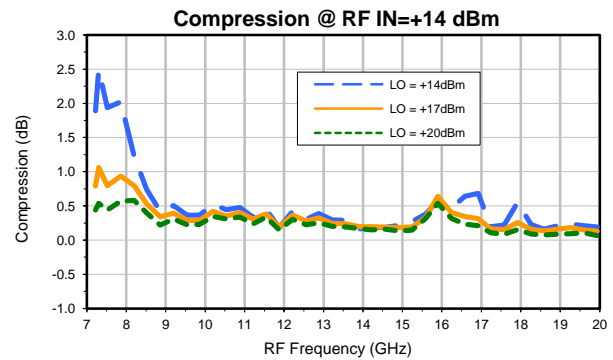
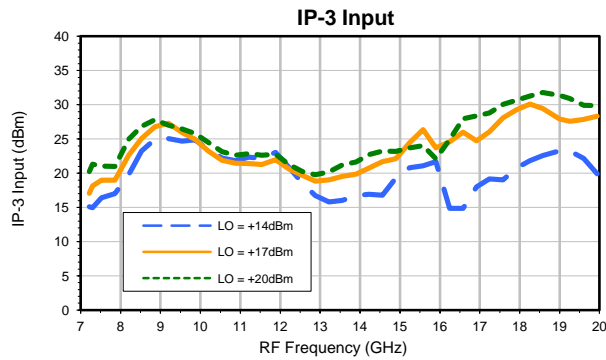
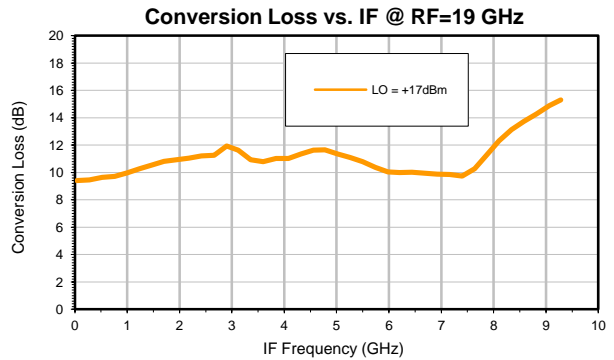
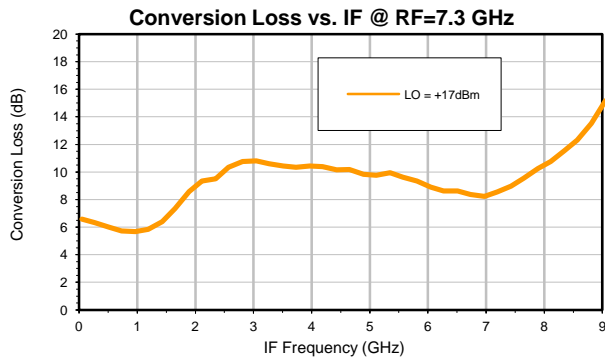
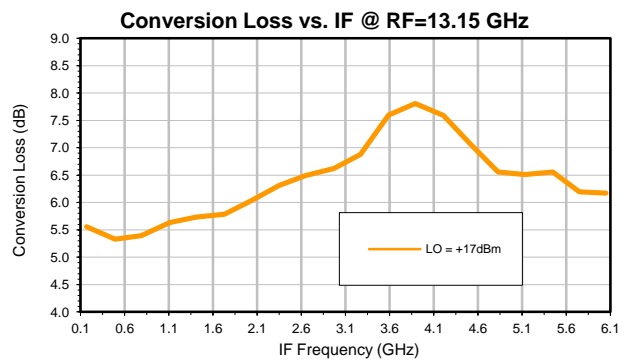
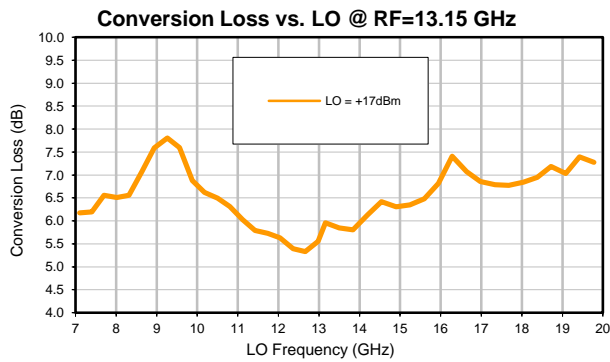
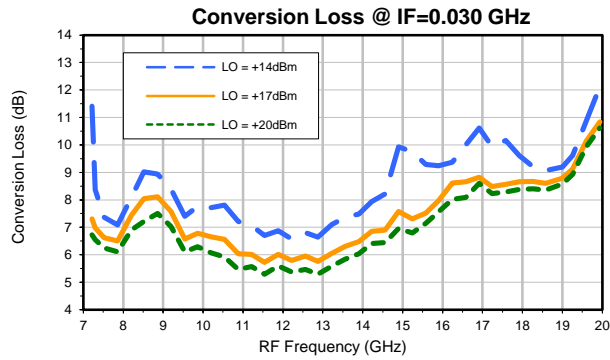


Typical Performance Curves

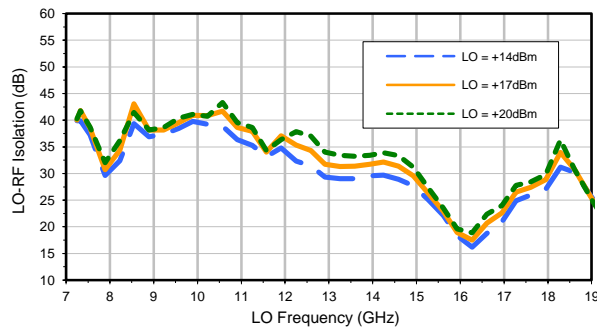


Frequency Mixer

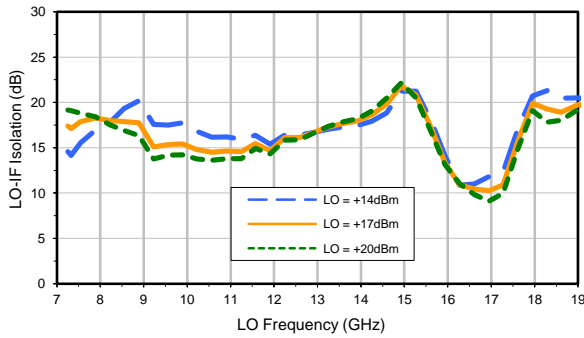
Typical Performance Curves

SIM-193H+

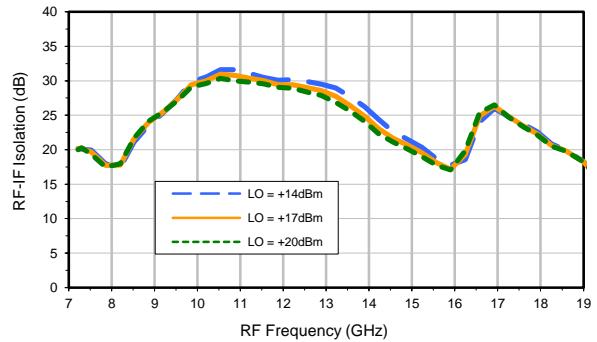
LO-RF Isolation



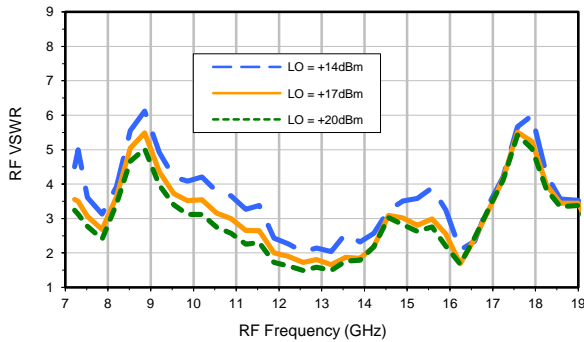
LO-IF Isolation



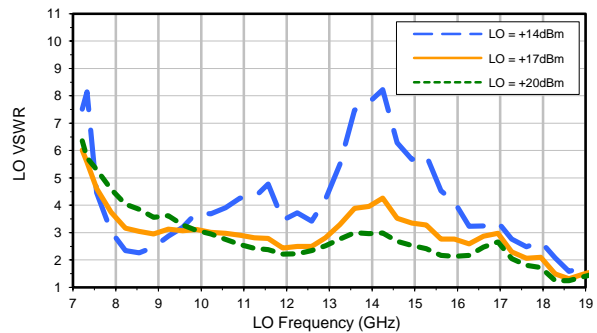
RF-IF Isolation



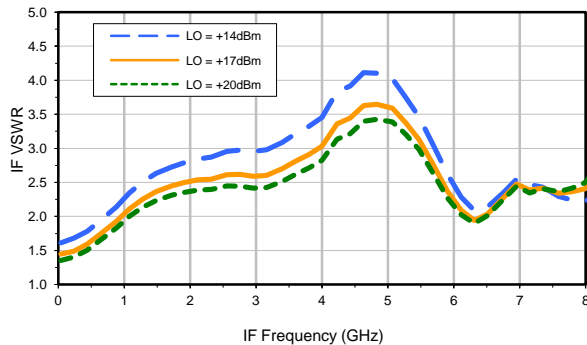
RF VSWR



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. A
 SIM-193H+
 4/25/2013
 Page 2 of 3

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	-15.92	32.30	---	---	---	---	---	---	---	---
1	---	25.12	---	32.76	38.32	---	---	---	---	---	---	---
2	-104.18	77.79	69.93	59.81	70.54	76.72	---	---	---	---	---	---
3	-126.21	---	92.49	100.15	80.34	95.23	93.11	---	---	---	---	---
4	-124.18	---	---	92.05	101.08	105.11	101.18	92.86	---	---	---	---
5	-122.93	---	---	---	93.07	102.01	91.44	101.31	---	---	---	---
6	-123.50	---	---	---	---	91.84	89.03	95.06	89.54	---	---	---
7	-125.26	---	---	---	---	---	91.81	89.72	95.90	91.46	---	---
8	-125.01	---	---	---	---	---	---	92.89	99.03	96.14	97.00	---
9	-124.81	---	---	---	---	---	---	---	92.80	99.47	98.19	98.08
10	-126.17	---	---	---	---	---	---	---	---	90.62	100.82	103.18
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 13150 MHz; -15 dBm.
 LO IN: 13180 MHz; +17.00 dBm
 IF OUT: 30 MHz; -21.14 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	-5.99	43.11	---	---	---	---	---	---	---	---
1	---	25.69	---	32.80	38.06	---	---	---	---	---	---	---
2	-91.45	67.62	60.04	49.89	60.78	67.58	---	---	---	---	---	---
3	-113.83	---	82.64	81.07	60.37	78.67	89.18	---	---	---	---	---
4	-114.17	---	---	102.36	104.36	89.73	103.71	98.09	---	---	---	---
5	-111.38	---	---	---	102.59	111.69	93.95	111.21	---	---	---	---
6	-114.65	---	---	---	---	103.17	99.67	95.69	100.33	---	---	---
7	-114.09	---	---	---	---	---	102.30	99.78	95.63	101.48	---	---
8	-113.95	---	---	---	---	---	---	100.31	107.72	100.28	107.42	---
9	-112.34	---	---	---	---	---	---	---	100.85	110.44	99.48	109.14
10	-113.17	---	---	---	---	---	---	---	---	102.69	111.37	113.77
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 13150 MHz; -5 dBm.
 LO IN: 13180 MHz; +17.00 dBm
 IF OUT: 30 MHz; -10.99 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.

