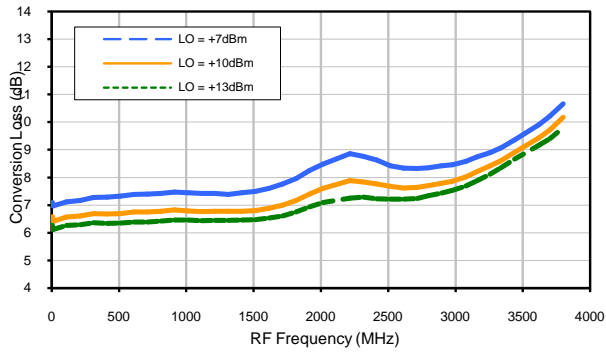


Frequency Mixer

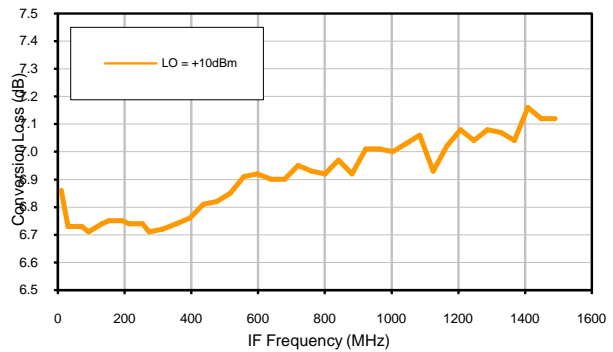
SYM-30DLHW+

Typical Performance Curves

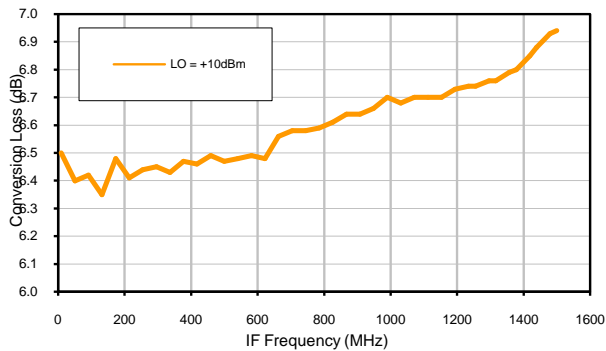
Conversion Loss @ IF=30MHz



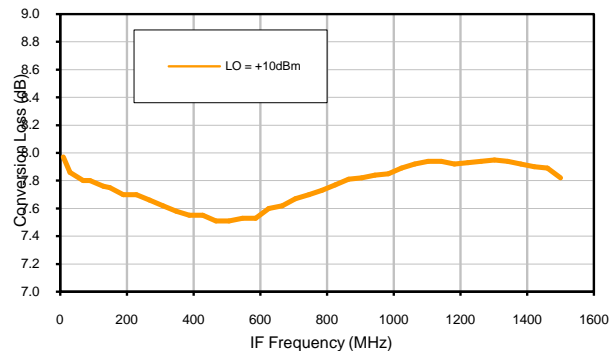
Conversion Loss vs. IF @ RF=1500.1MHz



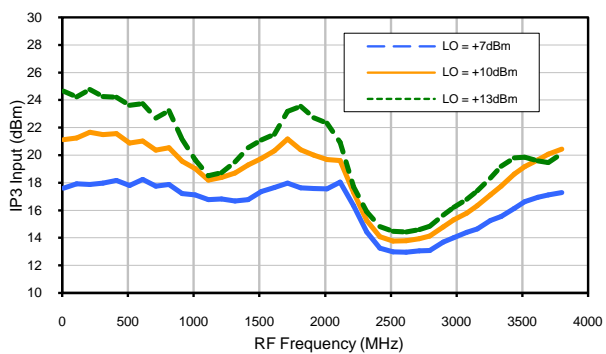
Conversion Loss vs. IF @ RF=10.1MHz



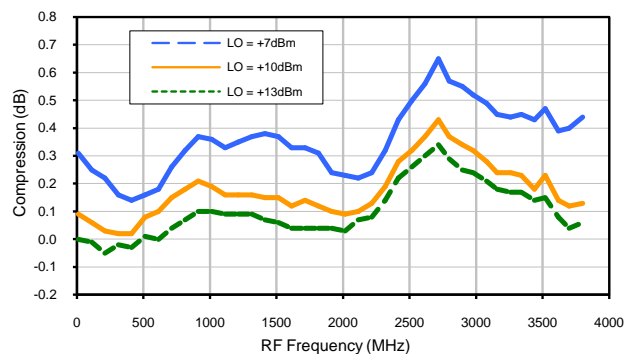
Conversion Loss vs. IF @ RF=3000.1MHz



IP3 Input



Compression @ RF IN=+5dBm



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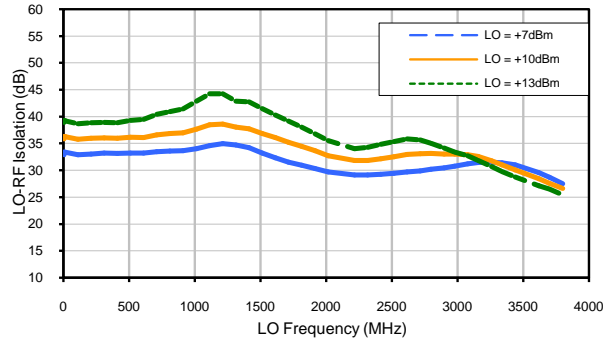


Frequency Mixer

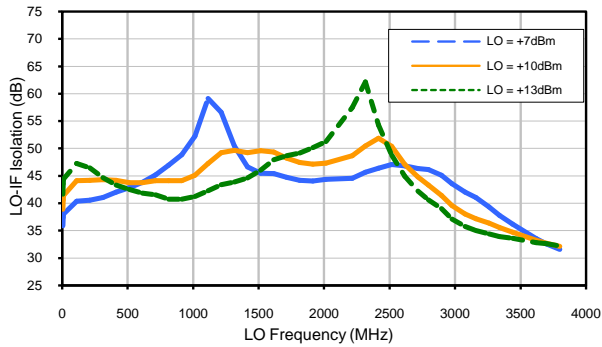
SYM-30DLHW+

Typical Performance Curves

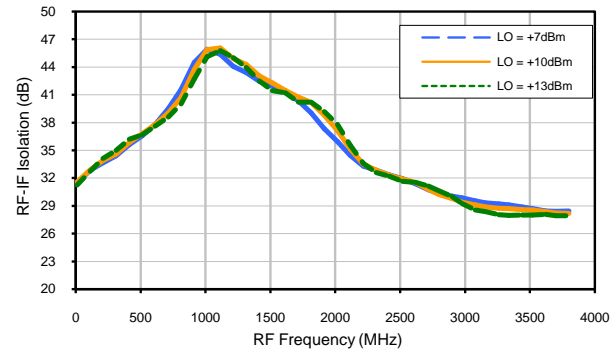
LO-RF Isolation



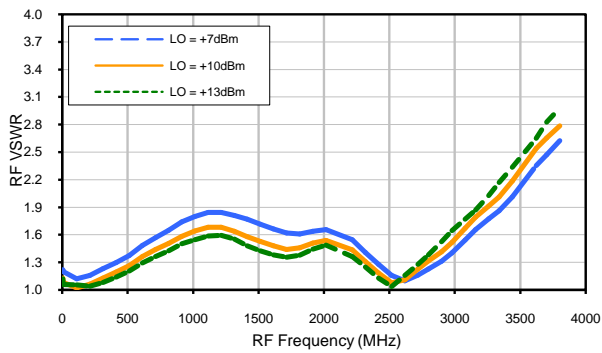
LO-IF Isolation



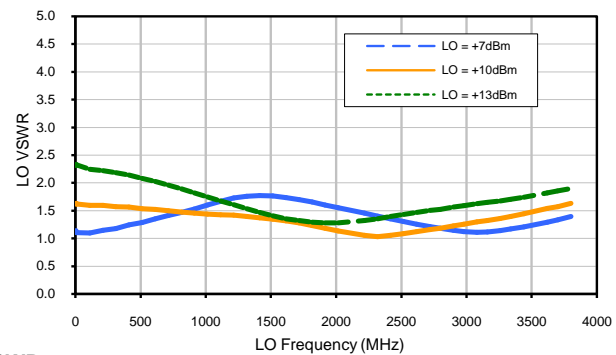
RF-IF Isolation



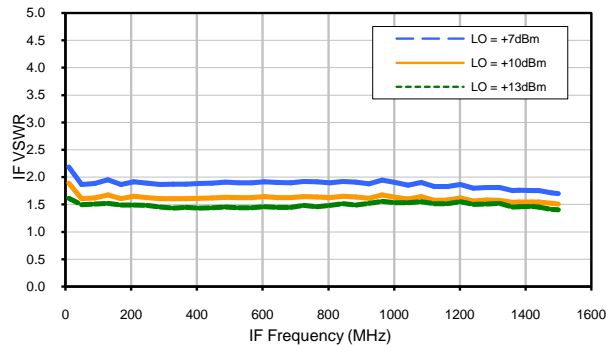
RF VSWR



LO VSWR



IF VSWR



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Frequency Mixer

SYM-30DLHW+

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	7	14	21	18	27	30	33	47	28	39
1	-	44	+0	45	14	66	32	43	45	40	44	44
2	97	53	60	54	66	66	64	66	61	70	60	72
3	>100	>79	73	>79	>79	>79	>79	>79	>79	>79	>79	>79
4	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
5	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
6	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
7	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
8	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
9	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
10	>100	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79	>79
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 1500.1 MHz; -14.00 dBm.
 LO IN: 1530.01 MHz; +10.00 dBm
 IF OUT: 29.91 MHz; -21.02 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	18	24	33	29	39	41	42	56	41	53
1	-	44	+0	45	14	61	32	45	45	41	46	46
2	>100	43	51	45	57	54	55	58	53	62	52	67
3	>100	83	53	74	60	76	64	73	68	67	79	67
4	>100	>89	86	75	79	74	88	73	79	75	75	78
5	>100	>89	>89	>89	85	>89	79	>89	86	>89	88	>89
6	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
7	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
8	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
9	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
10	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 1500.1 MHz; -4.00 dBm.
 LO IN: 1530.01 MHz; +10.00 dBm
 IF OUT: 29.91 MHz; -10.87 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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