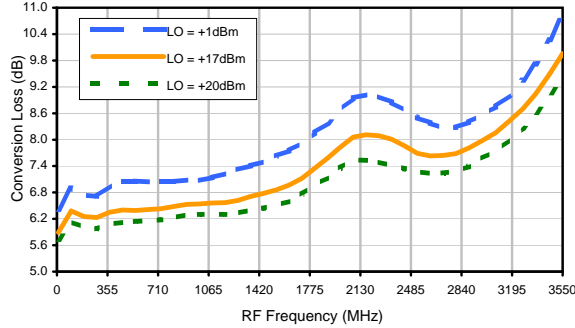


Frequency Mixer

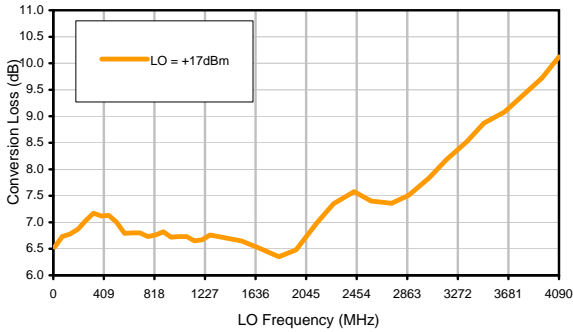
SYM-25DHW+

Typical Performance Curves

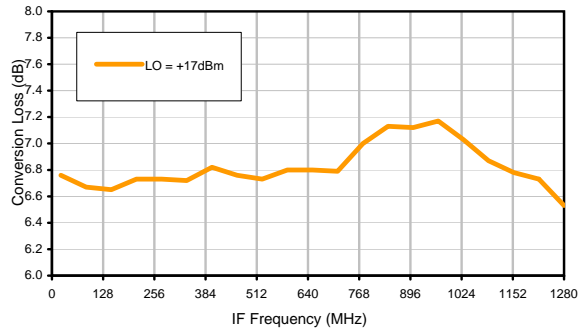
Conversion Loss @ IF=70MHz



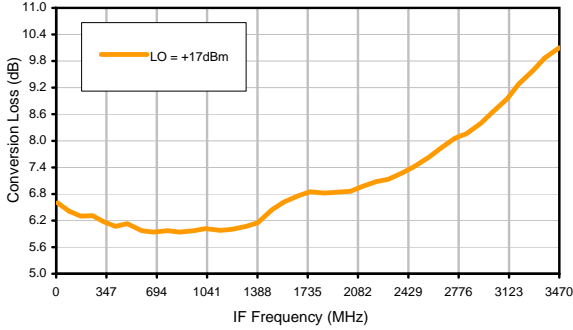
Conversion Loss vs. LO @ RF=1290.1MHz



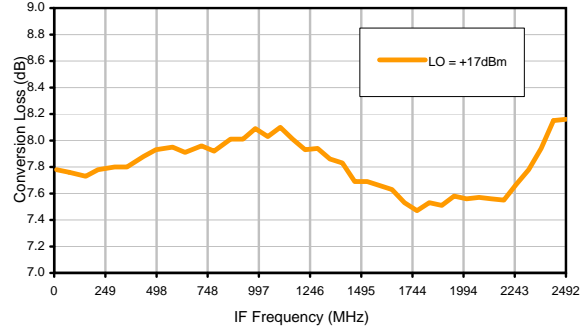
Conversion Loss vs. IF @ RF=1290.1MHz



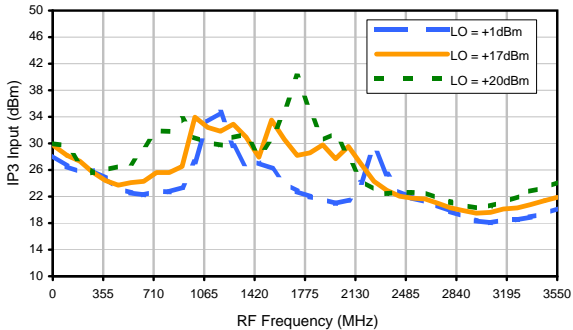
Conversion Loss vs. IF @ RF=80.1MHz



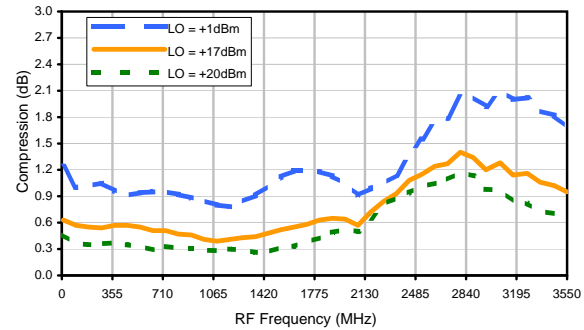
Conversion Loss vs. IF @ RF=2502.1001MHz



IP3 Input



Compression @ RF IN=+14dBm

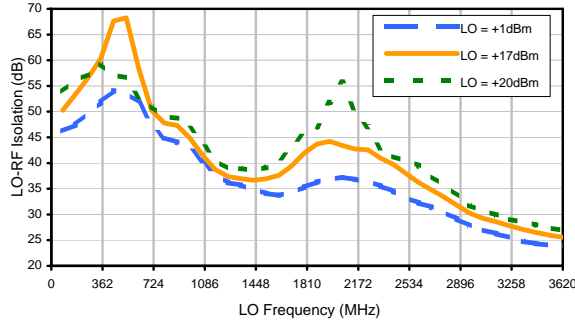


Frequency Mixer

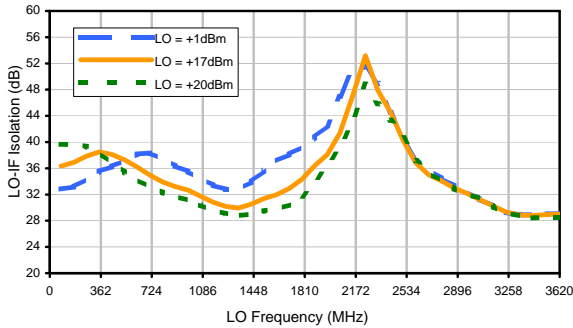
SYM-25DHW+

Typical Performance Curves

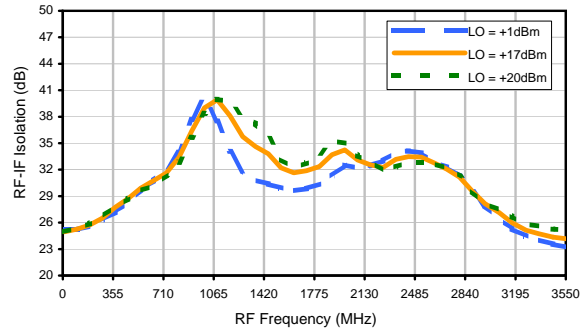
LO-RF Isolation



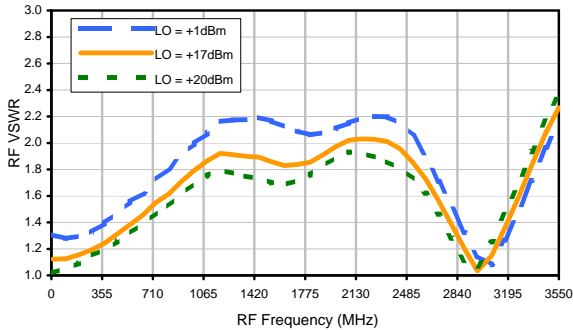
LO-IF Isolation



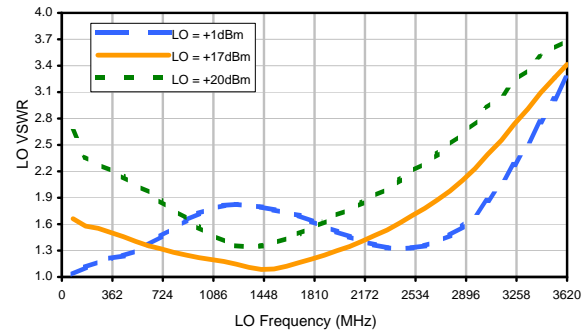
RF-IF Isolation



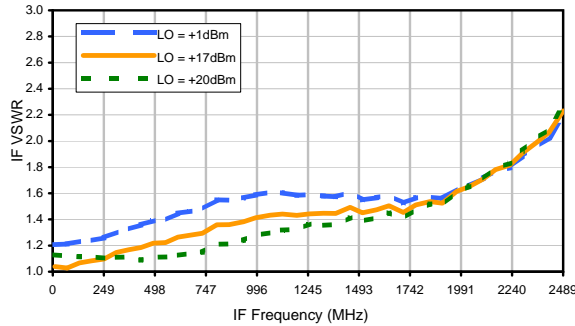
RF VSWR



LO VSWR



IF VSWR



Frequency Mixer

Harmonics Tables

SYM-25DHW+

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	6	14	19	19	29	41	26	33	36	38
1	-	28	+0	30	16	30	25	31	37	34	50	40
2	67	55	46	52	53	64	52	65	69	56	58	53
3	>100	81	72	71	70	69	65	71	67	72	67	84
4	>100	90	87	>92	>92	88	>92	85	>92	87	87	91
5	>100	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92
6	>100	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92
7	>100	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92
8	>100	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92
9	>100	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92
10	>100	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92	>92
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

Test conditions: RF IN: 1290.1 MHz; -1.00 dBm.
 LO IN: 1360.1 MHz; +17.00 dBm
 IF OUT: 70 MHz; -7.59 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	16	23	31	31	42	50	41	47	55	69
1	-	28	+0	30	16	32	26	35	41	39	46	50
2	47	47	36	44	44	55	43	54	57	51	53	55
3	96	59	47	58	62	50	51	50	57	50	56	54
4	>100	66	64	66	81	69	64	66	64	65	63	61
5	>100	83	71	70	61	74	59	71	61	65	62	67
6	>100	79	94	75	82	67	69	64	70	69	73	69
7	>100	84	82	84	84	80	85	>102	93	84	93	83
8	>100	91	95	94	94	100	91	94	89	87	96	99
9	>100	91	>102	98	99	93	101	87	87	86	86	91
10	>100	>102	100	>102	>102	101	>102	98	>102	86	96	84
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 1290.1 MHz; 9.00 dBm.
 LO IN: 1360.1 MHz; +17.00 dBm
 IF OUT: 70 MHz; 2.37 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.