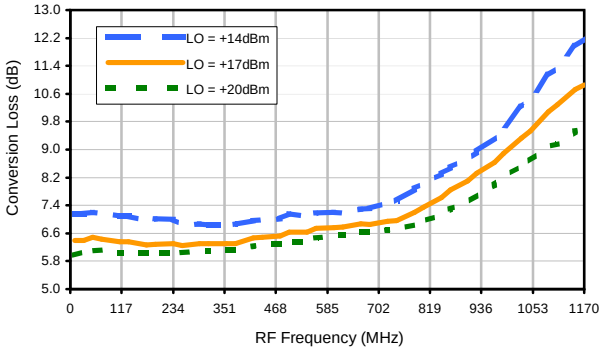
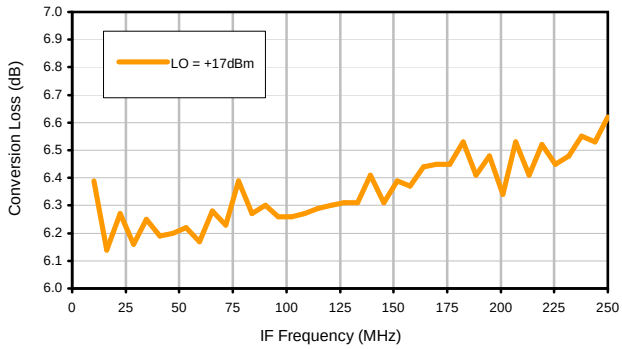
Frequency Mixer TFM-1H+

Typical Performance Curves

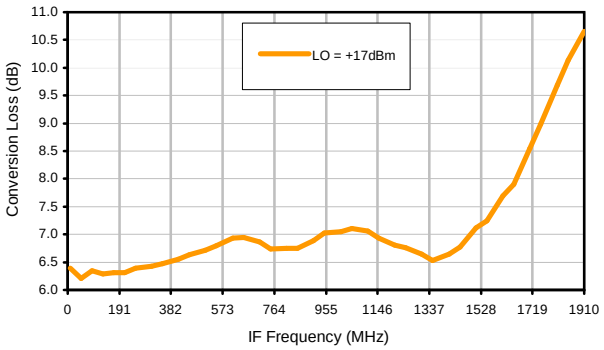
Conversion Loss @ IF=30MHz



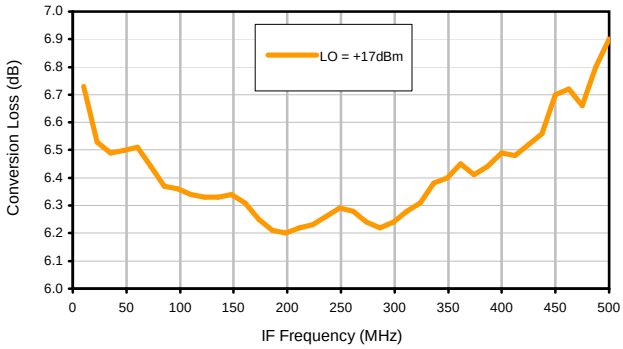
Conversion Loss vs. IF @ RF=260.1MHz



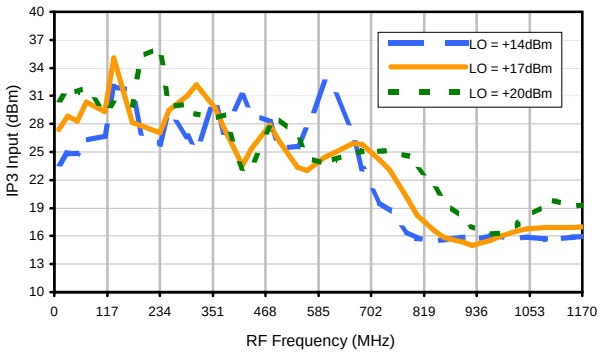
Conversion Loss vs. IF @ RF=10.1MHz



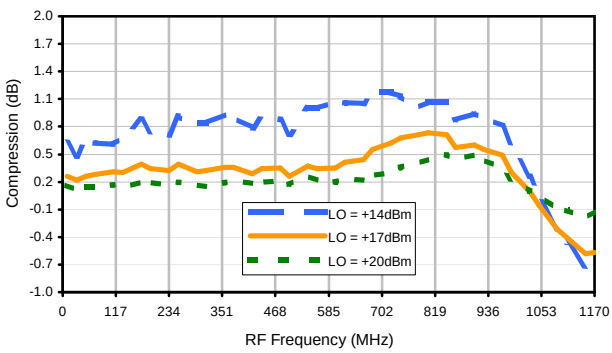
Conversion Loss vs. IF @ RF=510.1MHz



IP3 Input

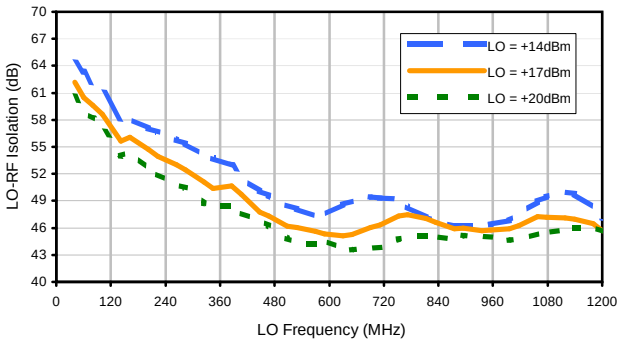


Compression @ RF IN=+14dBm

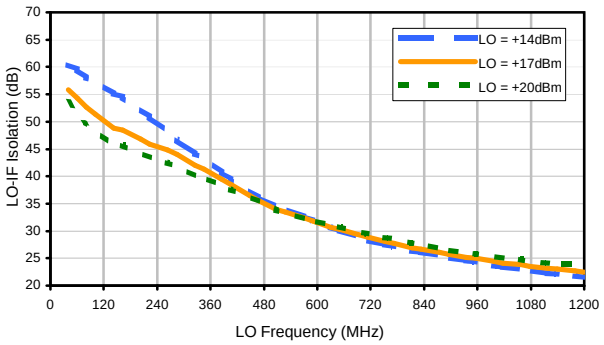


Typical Performance Curves

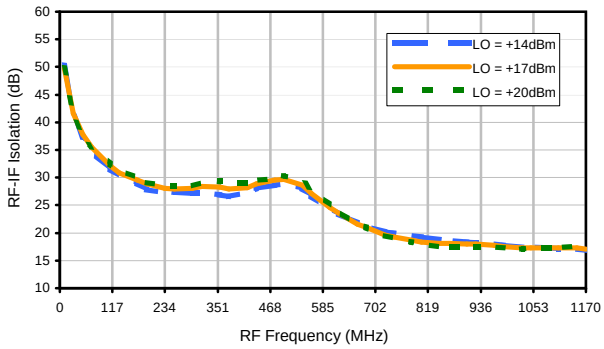
LO-RF Isolation



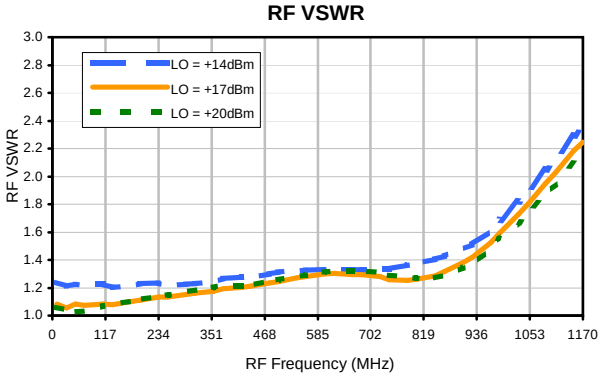
LO-IF Isolation



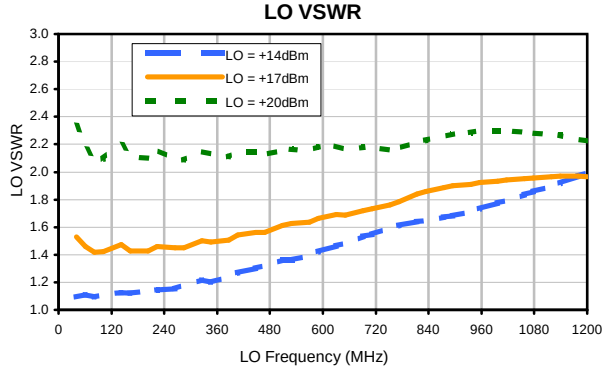
RF-IF Isolation



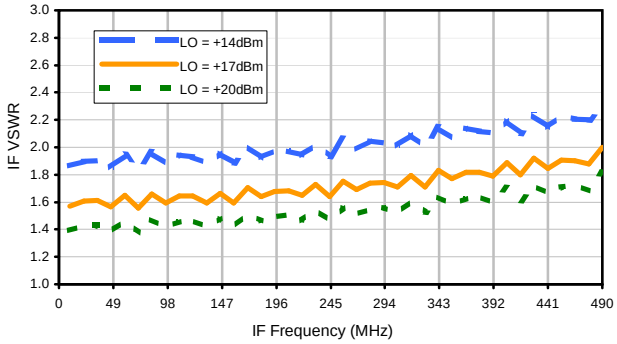
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	17	21	16	29	20	38	30	42	40	44
1	-	20	+0	32	15	44	31	44	24	37	26	48
2	66	68	46	58	47	53	47	57	50	54	61	61
3	>90	65	61	66	53	67	48	78	47	61	45	61
4	>90	>83	75	>83	>83	75	78	74	71	75	68	77
5	>90	>83	81	>83	76	>83	71	>83	71	>83	72	>83
6	>90	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
7	>90	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
8	>90	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
9	>90	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
10	>90	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 250 MHz; -1.00 dBm.
LO IN: 280 MHz; +17.00 dBm
IF OUT: 30 MHz; -7.46 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	25	31	29	43	39	55	46	67	55	67
1	-	20	+0	32	15	43	26	41	33	45	38	56
2	47	53	43	55	42	55	40	54	43	57	53	63
3	69	50	48	55	51	63	45	55	43	59	38	53
4	>90	80	61	70	59	65	61	60	60	62	62	63
5	>90	64	76	65	57	64	51	61	49	65	48	66
6	>90	77	67	77	67	>93	78	80	73	80	67	81
7	>90	76	85	80	74	76	64	72	60	75	61	82
8	>90	82	74	80	85	79	80	78	81	78	72	82
9	>90	>93	78	78	75	77	71	79	69	81	69	86
10	>90	>93	>93	>93	86	91	87	89	84	>93	79	91
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 250 MHz; 9.00 dBm.
LO IN: 280 MHz; +17.00 dBm
IF OUT: 30 MHz; 2.53 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.