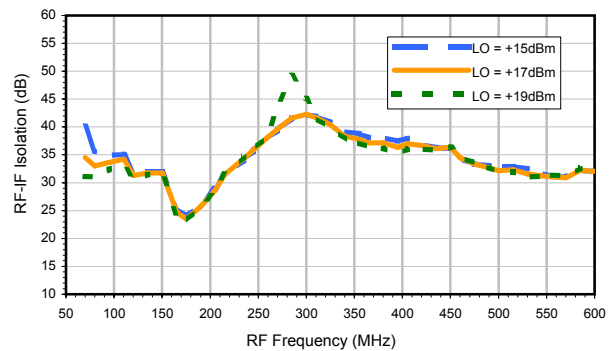
LO-RF Isolation



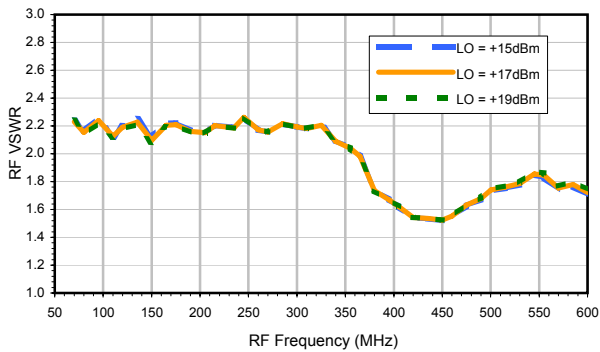
LO-IF Isolation



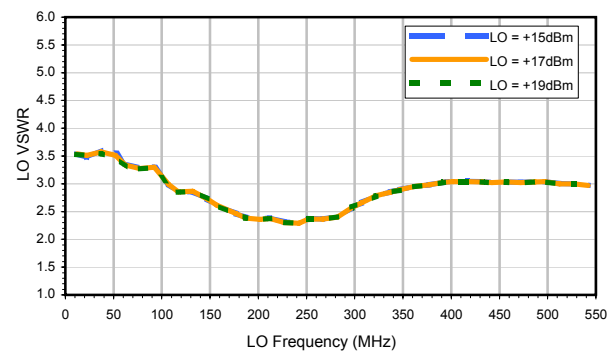
RF-IF Isolation



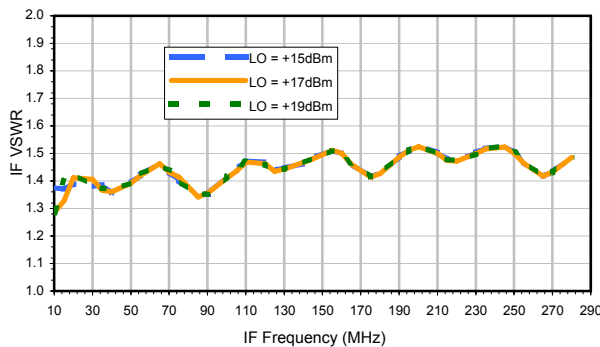
RF VSWR



LO VSWR



IF VSWR



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. OR
 HJK-351H+
 10/1/2012
 Page 2 of 3

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	15.97	33.85	32.40	41.73	35.28	38.74	51.06	82.63	64.22	66.14
1	---	35.90	---	39.58	11.65	42.13	17.92	42.97	30.55	51.04	54.55	52.05
2	103.29	78.64	66.80	76.26	68.94	73.58	75.45	77.10	72.50	80.97	78.37	96.46
3	118.81	109.76	89.58	106.05	79.32	98.34	71.95	95.65	74.10	95.73	76.44	97.22
4	117.91	114.74	101.66	113.39	97.90	113.40	105.15	114.73	94.64	107.82	98.78	111.26
5	117.29	117.38	102.67	117.49	94.25	117.46	94.75	119.12	96.46	115.14	92.07	117.06
6	117.71	117.34	117.24	117.95	109.85	117.51	103.50	115.98	109.46	118.38	105.91	117.83
7	115.29	116.58	118.57	116.70	107.75	116.90	101.45	115.50	98.26	116.64	100.97	117.45
8	116.84	116.73	115.37	117.65	119.47	117.21	115.28	117.81	112.73	118.93	114.66	113.62
9	115.24	114.90	116.75	117.56	113.85	115.64	118.86	116.68	102.36	117.77	100.83	115.30
10	115.91	115.36	115.64	117.33	117.31	117.89	116.91	117.11	116.01	118.03	117.52	117.76
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 295 MHz; 0 dBm.
 LO IN: 237 MHz; +17.00 dBm
 IF OUT: 58 MHz; - 6.85 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	26.80	43.93	45.10	53.38	44.94	49.12	61.23	90.80	76.31	78.91
1	---	36.02	---	39.75	11.66	42.65	18.17	43.40	31.05	51.27	50.49	53.87
2	88.59	67.79	58.90	63.96	57.40	63.62	62.61	67.39	63.20	74.08	70.09	90.70
3	105.64	79.93	61.82	74.79	60.77	71.03	51.57	70.12	53.68	72.73	56.99	76.54
4	112.99	90.48	86.66	95.23	82.94	89.49	83.28	86.91	86.42	90.02	87.07	85.95
5	112.42	108.15	83.94	99.40	83.15	94.24	83.15	91.84	80.39	93.04	76.81	96.35
6	112.04	125.19	115.86	115.31	105.06	127.38	98.87	115.93	101.87	105.20	108.41	104.01
7	111.46	126.52	121.44	126.32	105.12	111.88	103.86	113.29	100.84	108.16	101.28	110.45
8	110.75	126.93	126.23	127.75	126.36	120.20	122.36	119.02	121.55	118.79	122.61	115.38
9	108.00	124.45	126.05	125.63	127.68	126.06	111.84	118.00	104.21	119.34	104.08	117.37
10	108.73	125.92	123.47	123.53	126.83	125.75	127.55	126.85	124.87	120.76	120.74	117.46
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 295 MHz; +10 dBm.
 LO IN: 237 MHz; +17.00 dBm
 IF OUT: 58 MHz; 3.19 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

