

# Frequency Mixer

# SYM-63LH+

## Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30.1MHz (dB)			RF (IN) (MHz)	LO (MHz)	IP-3 INPUT (dBm)			RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+3dBm (dB)		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+7	+10	+13			+7	+10	+13			+7	+10	+13
0.9	30.9	7.45	7.02	6.81	0.9	30.9	15.55	17.77	18.80	0.9	30.9	0.66	0.42	0.24
1.1	31.1	7.23	6.82	6.60	1.1	31.1	15.49	17.58	18.85	2.0	32.1	1.00	0.69	0.43
5.1	35.1	6.47	6.10	5.92	5.1	35.1	16.58	18.43	19.22	5.0	35.1	1.21	0.87	0.57
9.1	39.1	6.42	6.05	5.87	9.1	39.1	16.67	17.79	18.34	9.0	39.1	1.26	0.90	0.61
52.0	82.1	6.46	6.08	5.89	52.0	82.1	13.15	13.95	14.83	52.0	82.1	1.39	1.05	0.75
100.0	130.1	6.52	6.16	5.97	100.0	130.1	12.34	13.27	14.08	100.0	130.1	1.45	1.10	0.79
300.0	330.1	6.65	6.25	6.03	300.0	330.1	12.56	16.72	21.85	300.0	330.1	1.53	1.21	0.92
500.0	530.1	6.70	6.35	6.14	500.0	530.1	17.37	17.29	17.19	500.0	530.1	1.52	1.21	0.92
650.0	680.1	6.63	6.29	6.10	650.0	680.1	15.54	15.67	16.12	650.0	680.1	1.61	1.31	1.00
850.0	880.1	6.78	6.44	6.26	850.0	880.1	17.93	17.29	16.48	850.0	880.1	1.78	1.44	1.12
1050.0	1080.1	7.25	6.82	6.58	1050.0	1080.1	10.93	12.93	14.46	1050.0	1080.1	1.49	1.20	0.91
1200.0	1230.1	7.58	7.28	7.09	1200.0	1230.1	9.41	10.40	11.46	1200.0	1230.1	1.15	0.86	0.63
1400.0	1430.1	7.49	7.29	7.20	1400.0	1430.1	12.53	13.17	13.38	1400.0	1430.1	0.91	0.68	0.50
1600.0	1630.1	7.35	7.20	7.14	1600.0	1630.1	16.92	15.99	15.41	1600.0	1630.1	0.76	0.59	0.47
1750.0	1780.1	7.11	6.94	6.86	1750.0	1780.1	17.63	18.40	17.93	1750.0	1780.1	0.81	0.63	0.50
1950.0	1980.1	7.26	7.08	6.99	1950.0	1980.1	17.51	18.39	19.98	1950.0	1980.1	0.85	0.62	0.47
2150.0	2180.1	7.44	7.18	7.03	2150.0	2180.1	17.75	19.09	20.72	2150.0	2180.1	1.09	0.83	0.65
2300.0	2330.1	8.06	7.67	7.47	2300.0	2330.1	19.14	20.53	19.92	2300.0	2330.1	1.03	0.82	0.64
2500.0	2530.1	8.85	8.26	7.89	2500.0	2530.1	18.01	20.79	19.68	2500.0	2530.1	0.91	0.81	0.69
2700.0	2730.1	9.23	8.65	8.27	2700.0	2730.1	13.82	14.02	14.43	2700.0	2730.1	0.86	0.76	0.67
2850.0	2880.1	9.11	8.60	8.27	2850.0	2880.1	12.11	12.06	12.02	2850.0	2880.1	1.06	0.89	0.78
3050.0	3080.1	9.04	8.58	8.37	3050.0	3080.1	11.45	11.76	11.42	3050.0	3080.1	1.09	0.90	0.76
3250.0	3280.1	8.83	8.36	8.19	3250.0	3280.1	11.39	14.56	15.03	3250.0	3280.1	1.26	0.95	0.80
3400.0	3430.1	9.06	8.50	8.33	3400.0	3430.1	11.15	15.20	15.44	3400.0	3430.1	1.04	0.79	0.69
3600.0	3630.1	9.17	8.40	8.20	3600.0	3630.1	12.21	13.56	15.02	3600.0	3630.1	0.97	0.74	0.65
3800.0	3830.1	8.91	8.22	8.04	3800.0	3830.1	13.13	13.60	14.23	3800.0	3830.1	0.86	0.64	0.55
3950.0	3980.1	9.32	8.22	7.88	3950.0	3980.1	12.62	13.94	13.73	3950.0	3980.1	0.96	0.67	0.53
4150.0	4180.1	8.82	7.94	7.63	4150.0	4180.1	13.22	14.08	14.43	4150.0	4180.1	0.90	0.57	0.44
4350.0	4380.1	8.57	7.83	7.54	4350.0	4380.1	14.47	14.47	14.77	4350.0	4380.1	0.88	0.52	0.36
4500.0	4530.1	8.48	7.74	7.45	4500.0	4530.1	15.04	16.60	16.33	4500.0	4530.1	1.05	0.57	0.36
4700.0	4730.1	8.73	7.98	7.63	4700.0	4730.1	13.33	18.04	17.44	4700.0	4730.1	1.01	0.58	0.40
4900.0	4930.1	9.06	8.27	7.84	4900.0	4930.1	17.74	25.34	22.47	4900.0	4930.1	1.07	0.68	0.52
5050.0	5080.1	9.17	8.40	7.96	5050.0	5080.1	15.58	14.77	14.98	5050.0	5080.1	1.07	0.70	0.53
5250.0	5280.1	9.08	8.34	7.93	5250.0	5280.1	12.37	12.37	12.71	5250.0	5280.1	1.37	0.88	0.67
5450.0	5480.1	9.49	8.66	8.22	5450.0	5480.1	11.26	12.27	13.25	5450.0	5480.1	1.50	0.85	0.63
5600.0	5630.1	9.46	8.52	8.05	5600.0	5630.1	9.83	12.17	14.30	5600.0	5630.1	2.09	1.15	0.81
5800.0	5830.1	9.84	8.60	8.08	5800.0	5830.1	7.67	11.21	14.97	5800.0	5830.1	2.43	1.40	0.88
6000.0	6030.1	11.27	9.04	8.36	6000.0	6030.1	7.58	9.30	12.83	6000.0	6030.1	2.09	1.70	0.80



# Frequency Mixer

# SYM-63LH+

## Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=3000.5MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10.1MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=6000.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+10			+10			+10
741.5	2259.0	10.26	0.3	10.4	5.51	991.1	5009.0	10.45
701.5	2299.0	10.10	1.9	12.0	5.69	961.1	5039.0	10.32
666.5	2334.0	10.04	41.9	52.0	5.99	941.1	5059.0	10.27
626.5	2374.0	10.02	71.9	82.0	5.92	911.1	5089.0	10.21
586.5	2414.0	9.79	111.9	122.0	6.04	881.1	5119.0	10.08
546.5	2454.0	9.77	151.9	162.0	6.05	861.1	5139.0	10.01
511.5	2489.0	9.63	191.9	202.0	6.08	831.1	5169.0	9.93
471.5	2529.0	9.47	221.9	232.0	6.19	801.1	5199.0	9.87
431.5	2569.0	9.40	261.9	272.0	6.21	781.1	5219.0	9.81
391.5	2609.0	9.26	301.9	312.0	6.32	751.1	5249.0	9.73
356.5	2644.0	9.13	341.9	352.0	6.34	721.1	5279.0	9.68
316.5	2684.0	9.08	371.9	382.0	6.34	701.1	5299.0	9.63
276.5	2724.0	8.96	411.9	422.0	6.52	671.1	5329.0	9.58
236.5	2764.0	8.97	451.9	462.0	6.55	641.1	5359.0	9.51
201.5	2799.0	8.89	491.9	502.0	6.66	621.1	5379.0	9.45
161.5	2839.0	8.88	531.9	542.0	6.74	591.1	5409.0	9.37
121.5	2879.0	8.84	561.9	572.0	6.71	561.1	5439.0	9.37
81.5	2919.0	8.77	601.9	612.0	6.88	541.1	5459.0	9.34
46.5	2954.0	8.73	641.9	652.0	6.97	511.1	5489.0	9.31
6.5	2994.0	8.37	681.9	692.0	7.07	481.1	5519.0	9.30
0.3	3000.8	8.31	711.9	722.0	7.15	461.1	5539.0	9.29
21.5	3022.0	8.67	751.9	762.0	7.29	431.1	5569.0	9.26
61.5	3062.0	8.65	791.9	802.0	7.32	401.1	5599.0	9.26
96.5	3097.0	8.68	831.9	842.0	7.48	381.1	5619.0	9.21
136.5	3137.0	8.75	861.9	872.0	7.56	351.1	5649.0	9.18
171.5	3172.0	8.78	901.9	912.0	7.67	321.1	5679.0	9.19
206.5	3207.0	8.86	941.9	952.0	7.88	301.1	5699.0	9.18
246.5	3247.0	8.90	981.9	992.0	8.00	271.1	5729.0	9.02
281.5	3282.0	8.97	1021.9	1032.0	8.24	241.1	5759.0	9.06
316.5	3317.0	9.10	1051.9	1062.0	8.38	221.1	5779.0	9.09
356.5	3357.0	9.13	1091.9	1102.0	8.61	191.1	5809.0	9.00
391.5	3392.0	9.29	1131.9	1142.0	8.87	161.1	5839.0	8.85
431.5	3432.0	9.41	1171.9	1182.0	9.06	141.1	5859.0	8.99
466.5	3467.0	9.42	1201.9	1212.0	9.29	111.1	5889.0	9.04
501.5	3502.0	9.56	1241.9	1252.0	9.57	81.1	5919.0	8.95
541.5	3542.0	9.71	1281.9	1292.0	9.81	61.1	5939.0	8.87
576.5	3577.0	9.70	1321.9	1332.0	10.20	31.1	5969.0	9.12
616.5	3617.0	9.93	1351.9	1362.0	10.44	1.1	5999.0	8.99
651.5	3652.0	10.00	1391.9	1402.0	10.85	0.8	5999.3	9.02
686.5	3687.0	10.10	1421.9	1432.0	11.23	0.4	5999.7	8.92



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IF/RF MICROWAVE COMPONENTS

REV. X2

SYM-63LH+

10/4/2010

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## Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+7	+10	+13	+7	+10	+13
30.9	65.72	65.35	65.20	61.60	60.92	60.39
32.0	65.25	65.08	65.02	61.32	60.53	60.20
35.0	64.40	64.30	64.33	60.40	60.00	59.37
39.0	63.17	63.25	63.38	59.59	58.69	58.34
82.0	56.63	56.87	57.26	52.02	51.30	50.97
130.0	52.42	52.88	53.46	46.80	46.39	46.46
330.0	45.26	46.16	46.94	36.69	37.49	38.32
530.0	42.02	42.87	43.62	32.85	34.05	35.06
680.0	40.96	41.73	42.13	31.93	33.47	34.68
880.0	40.31	41.05	41.59	31.51	33.85	36.15
1080.0	44.14	43.48	42.90	32.21	34.08	35.20
1230.0	40.28	39.20	38.44	28.81	29.72	29.97
1430.0	36.04	34.97	34.15	24.75	24.97	24.96
1630.0	33.04	32.15	31.27	23.26	23.12	22.96
1780.0	32.02	31.23	30.42	23.35	23.08	22.85
1980.0	31.52	30.85	30.07	24.37	24.01	23.72
2180.0	30.93	30.51	30.02	26.01	25.51	25.14
2330.0	30.16	29.73	29.36	27.18	26.60	26.16
2530.0	29.43	28.84	28.34	29.39	28.82	28.40
2730.0	28.01	27.31	26.78	32.19	31.70	31.39
2880.0	27.68	27.01	26.47	36.35	35.40	34.63
3080.0	26.85	26.32	25.88	34.73	32.86	31.69
3280.0	27.17	26.71	26.36	27.49	26.65	26.04
3430.0	26.41	25.91	25.53	23.52	23.03	22.49
3630.0	27.12	26.59	26.15	20.60	20.49	20.26
3830.0	27.03	26.73	26.48	18.28	18.61	18.72
3980.0	28.78	28.25	27.76	18.35	18.93	19.24
4180.0	29.19	28.88	28.34	17.25	18.23	18.93
4380.0	29.83	29.81	29.40	16.88	18.25	19.36
4530.0	30.88	31.00	30.82	16.98	18.61	20.05
4730.0	32.24	32.49	32.56	16.99	18.68	20.34
4930.0	34.63	34.96	35.03	17.53	19.22	20.84
5080.0	36.89	37.21	37.33	18.06	19.60	21.00
5280.0	41.43	42.08	42.43	18.98	20.08	20.97
5480.0	41.05	43.08	44.32	20.09	20.43	20.63
5630.0	37.12	38.73	39.88	20.88	20.57	20.30
5830.0	33.56	34.99	35.94	21.43	20.42	19.70
6030.0	31.45	33.24	34.48	21.27	20.19	19.31

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+7	+10	+13
0.9	30.9	47.70	50.62	53.55
2.0	32.0	46.89	49.61	53.59
5.0	35.0	46.41	48.14	50.76
9.0	39.0	45.54	47.71	50.63
52.0	82.0	43.52	42.69	41.55
100.0	130.0	38.97	37.66	36.56
300.0	330.0	30.95	29.60	28.96
500.0	530.0	28.71	27.66	27.01
650.0	680.0	29.42	27.74	26.69
850.0	880.0	31.01	29.03	27.81
1050.0	1080.0	21.56	21.36	21.07
1200.0	1230.0	17.90	17.70	17.57
1400.0	1430.0	15.76	15.50	15.28
1600.0	1630.0	15.98	15.76	15.57
1750.0	1780.0	16.95	16.82	16.73
1950.0	1980.0	19.25	19.19	19.15
2150.0	2180.0	21.23	21.21	21.18
2300.0	2330.0	22.85	22.78	22.74
2500.0	2530.0	24.37	24.23	24.15
2700.0	2730.0	25.16	24.96	24.83
2850.0	2880.0	24.48	24.23	24.04
3050.0	3080.0	23.26	22.93	22.62
3250.0	3280.0	21.81	21.41	21.09
3400.0	3430.0	21.34	20.90	20.59
3600.0	3630.0	21.12	20.54	20.11
3800.0	3830.0	21.40	20.91	20.44
3950.0	3980.0	21.61	21.37	21.02
4150.0	4180.0	22.00	21.74	21.46
4350.0	4380.0	22.66	22.47	22.12
4500.0	4530.0	23.30	23.37	23.22
4700.0	4730.0	24.51	25.07	25.39
4900.0	4930.0	25.67	26.69	27.63
5050.0	5080.0	26.33	27.39	28.10
5250.0	5280.0	26.32	27.17	27.77
5450.0	5480.0	26.62	27.14	27.60
5600.0	5630.0	26.39	26.80	26.96
5800.0	5830.0	26.27	26.06	26.03
6000.0	6030.0	27.33	26.64	26.34

# Frequency Mixer

# SYM-63LH+

## Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=6000.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+7	+10	+13		+7	+10	+13		+7	+10	+13
0.9	30.9	1.89	1.90	1.92	30.9	2.93	4.22	6.05	0.3	2.64	1.55	1.15
2.0	32.0	1.41	1.43	1.46	32.0	2.93	4.21	6.03	2.0	2.61	1.53	1.15
5.0	35.0	1.15	1.17	1.21	35.0	2.92	4.18	5.99	6.0	2.63	1.55	1.15
9.0	39.0	1.08	1.10	1.15	39.0	2.89	4.14	5.88	10.0	2.65	1.56	1.16
52.0	82.0	1.04	1.04	1.11	82.0	2.67	3.66	4.92	68.0	2.59	1.55	1.18
100.0	130.0	1.06	1.02	1.08	130.0	2.56	3.47	4.58	120.0	2.52	1.53	1.17
300.0	330.0	1.22	1.17	1.16	330.0	2.28	3.00	3.83	160.0	2.49	1.52	1.19
500.0	530.0	1.45	1.41	1.39	530.0	2.05	2.61	3.22	210.0	2.42	1.49	1.18
650.0	680.0	1.58	1.54	1.51	680.0	1.88	2.29	2.77	250.0	2.39	1.49	1.19
850.0	880.0	1.87	1.79	1.75	880.0	1.66	1.90	2.21	290.0	2.33	1.47	1.19
1050.0	1080.0	2.19	2.12	2.06	1080.0	1.47	1.59	1.78	330.0	2.25	1.43	1.19
1200.0	1230.0	2.22	2.18	2.15	1230.0	1.31	1.39	1.56	370.0	2.21	1.43	1.20
1400.0	1430.0	2.12	2.10	2.08	1430.0	1.09	1.23	1.43	410.0	2.13	1.38	1.19
1600.0	1630.0	2.10	2.06	2.04	1630.0	1.07	1.31	1.54	450.0	2.07	1.37	1.22
1750.0	1780.0	2.13	2.06	2.02	1780.0	1.20	1.46	1.71	490.0	2.02	1.35	1.21
1950.0	1980.0	2.19	2.08	2.01	1980.0	1.38	1.68	1.96	530.0	1.94	1.32	1.23
2150.0	2180.0	2.39	2.26	2.17	2180.0	1.61	1.92	2.22	570.0	1.89	1.32	1.25
2300.0	2330.0	2.56	2.42	2.32	2330.0	1.82	2.11	2.41	610.0	1.80	1.27	1.25
2500.0	2530.0	2.79	2.63	2.51	2530.0	2.09	2.33	2.60	650.0	1.73	1.26	1.27
2700.0	2730.0	2.76	2.61	2.49	2730.0	2.35	2.51	2.73	690.0	1.68	1.24	1.27
2850.0	2880.0	2.67	2.54	2.43	2880.0	2.48	2.55	2.72	740.0	1.58	1.22	1.31
3050.0	3080.0	2.51	2.38	2.27	3080.0	2.64	2.55	2.62	780.0	1.55	1.21	1.30
3250.0	3280.0	2.37	2.23	2.12	3280.0	2.96	2.62	2.53	820.0	1.48	1.20	1.33
3400.0	3430.0	2.30	2.14	2.05	3430.0	3.17	2.69	2.49	860.0	1.45	1.19	1.33
3600.0	3630.0	2.19	2.00	1.90	3630.0	3.42	2.82	2.47	900.0	1.40	1.20	1.35
3800.0	3830.0	2.04	1.87	1.77	3830.0	3.31	2.73	2.34	940.0	1.37	1.18	1.34
3950.0	3980.0	2.07	1.87	1.73	3980.0	3.51	2.85	2.37	1000.0	1.32	1.20	1.36
4150.0	4180.0	1.85	1.69	1.59	4180.0	3.16	2.65	2.29	1020.0	1.30	1.19	1.36
4350.0	4380.0	1.72	1.59	1.51	4380.0	2.84	2.55	2.36	1060.0	1.28	1.18	1.34
4500.0	4530.0	1.63	1.49	1.41	4530.0	2.63	2.50	2.46	1100.0	1.27	1.18	1.34
4700.0	4730.0	1.64	1.51	1.43	4730.0	2.36	2.42	2.55	1140.0	1.25	1.17	1.32
4900.0	4930.0	1.83	1.73	1.66	4930.0	2.22	2.42	2.63	1180.0	1.23	1.17	1.32
5050.0	5080.0	1.89	1.80	1.74	5080.0	2.23	2.47	2.70	1220.0	1.22	1.14	1.28
5250.0	5280.0	2.03	1.96	1.92	5280.0	2.28	2.48	2.67	1270.0	1.23	1.11	1.23
5450.0	5480.0	2.34	2.27	2.21	5480.0	2.38	2.48	2.58	1310.0	1.24	1.10	1.19
5600.0	5630.0	2.27	2.16	2.08	5630.0	2.47	2.48	2.51	1350.0	1.26	1.09	1.15
5800.0	5830.0	2.54	2.39	2.31	5830.0	2.53	2.45	2.41	1390.0	1.28	1.11	1.13
6000.0	6030.0	2.81	2.50	2.40	6030.0	2.54	2.45	2.37	1430.0	1.31	1.13	1.11



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IF/RF MICROWAVE COMPONENTS

REV. X2

SYM-63LH+

10/4/2010

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## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	6.46	22.00	13.18	39.04	29.66	45.61	38.99	59.01	---	---
1	---	15.46	---	43.26	27.45	40.02	52.64	38.28	49.88	55.19	60.07	---
2	113.32	52.56	54.17	63.68	54.87	57.19	52.54	59.18	60.92	75.36	58.62	83.97
3	129.52	69.67	61.48	68.24	55.61	65.89	73.86	69.84	72.32	61.12	72.39	76.22
4	129.37	92.58	97.04	87.67	88.10	71.26	84.63	80.86	85.88	79.90	76.98	96.73
5	126.77	100.42	106.54	101.61	93.68	97.15	82.96	91.12	97.35	96.96	91.86	82.54
6	124.76	103.85	103.16	106.44	107.83	106.51	107.94	98.16	104.68	106.28	106.98	98.90
7	123.22	101.62	105.09	105.60	107.58	109.34	106.16	107.22	100.77	105.48	107.56	109.46
8	122.27	98.84	100.86	104.25	105.46	106.54	106.63	107.58	108.17	104.61	105.86	106.85
9	123.27	---	96.41	101.69	104.58	104.81	106.83	108.45	107.75	106.84	106.39	105.58
10	122.27	---	---	99.76	101.51	104.86	103.50	105.67	107.08	106.68	107.33	106.56
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 3000 MHz; -10.00 dBm  
 LO IN: 3030 MHz; +10.00 dBm  
 IF OUT: 30 MHz; -18.44 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	---	---	17.00	30.70	24.98	68.89	42.20	68.75	46.23	72.44	---	---
1	---	14.58	---	43.90	28.09	47.15	48.56	50.81	63.72	70.22	69.80	---
2	102.93	43.63	43.71	34.51	46.45	42.94	49.19	52.79	66.06	67.98	61.71	96.97
3	119.13	48.13	41.53	49.75	38.36	54.12	69.92	57.85	64.47	56.09	67.43	72.92
4	118.98	73.63	75.55	73.51	61.79	46.59	57.64	57.23	60.90	64.18	68.15	72.57
5	116.38	62.44	67.74	68.67	63.94	65.68	62.02	64.74	71.44	66.97	76.18	64.38
6	114.37	86.47	80.58	80.97	79.73	69.51	72.68	53.69	70.45	68.09	74.05	73.58
7	112.83	80.85	85.75	71.80	86.62	85.54	75.86	85.87	69.84	79.55	80.21	80.36
8	111.88	100.23	90.31	98.51	87.30	96.08	91.28	76.87	80.85	65.12	77.37	79.51
9	112.88	---	102.78	93.94	95.99	83.43	93.13	94.46	82.74	94.52	76.99	82.49
10	111.88	---	---	109.04	104.90	103.14	90.56	101.95	105.13	85.56	89.79	76.40
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 3000 MHz; 0.00 dBm  
 LO IN: 3030 MHz; +10.00 dBm  
 IF OUT: 30 MHz; -8.05 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 represents the Harmonics level of the RF Input Signal to the mixer

