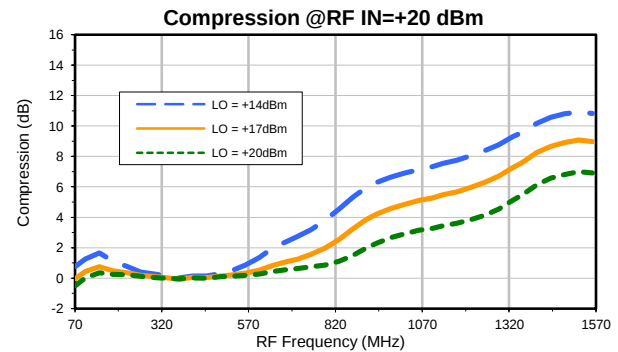
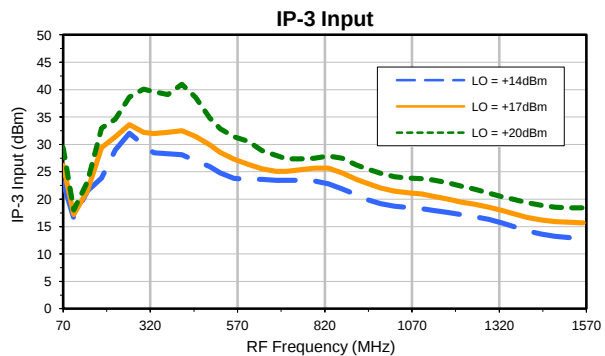
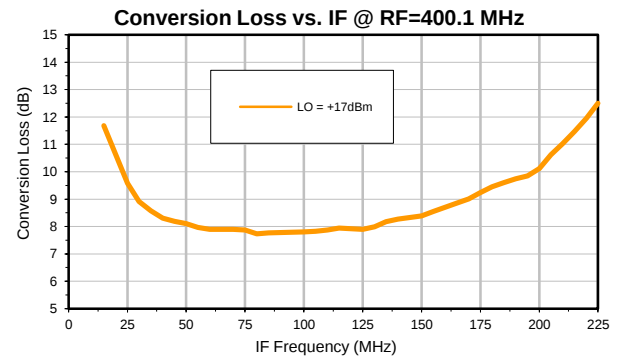
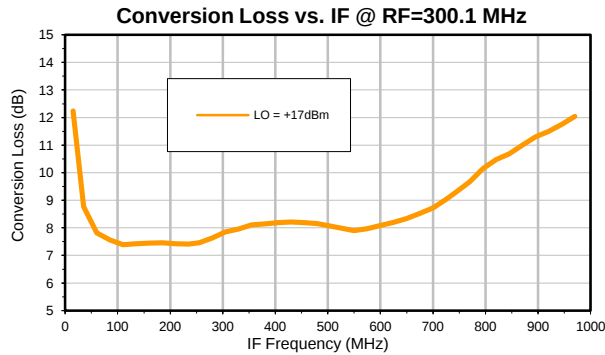
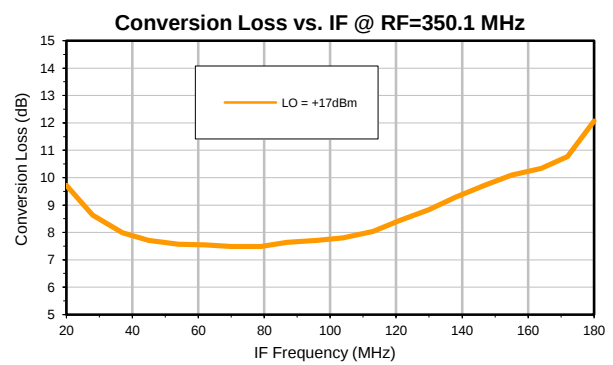
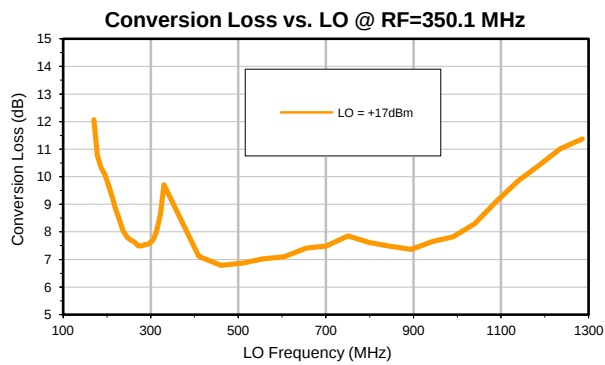
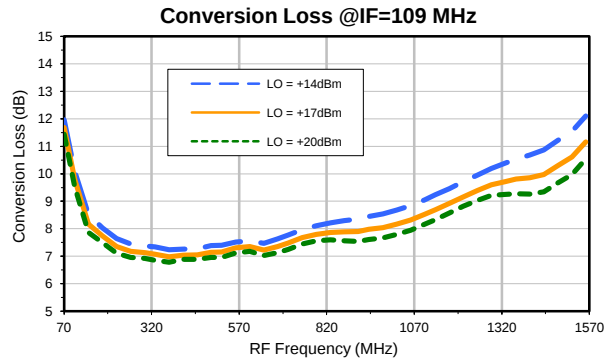


Frequency Mixer

Typical Performance Curves

HJK-ED16428/2



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

minicircuits.com

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



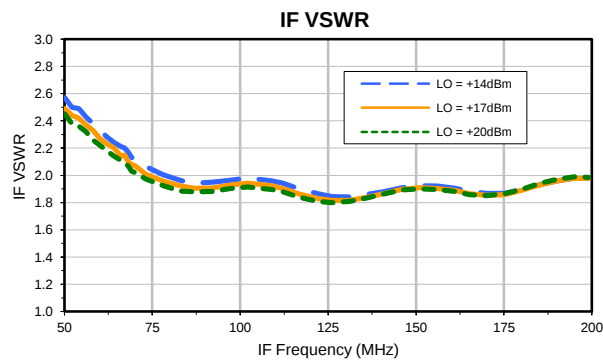
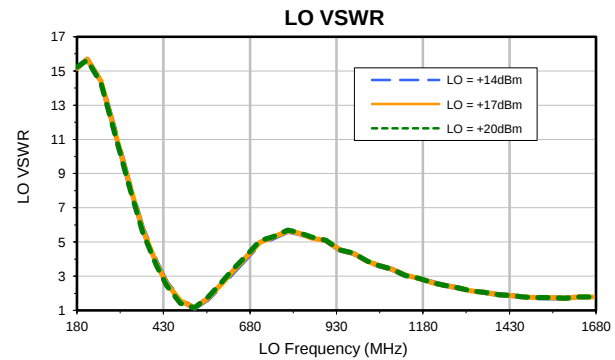
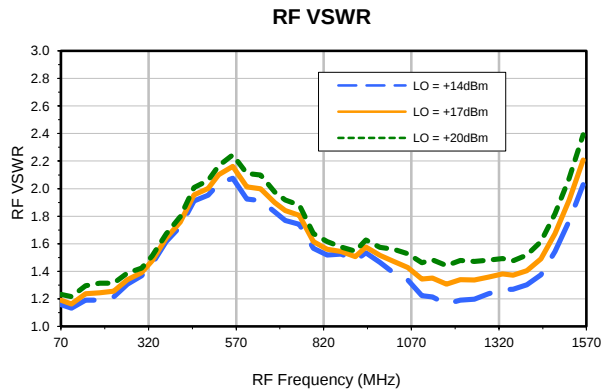
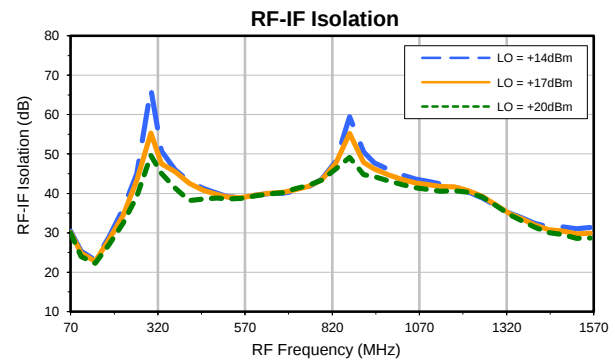
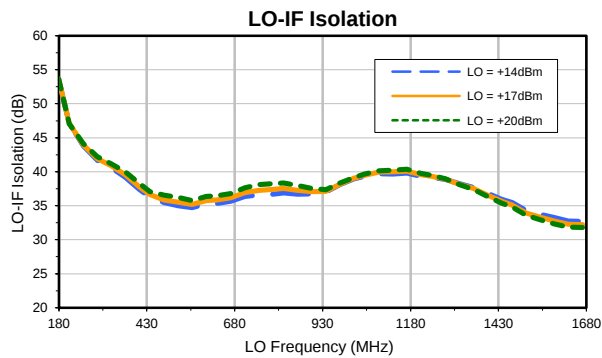
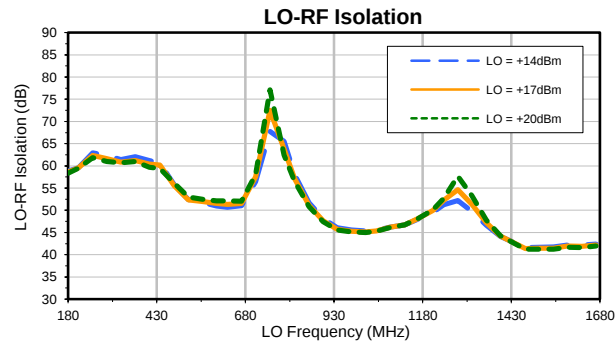
IF/RF MICROWAVE COMPONENTS

REV. X1
HJK-ED16428/2
8/1/2014
Page 1 of 3

Frequency Mixer

Typical Performance Curves

HJK-ED16428/2



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

minicircuits.com

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
HJK-ED16428/2
8/1/2014
Page 2 of 3

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	12.7	37.3	27.9	20.7	34.5	44.3	43.3	61.3	53.8	49.1
1	---	38.2	---	43.6	12.9	36.4	27.3	43.8	41.0	52.3	56.8	64.8
2	105.0	69.7	61.2	66.3	64.6	64.4	72.5	67.7	76.8	77.9	84.3	92.2
3	114.5	89.7	85.6	84.2	87.4	85.9	105.0	93.9	92.1	92.0	93.7	102.8
4	113.6	103.7	82.2	96.6	81.1	98.9	81.5	104.0	88.8	98.9	90.7	101.3
5	113.6	104.8	93.5	99.6	87.9	101.6	89.2	105.5	93.9	104.6	101.4	103.0
6	114.9	104.9	101.9	104.5	92.9	103.5	90.9	105.7	97.9	104.0	104.9	102.1
7	113.4	102.6	104.9	104.9	103.9	105.5	100.9	105.9	105.9	106.4	105.7	102.8
8	112.9	103.2	104.5	103.6	105.0	103.4	102.6	104.5	105.7	105.5	104.3	104.8
9	112.4	102.8	100.2	103.9	104.5	105.6	103.7	105.2	103.8	104.8	105.3	105.7
10	114.8	103.2	101.6	102.7	104.2	105.1	106.2	105.3	104.6	106.5	105.2	105.2
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 350 MHz; 0 dBm.
LO IN: 459 MHz; +17.00 dBm
IF OUT: 109 MHz; -7.34 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	22.8	43.1	37.4	31.5	45.7	55.7	54.0	69.0	64.0	61.0
1	---	38.4	---	43.1	13.0	36.5	27.7	44.0	42.5	52.9	57.4	65.8
2	95.2	59.2	50.1	55.9	53.1	54.4	63.4	60.1	66.0	70.2	74.5	90.5
3	107.1	73.6	53.7	70.4	53.4	71.6	61.5	72.7	66.9	79.3	68.2	87.0
4	108.8	110.3	94.4	91.6	97.9	88.7	97.9	91.8	88.5	86.6	88.5	95.6
5	109.3	95.9	89.8	107.1	85.0	101.0	85.9	104.4	99.9	98.3	93.2	103.4
6	107.3	98.5	102.5	113.3	100.1	112.9	99.6	112.7	100.6	105.8	113.5	99.8
7	107.8	111.0	105.4	117.0	94.9	113.4	89.0	114.7	90.7	114.9	100.4	113.8
8	106.5	111.4	111.5	109.4	105.0	113.8	97.4	112.6	96.4	114.7	101.5	107.6
9	105.6	111.6	100.8	111.9	100.8	112.6	92.8	111.9	91.2	115.1	94.6	114.6
10	109.7	111.1	111.9	109.7	111.6	112.2	100.7	108.4	95.0	106.6	96.0	113.8
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 350 MHz; 10 dBm.
LO IN: 459 MHz; +17.00 dBm
IF OUT: 109 MHz; 2.64 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
HJK-ED16428/2
8/1/2014
Page 3 of 3