

Frequency Mixer

SYM-2500+

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB)			RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm)			RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+1dBm (dB)		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+4	+7	+10			+4	+7	+10			+4	+7	+10
1.0	31.0	5.79	5.40	5.23	10.1	40.1	19.15	16.78	18.16	10.1	40.1	1.53	1.21	0.95
2.0	32.0	5.63	5.24	5.09	89.8	119.8	15.57	15.76	15.06	89.8	119.8	1.57	1.23	0.99
5.8	35.8	5.54	5.13	4.99	169.5	199.5	14.11	15.14	17.75	169.5	199.5	1.61	1.26	0.99
9.4	39.4	5.51	5.12	5.00	249.3	279.3	13.77	19.69	26.05	249.3	279.3	1.52	1.19	0.98
10.1	40.1	5.52	5.27	5.07	329.0	359.0	12.87	13.06	13.14	329.0	359.0	1.36	1.02	0.81
89.8	119.8	5.73	5.36	5.18	408.7	438.7	14.96	21.43	16.78	408.7	438.7	1.36	0.98	0.72
169.5	199.5	5.85	5.49	5.26	488.4	518.4	9.53	11.86	15.47	488.4	518.4	1.60	1.20	0.93
249.3	279.3	5.94	5.55	5.33	568.2	598.2	9.90	14.05	22.73	568.2	598.2	1.85	1.56	1.33
329.0	359.0	6.03	5.67	5.47	647.9	677.9	9.33	11.74	13.61	647.9	677.9	1.26	1.16	1.03
408.7	438.7	5.90	5.64	5.51	727.6	757.6	7.98	8.95	10.63	727.6	757.6	0.98	0.79	0.70
568.2	598.2	6.66	6.00	5.70	807.3	837.3	8.40	9.56	10.05	807.3	837.3	0.88	0.67	0.53
647.9	677.9	7.65	6.84	6.33	887.1	917.1	10.66	11.01	11.87	887.1	917.1	0.80	0.62	0.50
727.6	757.6	7.75	7.18	6.83	966.8	996.8	13.56	12.86	13.42	966.8	996.8	0.71	0.47	0.35
807.3	837.3	7.47	7.04	6.80	1046.5	1076.5	15.01	14.72	14.66	1046.5	1076.5	0.64	0.40	0.30
887.1	917.1	7.12	6.82	6.67	1126.2	1156.2	16.02	18.13	16.31	1126.2	1156.2	0.62	0.43	0.29
966.8	996.8	6.98	6.71	6.58	1206.0	1236.0	15.76	15.09	17.19	1206.0	1236.0	0.60	0.40	0.27
1046.5	1076.5	7.00	6.72	6.58	1285.7	1315.7	13.91	14.36	14.69	1285.7	1315.7	0.51	0.38	0.26
1126.2	1156.2	7.25	6.92	6.77	1365.4	1395.4	13.29	14.40	15.34	1365.4	1395.4	0.47	0.32	0.22
1285.7	1315.7	7.87	7.40	7.18	1445.1	1475.1	13.27	13.48	14.32	1445.1	1475.1	0.50	0.34	0.28
1365.4	1395.4	8.10	7.57	7.31	1504.9	1534.9	12.11	13.23	13.94	1504.9	1534.9	0.51	0.34	0.28
1445.1	1475.1	8.31	7.74	7.43	1584.7	1614.7	12.07	12.16	13.06	1584.7	1614.7	0.50	0.34	0.29
1504.9	1534.9	8.40	7.88	7.50	1644.4	1674.4	11.22	11.91	12.30	1644.4	1674.4	0.60	0.35	0.26
1584.7	1614.7	8.49	7.91	7.63	1724.2	1754.2	11.02	11.54	11.63	1724.2	1754.2	0.57	0.41	0.30
1644.4	1674.4	8.57	7.95	7.67	1784.0	1814.0	10.12	11.43	12.45	1784.0	1814.0	0.61	0.41	0.35
1784.0	1814.0	8.66	8.02	7.67	1863.7	1893.7	9.24	10.57	11.69	1863.7	1893.7	0.75	0.49	0.40
1863.7	1893.7	8.73	7.97	7.63	1923.5	1953.5	9.19	10.51	11.95	1923.5	1953.5	0.81	0.55	0.42
1923.5	1953.5	8.77	7.90	7.58	2003.2	2033.2	8.40	9.97	11.20	2003.2	2033.2	0.86	0.55	0.42
2003.2	2033.2	8.89	7.87	7.54	2063.0	2093.0	7.85	9.62	11.52	2063.0	2093.0	0.82	0.54	0.41
2063.0	2093.0	8.89	7.88	7.51	2142.7	2172.7	7.36	9.27	11.62	2142.7	2172.7	0.79	0.50	0.37
2142.7	2172.7	9.04	7.89	7.46	2202.5	2232.5	7.19	8.88	11.18	2202.5	2232.5	0.73	0.51	0.37
2202.5	2232.5	9.29	7.91	7.49	2282.2	2312.2	7.09	9.05	10.87	2282.2	2312.2	0.76	0.52	0.35
2282.2	2312.2	9.42	7.97	7.55	2342.0	2372.0	7.42	8.80	11.60	2342.0	2372.0	0.79	0.45	0.35
2342.0	2372.0	9.49	8.05	7.63	2421.8	2451.8	8.47	9.20	12.05	2421.8	2451.8	0.79	0.44	0.30
2421.8	2451.8	9.52	8.20	7.76	2481.5	2511.5	9.14	10.97	13.20	2481.5	2511.5	0.78	0.45	0.30
2481.5	2511.5	9.76	8.39	7.96	2561.3	2591.3	10.61	12.61	13.29	2561.3	2591.3	0.80	0.51	0.30
2561.3	2591.3	9.87	8.61	8.16	2621.1	2651.1	11.90	13.39	14.11	2621.1	2651.1	0.75	0.44	0.30
2700.8	2730.8	10.15	9.09	8.78	2700.8	2730.8	13.71	15.13	15.83	2700.8	2730.8	0.78	0.41	0.31
2760.6	2790.6	10.38	9.40	9.07	2760.6	2790.6	13.32	14.21	15.27	2760.6	2790.6	0.75	0.45	0.30
2840.3	2870.3	10.71	9.80	9.48	2840.3	2870.3	11.95	15.03	14.28	2840.3	2870.3	0.77	0.41	0.28
2900.1	2930.1	11.02	10.12	9.79	2900.1	2930.1	11.22	15.33	16.35	2900.1	2930.1	0.77	0.39	0.27

Frequency Mixer

SYM-2500+

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1250.1MHz (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)=2500.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+7			+7			+7
500.0	750.1	7.86	10.0	20.1	5.13	500.0	2000.1	8.48
487.4	762.7	7.82	22.3	32.4	5.29	487.4	2012.7	8.46
474.9	775.2	7.79	34.6	44.7	5.30	474.9	2025.2	8.45
462.3	787.8	7.72	46.9	57.0	5.33	462.3	2037.8	8.43
449.7	800.4	7.63	59.2	69.3	5.32	449.7	2050.4	8.41
437.2	812.9	7.58	71.5	81.6	5.35	437.2	2062.9	8.40
424.6	825.5	7.51	83.8	93.9	5.36	424.6	2075.5	8.39
412.1	838.0	7.48	96.2	106.3	5.36	412.1	2088.0	8.38
399.5	850.6	7.43	108.5	118.6	5.35	399.5	2100.6	8.38
386.9	863.2	7.38	120.8	130.9	5.35	386.9	2113.2	8.38
374.4	875.7	7.35	133.1	143.2	5.36	374.4	2125.7	8.37
361.8	888.3	7.32	145.4	155.5	5.38	361.8	2138.3	8.35
349.2	900.9	7.32	157.7	167.8	5.39	349.2	2150.9	8.34
336.7	913.4	7.33	170.0	180.1	5.41	336.7	2163.4	8.33
324.1	926.0	7.32	182.3	192.4	5.42	324.1	2176.0	8.33
311.5	938.6	7.33	194.6	204.7	5.40	311.5	2188.6	8.33
299.0	951.1	7.33	206.9	217.0	5.40	299.0	2201.1	8.32
286.4	963.7	7.35	219.2	229.3	5.39	286.4	2213.7	8.31
273.8	976.3	7.35	231.5	241.6	5.41	273.8	2226.3	8.31
261.3	988.8	7.36	243.8	253.9	5.43	261.3	2238.8	8.30
248.7	1001.4	7.36	256.2	266.3	5.47	248.7	2251.4	8.29
236.2	1013.9	7.39	268.5	278.6	5.48	236.2	2263.9	8.29
223.6	1026.5	7.41	280.8	290.9	5.50	223.6	2276.5	8.29
211.0	1039.1	7.43	293.1	303.2	5.52	211.0	2289.1	8.31
198.5	1051.6	7.44	305.4	315.5	5.55	198.5	2301.6	8.31
185.9	1064.2	7.46	317.7	327.8	5.57	185.9	2314.2	8.32
173.3	1076.8	7.47	330.0	340.1	5.57	173.3	2326.8	8.32
160.8	1089.3	7.48	342.3	352.4	5.59	160.8	2339.3	8.32
148.2	1101.9	7.47	354.6	364.7	5.61	148.2	2351.9	8.34
135.6	1114.5	7.47	366.9	377.0	5.60	135.6	2364.5	8.33
123.1	1127.0	7.49	379.2	389.3	5.61	123.1	2377.0	8.36
110.5	1139.6	7.47	391.5	401.6	5.61	110.5	2389.6	8.34
97.9	1152.2	7.46	403.8	413.9	5.62	97.9	2402.2	8.37
85.4	1164.7	7.44	416.2	426.3	5.64	85.4	2414.7	8.38
72.8	1177.3	7.42	428.5	438.6	5.65	72.8	2427.3	8.39
60.3	1189.8	7.39	440.8	450.9	5.69	60.3	2439.8	8.38
47.7	1202.4	7.38	453.1	463.2	5.70	47.7	2452.4	8.38
35.1	1215.0	7.35	465.4	475.5	5.73	35.1	2465.0	8.40
22.6	1227.5	7.34	477.7	487.8	5.76	22.6	2477.5	8.41
10.0	1240.1	7.19	490.0	500.1	5.80	10.0	2490.1	8.26

REV. X2
SYM-2500+
100818
Page 2 of 5

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+4	+7	+10	+4	+7	+10
1.0	68.86	68.55	68.96	70.80	78.07	74.95
2.0	69.52	68.93	69.10	77.60	76.05	72.73
5.8	69.84	70.25	69.89	79.08	70.86	67.07
9.4	70.13	70.04	70.28	77.34	68.23	63.94
10.1	67.98	68.91	69.86	63.45	71.23	71.60
89.8	57.56	59.96	61.30	46.19	52.76	82.11
169.5	53.30	55.28	57.35	40.32	48.63	57.16
249.3	50.18	52.27	54.51	37.82	48.31	47.39
329.0	48.01	50.22	52.34	37.96	49.36	42.25
408.7	47.46	49.94	52.52	38.39	50.63	38.93
568.2	43.86	46.84	49.82	33.21	42.57	39.61
647.9	41.33	43.81	46.57	32.53	40.60	40.22
727.6	40.04	41.98	44.38	30.37	36.65	40.10
807.3	39.87	41.21	42.91	27.07	31.52	36.88
887.1	41.56	43.18	44.76	23.53	26.60	30.54
966.8	44.77	46.66	48.18	21.12	23.45	26.26
1046.5	50.15	52.66	54.08	19.67	21.65	23.87
1126.2	46.49	46.95	47.08	19.01	20.79	22.66
1285.7	40.32	41.02	41.63	19.05	20.57	21.99
1365.4	39.52	40.38	41.11	19.65	20.87	22.07
1445.1	38.64	39.97	41.02	20.36	21.34	22.21
1504.9	38.26	39.73	40.99	20.98	21.64	22.28
1584.7	37.83	39.56	40.76	21.67	22.00	22.23
1644.4	37.65	39.34	40.82	22.09	22.14	22.27
1784.0	37.76	39.35	40.55	22.45	22.57	22.62
1863.7	38.52	39.81	40.75	22.62	22.92	23.14
1923.5	39.34	40.66	41.20	22.84	23.41	23.68
2003.2	40.64	42.08	42.60	23.28	24.39	25.18
2063.0	42.03	43.40	44.04	23.89	25.37	26.97
2142.7	45.13	47.16	47.24	24.70	26.62	29.47
2202.5	48.94	53.38	51.87	25.29	26.92	29.77
2282.2	55.75	54.18	48.45	25.87	26.72	27.88
2342.0	52.53	48.71	44.05	26.25	26.28	26.07
2421.8	46.28	43.74	40.78	26.48	25.36	23.94
2481.5	43.40	40.99	38.41	26.55	24.45	22.27
2561.3	40.24	38.22	35.85	25.92	23.07	20.75
2700.8	35.51	34.53	32.67	22.57	20.62	18.74
2760.6	33.73	32.85	31.62	20.91	19.36	18.09
2840.3	31.71	31.23	30.45	19.18	18.37	17.63
2900.1	30.36	30.15	29.71	18.07	17.72	17.47

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+4	+7	+10
10.1	40.1	50.67	42.48	47.00
89.8	119.8	50.89	49.85	49.01
169.5	199.5	46.05	44.50	44.20
249.3	279.3	42.01	42.31	42.09
329.0	359.0	38.88	38.14	37.05
408.7	438.7	37.40	37.17	36.53
488.4	518.4	34.56	33.80	33.47
568.2	598.2	35.79	35.00	34.41
647.9	677.9	38.32	38.33	39.13
727.6	757.6	32.93	33.02	33.38
807.3	837.3	29.74	29.67	29.82
887.1	917.1	27.92	27.61	27.44
966.8	996.8	26.34	25.99	25.86
1046.5	1076.5	26.13	26.00	25.95
1126.2	1156.2	27.89	28.09	28.25
1206.0	1236.0	30.61	31.33	31.80
1285.7	1315.7	33.54	34.57	35.41
1365.4	1395.4	36.28	37.52	38.22
1445.1	1475.1	38.68	39.25	39.93
1504.9	1534.9	39.04	39.41	39.79
1584.7	1614.7	37.39	37.68	37.91
1644.4	1674.4	35.66	35.89	36.04
1724.2	1754.2	33.64	33.91	34.15
1784.0	1814.0	32.54	32.87	33.08
1863.7	1893.7	31.36	31.49	31.50
1923.5	1953.5	30.59	30.50	30.31
2003.2	2033.2	29.49	29.03	28.49
2063.0	2093.0	28.69	27.83	27.14
2142.7	2172.7	27.56	26.32	25.44
2202.5	2232.5	26.81	25.45	24.58
2282.2	2312.2	25.81	24.67	24.02
2342.0	2372.0	25.13	24.32	23.84
2421.8	2451.8	24.63	24.09	23.87
2481.5	2511.5	24.46	24.20	24.06
2561.3	2591.3	24.32	24.39	24.46
2621.1	2651.1	24.40	24.57	24.70
2700.8	2730.8	24.44	24.70	25.01
2760.6	2790.6	24.37	24.66	24.95
2840.3	2870.3	24.02	24.21	24.40
2900.1	2930.1	23.67	23.75	23.90

Frequency Mixer

SYM-2500+

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=2500.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+4	+7	+10		+4	+7	+10		+4	+7	+10
1.0	31.0	1.47	1.24	1.21	1.0	2.13	2.88	3.96	1.0	1.95	1.44	1.18
2.0	32.0	1.47	1.18	1.12	2.0	1.94	2.74	3.84	3.3	1.95	1.44	1.19
5.8	35.8	1.49	1.17	1.04	5.8	1.82	2.63	3.69	5.5	1.96	1.44	1.18
9.4	39.4	1.50	1.17	1.02	9.4	1.71	2.50	3.55	7.8	1.96	1.44	1.18
10.1	40.1	1.25	1.15	1.08	10.1	1.93	2.60	3.67	10.0	1.96	1.44	1.18
89.8	119.8	1.36	1.26	1.18	89.8	1.87	2.59	3.54	22.7	2.23	1.63	1.25
169.5	199.5	1.49	1.39	1.32	169.5	1.89	2.53	3.36	35.2	2.22	1.53	1.21
249.3	279.3	1.65	1.56	1.51	249.3	1.90	2.44	3.17	47.8	2.15	1.51	1.14
329.0	359.0	1.80	1.72	1.68	329.0	1.88	2.32	2.93	60.4	2.10	1.43	1.14
408.7	438.7	1.77	1.70	1.66	408.7	1.86	2.15	2.63	72.9	2.13	1.49	1.12
488.4	518.4	1.81	1.70	1.62	488.4	1.89	2.01	2.37	85.5	2.09	1.47	1.14
568.2	598.2	2.52	2.33	2.20	568.2	1.90	1.88	2.13	98.0	2.05	1.44	1.14
647.9	677.9	3.27	3.03	2.86	647.9	1.86	1.75	1.91	110.6	2.08	1.48	1.13
727.6	757.6	3.33	3.17	3.04	727.6	1.75	1.58	1.71	123.2	2.08	1.44	1.15
807.3	837.3	3.09	2.99	2.89	807.3	1.59	1.40	1.53	135.7	2.05	1.43	1.12
887.1	917.1	2.85	2.73	2.67	887.1	1.46	1.24	1.41	148.3	2.04	1.42	1.11
966.8	996.8	2.62	2.49	2.42	966.8	1.36	1.14	1.37	160.9	2.01	1.42	1.11
1046.5	1076.5	2.46	2.31	2.21	1046.5	1.27	1.12	1.39	173.4	1.98	1.40	1.11
1126.2	1156.2	2.43	2.30	2.17	1126.2	1.19	1.16	1.45	186.0	1.96	1.37	1.11
1206.0	1236.0	2.50	2.36	2.25	1206.0	1.14	1.23	1.53	198.6	1.93	1.39	1.11
1285.7	1315.7	2.52	2.36	2.26	1285.7	1.16	1.32	1.60	211.1	1.91	1.37	1.11
1365.4	1395.4	2.49	2.33	2.22	1365.4	1.23	1.39	1.65	223.7	1.89	1.34	1.09
1445.1	1475.1	2.41	2.26	2.14	1445.1	1.32	1.45	1.68	236.3	1.87	1.33	1.10
1504.9	1534.9	2.31	2.20	2.08	1504.9	1.38	1.49	1.70	248.8	1.83	1.31	1.10
1584.7	1614.7	2.22	2.09	2.00	1584.7	1.46	1.53	1.71	261.4	1.80	1.28	1.10
1644.4	1674.4	2.15	2.03	1.93	1644.4	1.51	1.54	1.69	273.9	1.76	1.28	1.12
1724.2	1754.2	2.05	1.93	1.85	1724.2	1.57	1.55	1.67	286.5	1.75	1.26	1.13
1784.0	1814.0	1.97	1.85	1.77	1784.0	1.61	1.56	1.66	299.1	1.73	1.26	1.15
1863.7	1893.7	1.89	1.76	1.67	1863.7	1.67	1.58	1.65	311.6	1.71	1.25	1.15
1923.5	1953.5	1.83	1.69	1.60	1923.5	1.73	1.61	1.65	324.2	1.69	1.24	1.17
2003.2	2033.2	1.76	1.61	1.52	2003.2	1.79	1.64	1.64	336.8	1.67	1.23	1.17
2063.0	2093.0	1.71	1.56	1.46	2063.0	1.84	1.67	1.64	349.3	1.63	1.22	1.19
2142.7	2172.7	1.65	1.50	1.40	2142.7	1.89	1.69	1.64	361.9	1.61	1.21	1.21
2202.5	2232.5	1.63	1.46	1.37	2202.5	1.92	1.71	1.62	374.5	1.60	1.21	1.23
2282.2	2312.2	1.59	1.42	1.34	2282.2	1.95	1.73	1.61	387.0	1.58	1.21	1.24
2342.0	2372.0	1.55	1.39	1.33	2342.0	1.97	1.74	1.60	399.6	1.57	1.21	1.26
2421.8	2451.8	1.48	1.36	1.31	2421.8	1.99	1.75	1.58	412.2	1.56	1.21	1.27
2481.5	2511.5	1.46	1.35	1.32	2481.5	2.00	1.75	1.56	424.7	1.54	1.21	1.28
2561.3	2591.3	1.43	1.37	1.36	2561.3	2.00	1.74	1.54	437.3	1.53	1.22	1.30
2621.1	2651.1	1.41	1.38	1.40	2621.1	1.99	1.72	1.50	449.8	1.51	1.24	1.32
2700.8	2730.8	1.42	1.41	1.45	2700.8	1.96	1.69	1.47	462.4	1.50	1.24	1.34
2760.6	2790.6	1.44	1.45	1.49	2760.6	1.91	1.65	1.44	475.0	1.50	1.25	1.35
2840.3	2870.3	1.52	1.55	1.58	2840.3	1.82	1.60	1.42	487.5	1.49	1.26	1.36
2900.1	2930.1	1.60	1.63	1.67	2900.1	1.75	1.56	1.42	500.1	1.48	1.27	1.38

REV. X2
SYM-2500+
100818
Page 4 of 5



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED • RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0006 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, instantly • For detailed performance specs & shopping online see



Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	+8	33	17	53	13	42	22	63	51	69
1	-	25	+0	54	21	54	41	40	45	58	56	60
2	98	60	66	67	58	64	63	>79	52	73	55	76
3	>100	>79	68	>79	76	>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: 1250.1 MHz; -14.00 dBm.
LO IN: 1280.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -21.43 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	2	44	28	66	24	55	36	67	69	72
1	-	26	+0	66	20	55	41	43	46	58	59	68
2	79	50	56	54	49	56	54	69	45	66	48	71
3	>100	67	48	60	49	68	69	77	70	61	63	78
4	>100	>88	88	83	73	79	75	74	78	83	64	77
5	>100	>88	>88	86	76	78	66	>88	77	88	85	85
6	>100	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
7	>100	>88	>88	>88	>88	>88	>88	>88	87	>88	>88	>88
8	>100	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
9	>100	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
10	>100	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88	>88
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 1250.1 MHz; -4.00 dBm.
LO IN: 1280.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -11.68 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.

REV. X2
SYM-2500+
100818
Page 5 of 5



Mini-Circuits®

IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED • RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

The Design Engineers Search Engine finds the model you need, instantly • For detailed performance specs & shopping online see

