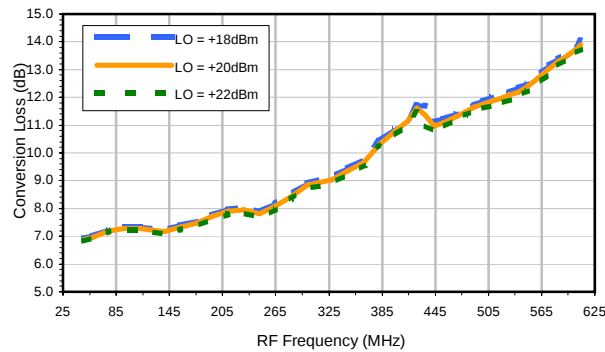


Frequency Mixer

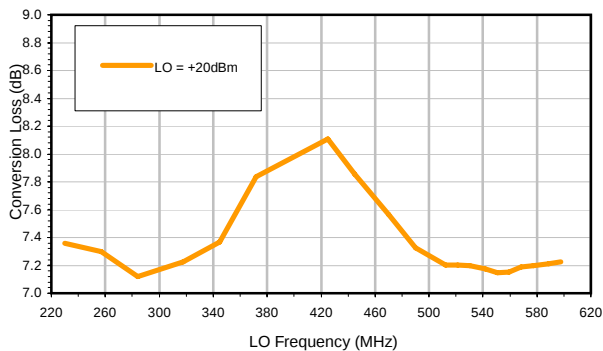
Typical Performance Curves

HJK-ED13641/1

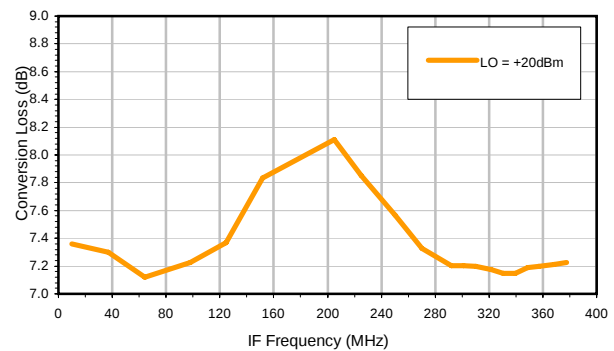
Conversion Loss @IF=30 MHz



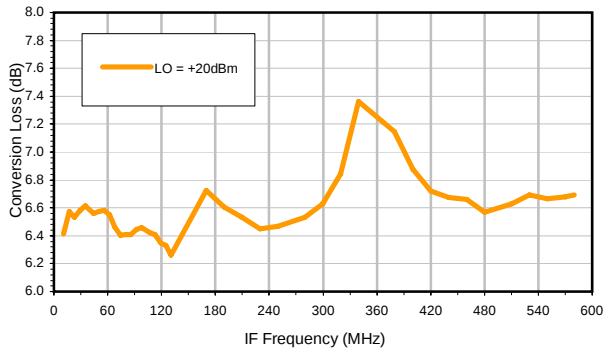
Conversion Loss vs. LO @ RF=220.1 MHz



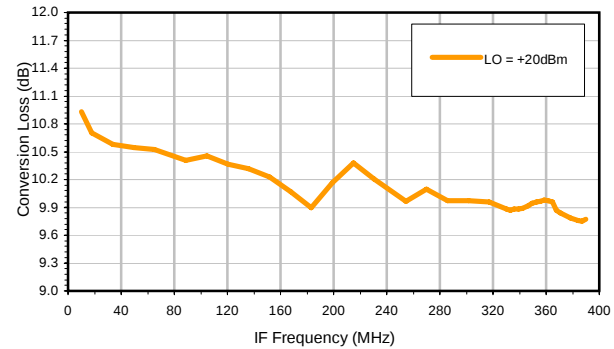
Conversion Loss vs. IF @ RF=220.1 MHz



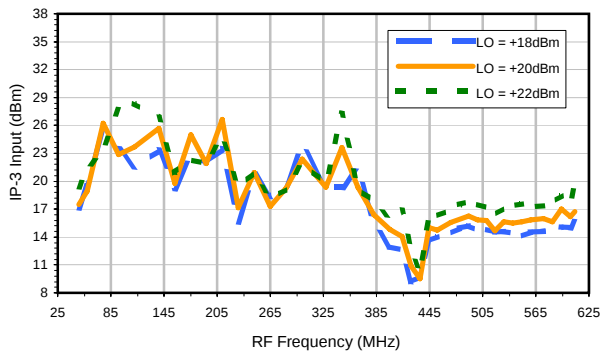
Conversion Loss vs. IF @ RF=40.1 MHz



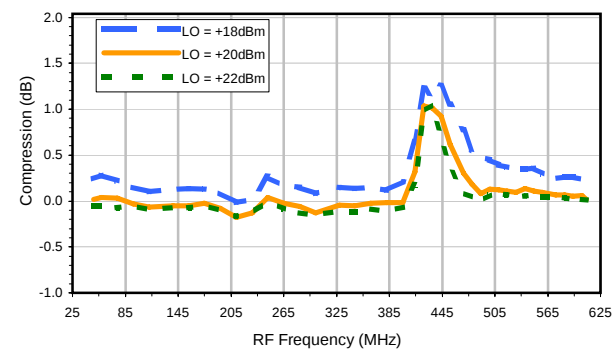
Conversion Loss vs. IF @ RF=400.1 MHz



IP-3 Input

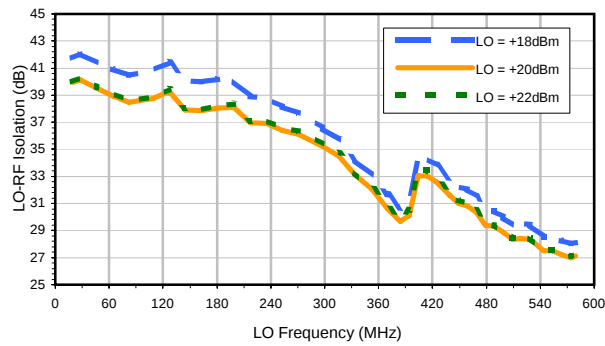


Compression @RF IN=+20 dBm

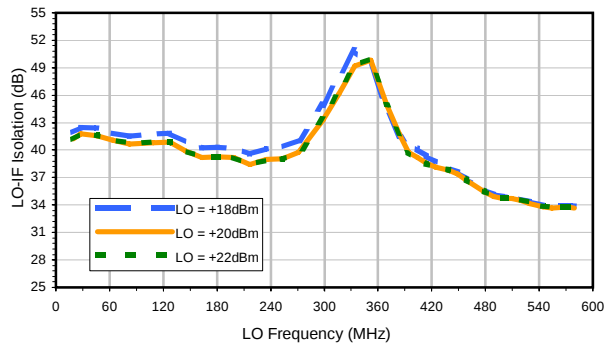


Typical Performance Curves

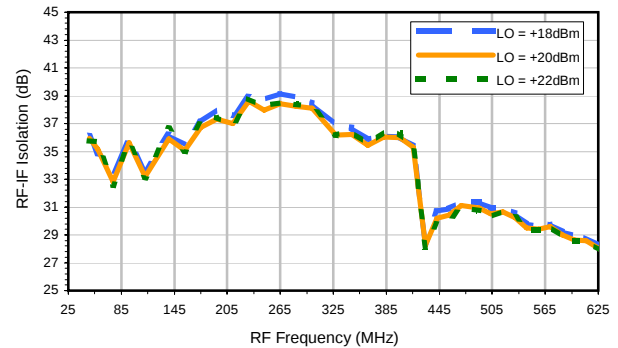
LO-RF Isolation



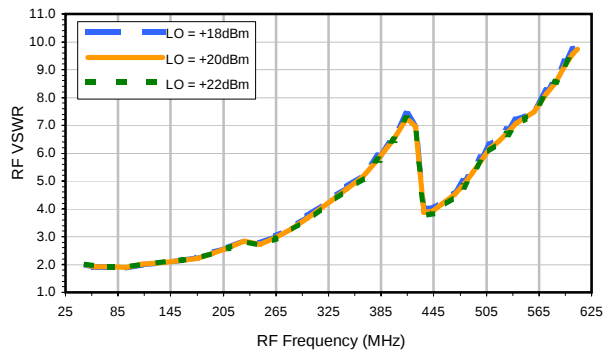
LO-IF Isolation



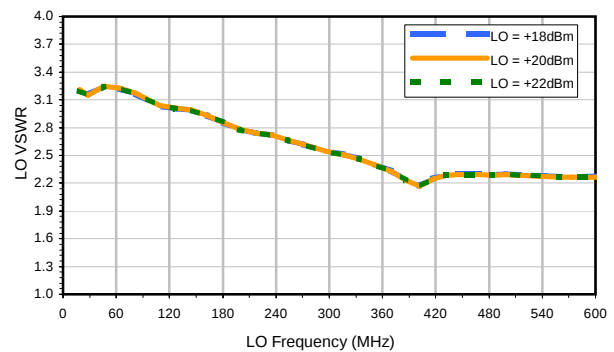
RF-IF Isolation



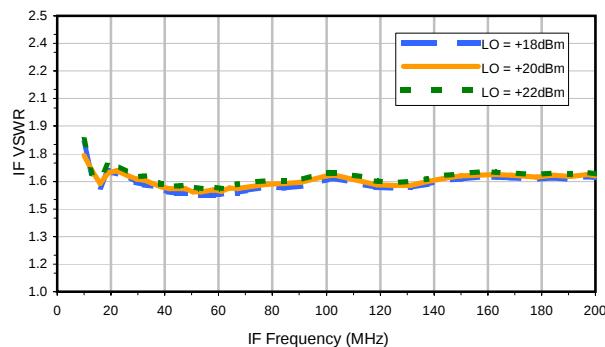
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	--	--	21.62	32.03	28.38	26.73	33.58	38.76	44.81	55.49	48.24	75.10
1	--	36.81	--	46.89	10.92	41.10	18.43	58.15	17.54	48.33	23.39	49.75
2	94.46	53.38	64.69	58.29	77.60	54.68	75.90	59.35	60.33	62.31	60.19	69.27
3	108.15	69.27	52.34	64.74	61.84	69.17	51.14	61.94	53.10	76.41	56.63	66.85
4	125.41	86.89	87.76	69.82	87.60	73.01	86.51	69.36	87.01	71.38	84.41	77.69
5	125.59	86.71	82.12	90.38	76.28	81.73	74.07	88.13	71.70	79.94	69.87	84.32
6	124.53	96.19	101.63	94.31	109.32	89.30	98.73	92.65	101.86	92.18	97.83	92.34
7	123.52	95.59	99.03	98.94	91.82	91.79	96.28	94.97	87.07	97.90	90.69	94.44
8	125.23	97.87	97.65	96.72	97.13	95.77	103.03	95.65	93.21	91.66	96.17	94.06
9	122.97	96.24	98.15	98.20	97.03	95.28	97.97	93.86	98.69	90.97	89.23	92.46
10	124.81	99.06	95.16	99.99	95.53	97.44	95.54	97.28	99.07	107.98	93.85	94.15
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 220.00 MHz; 0 dBm.
 LO IN: 190.01 MHz; +20.00 dBm
 IF OUT: 30.00 MHz; -7.15 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	--	31.65	41.69	38.10	36.51	41.45	43.20	50.33	49.85	64.24	50.24
1	---	36.65	--	45.60	11.24	44.27	18.01	53.34	18.87	53.50	25.90	63.12
2	74.31	45.89	63.56	52.61	68.11	49.70	63.62	59.81	70.17	59.14	68.26	55.93
3	77.40	61.60	40.18	64.77	43.04	66.69	36.93	65.26	40.39	63.97	41.01	63.21
4	111.99	68.81	68.36	59.71	74.90	62.00	75.36	56.77	75.25	59.46	64.94	63.28
5	111.33	77.49	59.41	73.19	51.70	75.44	56.68	77.49	54.10	72.81	52.43	73.74
6	111.32	75.14	79.54	85.88	95.10	66.42	80.55	67.96	82.96	69.01	76.15	66.41
7	110.08	80.27	80.10	80.64	76.09	82.40	67.28	75.20	67.79	84.03	66.06	74.96
8	110.83	83.02	74.33	90.41	75.55	87.26	83.57	84.20	75.44	77.30	81.72	79.72
9	111.50	84.75	78.38	85.89	79.16	84.92	83.45	91.24	76.82	78.18	72.15	82.49
10	110.15	80.48	70.06	79.78	70.75	81.63	71.26	84.33	76.85	81.79	68.94	77.88
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 220.00 MHz; 10 dBm.
 LO IN: 190.01 MHz; +20.00 dBm
 IF OUT: 30.00 MHz; 3.03 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