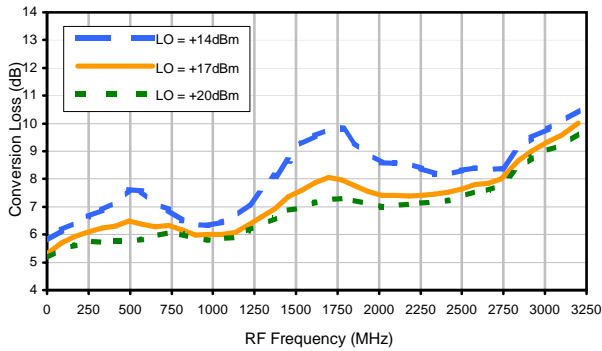


# Frequency Mixer

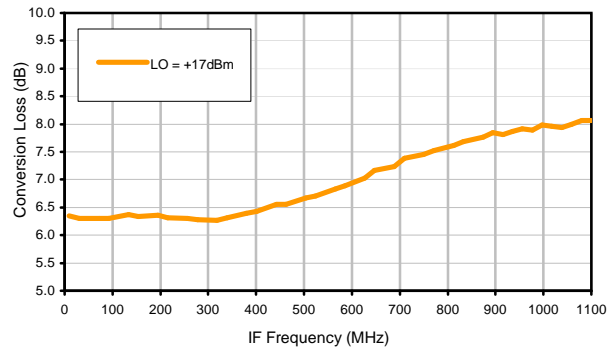
# SYM-25H

## Typical Performance Curves

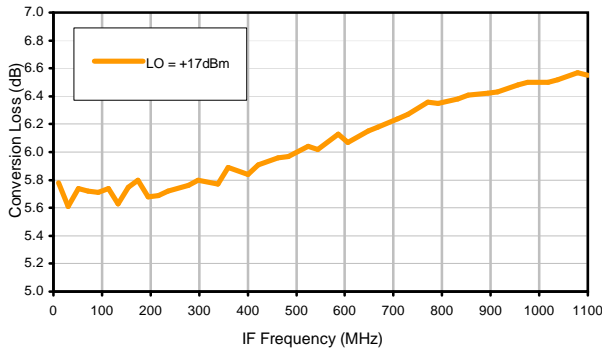
Conversion Loss @ IF=30MHz



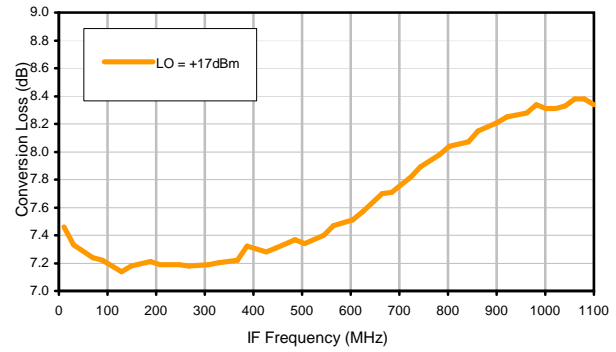
Conversion Loss vs. IF @ RF=1200.1MHz



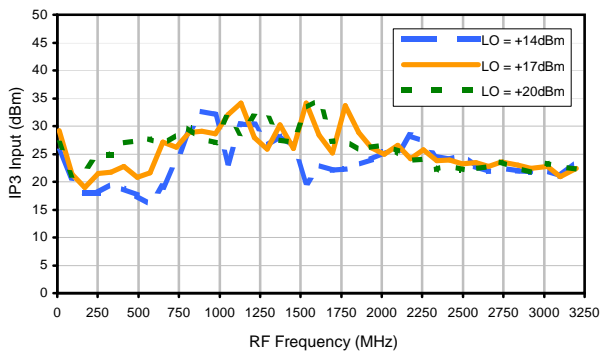
Conversion Loss vs. IF @ RF=10.1MHz



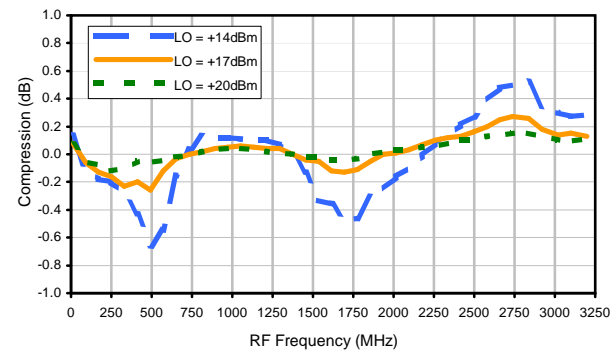
Conversion Loss vs. IF @ RF=2400.1MHz



IP3 Input



Compression @ RF IN=+10dBm



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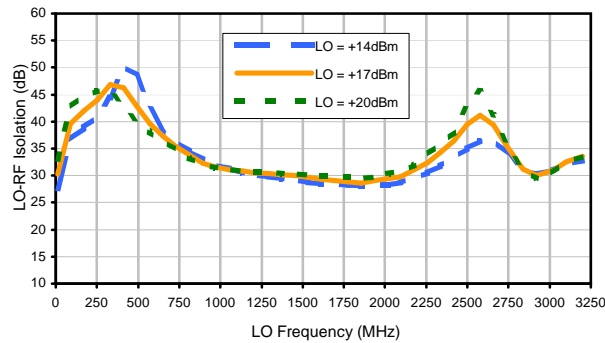


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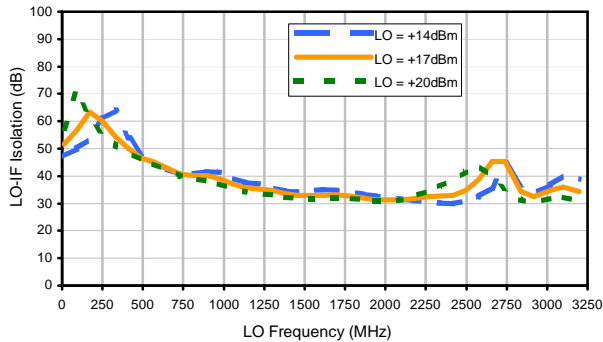


## Typical Performance Curves

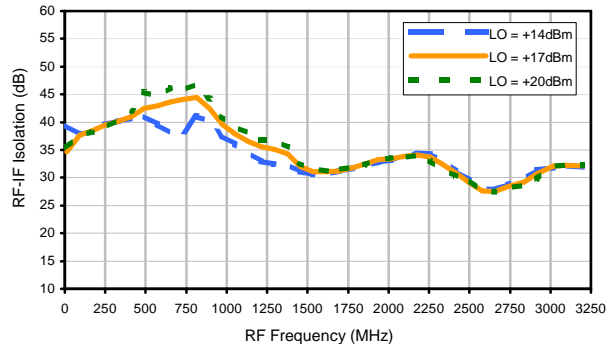
LO-RF Isolation



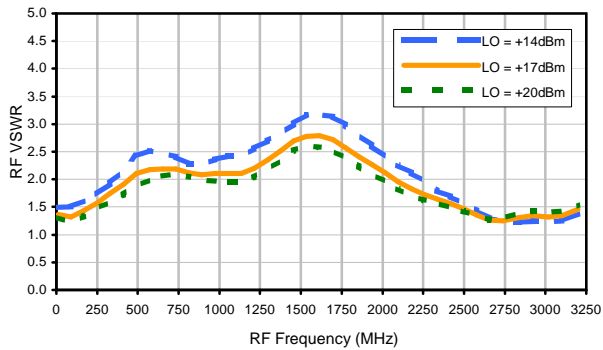
LO-IF Isolation



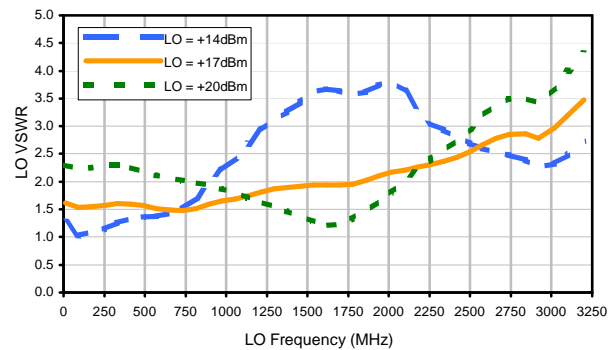
RF-IF Isolation



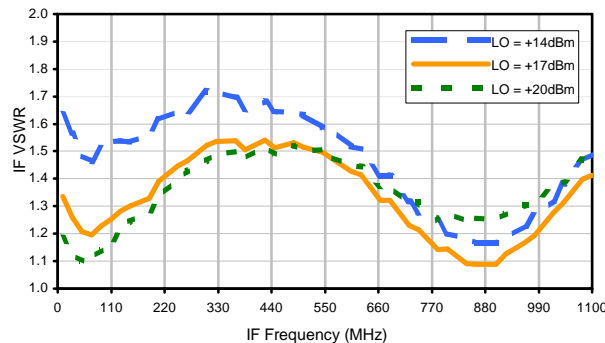
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	16	17	23	36	28	39	36	43	35	52
1	-	25	+0	37	14	31	27	47	42	43	52	37
2	85	57	45	56	46	55	50	63	58	62	66	64
3	>100	72	63	81	57	79	52	66	62	84	68	72
4	>100	>93	>93	>93	84	>93	79	92	79	>93	89	89
5	>100	>93	>93	>93	87	>93	82	>93	83	>93	90	>93
6	>100	>93	>93	>93	>93	>93	92	>93	>93	>93	>93	>93
7	>100	>93	>93	>93	>93	>93	>93	>93	91	>93	>93	>93
8	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93
9	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93
10	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 1200.1 MHz; -1.00 dBm.  
 LO IN: 1230.01 MHz; +17.00 dBm  
 IF OUT: 29.91 MHz; -7.46 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	23	27	38	50	43	63	57	60	57	74
1	-	26	+0	41	15	35	30	49	51	56	54	51
2	69	48	42	54	43	49	48	59	54	63	60	61
3	>100	58	39	63	40	63	36	49	47	62	64	59
4	>100	74	73	62	57	60	55	62	57	69	62	68
5	>100	73	74	86	58	81	53	75	49	65	59	76
6	>100	88	76	86	71	73	68	70	73	71	70	84
7	>100	86	82	86	76	85	66	99	65	85	64	79
8	>100	94	101	>103	85	>103	83	92	79	80	81	76
9	>100	96	101	>103	97	99	91	92	78	90	77	92
10	>100	>103	93	102	>103	100	96	101	85	90	83	86
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 1200.1 MHz; 9.00 dBm.  
 LO IN: 1230.01 MHz; +17.00 dBm  
 IF OUT: 29.91 MHz; 2.56 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.

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