

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						
10.1	40.1	4.68	4.51	4.52	10.1	40.1	21.66	14.46	12.86	10.1	40.1	1.87	1.47	1.45
14.1	44.1	4.97	4.90	4.73	14.1	44.1	21.51	15.67	14.68	14.1	44.1	1.62	1.40	1.32
18.1	48.1	5.22	4.98	4.98	18.1	48.1	12.57	11.09	10.77	18.1	48.1	1.33	1.22	1.01
22.1	52.1	5.36	5.07	4.95	22.1	52.1	11.80	10.87	11.29	22.1	52.1	1.32	1.26	1.01
26.1	56.1	5.53	5.23	4.92	26.1	56.1	13.08	11.64	11.90	26.1	56.1	1.20	1.02	0.95
30.1	60.1	5.73	5.37	5.03	30.1	60.1	9.14	10.18	11.24	30.1	60.1	0.91	0.95	0.79
34.1	64.1	5.82	5.55	5.30	34.1	64.1	8.06	7.69	7.94	34.1	64.1	1.00	0.75	0.74
38.1	68.1	5.71	5.47	5.40	38.1	68.1	9.46	9.26	9.14	38.1	68.1	1.14	0.85	0.79
42.1	72.1	5.62	5.49	5.29	42.1	72.1	11.36	11.03	11.67	42.1	72.1	1.30	1.04	0.75
46.1	76.1	5.64	5.45	5.42	46.1	76.1	11.27	10.93	10.69	46.1	76.1	1.38	1.03	0.87
50.1	80.1	5.73	5.55	5.54	50.1	80.1	10.44	9.66	10.27	50.1	80.1	1.46	1.20	0.94
54.1	84.1	5.84	5.68	5.72	54.1	84.1	10.52	11.29	11.05	54.1	84.1	1.87	1.13	0.96
58.1	88.1	5.98	5.76	5.79	58.1	88.1	9.24	9.39	10.44	58.1	88.1	1.98	1.43	1.02
62.1	92.1	6.06	5.91	5.80	62.1	92.1	8.55	9.66	10.63	62.1	92.1	2.03	1.65	1.30
66.1	96.1	6.10	5.91	5.73	66.1	96.1	4.56	8.63	10.16	66.1	96.1	2.51	2.02	1.54
70.1	100.1	6.11	5.88	5.61	70.1	100.1	2.69	5.15	9.56	70.1	100.1	2.88	2.31	1.89
74.1	104.1	6.07	5.93	5.56	74.1	104.1	1.44	3.01	6.11	74.1	104.1	3.07	2.51	2.34
78.1	108.1	6.12	5.92	5.60	78.1	108.1	1.29	2.94	6.02	78.1	108.1	3.04	2.78	2.47
82.1	112.1	6.20	5.93	5.62	82.1	112.1	2.65	3.56	4.08	82.1	112.1	3.18	2.85	2.64
86.1	116.1	6.22	5.96	5.73	86.1	116.1	2.38	3.07	4.25	86.1	116.1	3.11	2.80	2.67
90.1	120.1	6.29	6.03	5.79	90.1	120.1	2.27	2.54	4.78	90.1	120.1	3.18	2.77	2.66
94.1	124.1	6.39	6.10	5.89	94.1	124.1	3.05	3.19	5.83	94.1	124.1	3.12	2.73	2.55
98.1	128.1	6.37	6.22	5.99	98.1	128.1	3.88	4.68	7.38	98.1	128.1	3.06	2.58	2.40
102.1	132.1	6.36	6.19	6.05	102.1	132.1	4.71	7.30	9.92	102.1	132.1	2.98	2.71	2.28
106.1	136.1	6.35	6.20	6.07	106.1	136.1	5.59	8.41	12.20	106.1	136.1	3.04	2.53	2.35
110.1	140.1	6.39	6.27	6.14	110.1	140.1	5.95	9.28	12.05	110.1	140.1	3.05	2.52	2.19
114.1	144.1	6.49	6.40	6.33	114.1	144.1	6.62	10.01	12.27	114.1	144.1	3.07	2.36	2.05
118.1	148.1	6.57	6.56	6.62	118.1	148.1	7.37	10.13	11.94	118.1	148.1	3.02	2.32	1.90
122.1	152.1	6.75	6.75	6.88	122.1	152.1	7.66	10.09	12.40	122.1	152.1	3.01	2.23	1.71
125.1	155.1	6.90	6.96	7.10	125.1	155.1	7.42	10.54	12.41	125.1	155.1	2.89	2.17	1.58
129.1	159.1	7.28	7.38	7.55	129.1	159.1	8.60	11.24	12.69	129.1	159.1	2.82	2.00	1.46
132.1	162.1	7.70	7.83	8.01	132.1	162.1	9.17	11.24	12.75	132.1	162.1	2.63	1.84	1.22
136.1	166.1	8.31	8.53	8.74	136.1	166.1	9.42	9.45	10.10	136.1	166.1	2.30	1.41	1.02
139.1	169.1	8.79	9.05	9.28	139.1	169.1	8.86	7.68	8.71	139.1	169.1	2.14	1.11	0.78
143.1	173.1	9.37	9.71	9.92	143.1	173.1	8.10	7.09	7.52	143.1	173.1	1.86	0.87	0.64
146.1	176.1	9.75	10.14	10.36	146.1	176.1	8.70	6.29	6.84	146.1	176.1	1.85	0.85	0.62
150.1	180.1	10.22	10.66	10.92	150.1	180.1	9.55	7.35	7.06	150.1	180.1	1.88	0.79	0.61
153.1	183.1	10.60	11.02	11.32	153.1	183.1	8.91	7.69	7.71	153.1	183.1	1.93	0.89	0.57
157.1	187.1	11.20	11.55	11.83	157.1	187.1	9.05	8.27	8.62	157.1	187.1	1.96	0.94	0.64
160.1	190.1	11.72	12.00	12.21	160.1	190.1	10.52	9.58	8.40	160.1	190.1	1.91	0.95	0.72

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=60.1MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10MHz (dB)	IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=110.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+7			+7			+7
50.1	10.0	5.42	10.1	20.1	4.54	100.1	10.0	7.82
49.1	11.0	5.39	14.5	24.5	4.63	97.8	12.3	7.64
48.0	12.1	5.33	18.8	28.8	4.24	95.5	14.6	7.64
47.0	13.1	5.33	23.2	33.2	4.35	93.2	16.9	7.67
46.0	14.1	5.23	27.5	37.5	4.37	90.9	19.2	7.39
45.0	15.1	5.21	31.9	41.9	4.69	88.6	21.5	7.48
43.9	16.2	5.40	36.3	46.3	4.76	86.3	23.8	7.37
42.9	17.2	5.39	40.6	50.6	4.51	83.9	26.2	7.25
41.9	18.2	5.47	45.0	55.0	4.45	81.6	28.5	7.37
40.9	19.2	5.44	49.3	59.3	4.32	79.3	30.8	7.34
39.8	20.3	5.46	53.7	63.7	4.98	77.0	33.1	7.19
38.8	21.3	5.55	58.0	68.0	4.88	74.7	35.4	7.23
37.8	22.3	5.41	62.4	72.4	5.14	72.4	37.7	7.12
36.8	23.3	5.43	66.8	76.8	4.91	70.1	40.0	7.02
35.7	24.4	5.44	71.1	81.1	5.06	67.8	42.3	7.15
34.7	25.4	5.51	75.5	85.5	4.80	65.5	44.6	7.10
33.7	26.4	5.49	79.8	89.8	4.67	63.2	46.9	7.35
32.7	27.4	5.41	84.2	94.2	4.83	60.9	49.2	7.05
31.6	28.5	5.40	88.6	98.6	5.44	58.6	51.5	6.92
30.6	29.5	5.18	92.9	102.9	5.14	56.3	53.8	6.81
29.6	30.5	5.15	97.3	107.3	5.04	53.9	56.2	6.91
28.6	31.5	5.35	101.6	111.6	5.09	51.6	58.5	7.05
27.5	32.6	5.26	106.0	116.0	4.76	49.3	60.8	6.97
26.5	33.6	5.41	110.4	120.4	4.69	47.0	63.1	7.01
25.5	34.6	5.51	114.7	124.7	5.13	44.7	65.4	6.78
24.5	35.6	5.47	119.1	129.1	5.24	42.4	67.7	6.72
23.4	36.7	5.45	123.4	133.4	5.09	40.1	70.0	6.55
22.4	37.7	5.42	127.8	137.8	5.19	37.8	72.3	6.55
21.4	38.7	5.52	132.2	142.2	5.51	35.5	74.6	6.66
20.4	39.7	5.54	136.5	146.5	5.97	33.2	76.9	6.66
19.3	40.8	5.63	140.9	150.9	6.18	30.9	79.2	6.53
18.3	41.8	5.32	145.2	155.2	6.57	28.6	81.5	6.32
17.3	42.8	5.33	149.6	159.6	7.11	26.3	83.8	6.30
16.3	43.8	5.62	153.9	163.9	7.65	23.9	86.2	6.08
15.2	44.9	5.46	158.3	168.3	8.78	21.6	88.5	6.22
14.2	45.9	5.88	162.7	172.7	9.50	19.3	90.8	6.47
13.2	46.9	5.56	167.0	177.0	10.39	17.0	93.1	6.43
12.2	47.9	5.65	171.4	181.4	11.52	14.7	95.4	6.82
11.1	49.0	5.60	175.7	185.7	12.01	12.4	97.7	7.04
10.1	50.0	5.83	180.1	190.1	13.91	10.1	100.0	7.29

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+4	+7	+10	+4	+7	+10
40.1	55.23	56.06	56.36	41.58	43.67	45.65
44.1	60.46	59.68	59.60	40.27	41.78	43.49
48.1	58.88	61.34	60.49	39.10	40.51	41.97
52.1	55.15	56.94	58.10	38.59	40.10	41.52
56.1	51.99	53.53	54.65	39.51	40.94	42.47
60.1	49.78	50.93	52.41	39.56	41.20	42.67
64.1	47.17	48.56	49.88	38.47	39.85	40.95
68.1	45.37	46.68	47.87	37.64	38.84	39.57
72.1	45.30	46.24	47.13	36.76	37.62	37.73
76.1	45.20	45.48	45.72	35.34	35.68	35.19
80.1	43.62	43.43	43.39	33.91	33.62	32.96
84.1	42.95	42.48	42.18	33.55	32.75	31.98
88.1	42.01	41.39	40.99	33.06	31.92	30.78
92.1	41.90	41.29	40.91	32.61	31.34	29.76
96.1	41.24	40.83	40.69	32.05	30.93	29.02
100.1	40.54	40.42	40.30	31.55	30.98	28.61
104.1	40.05	40.13	40.06	31.10	30.63	28.72
108.1	39.76	39.45	39.17	30.64	30.05	28.46
112.1	38.99	38.27	37.25	30.18	28.91	27.10
116.1	38.34	36.90	35.26	29.67	27.71	25.23
120.1	37.50	35.22	33.31	28.88	26.17	23.26
124.1	37.16	34.21	31.57	28.33	24.63	21.57
128.1	36.25	32.66	30.03	27.05	23.09	20.19
132.1	35.16	31.12	28.36	26.05	21.85	19.03
136.1	33.21	29.40	26.90	24.62	20.64	18.10
140.1	31.89	28.00	25.66	23.45	19.73	17.38
144.1	30.24	26.76	24.49	22.42	19.12	16.86
148.1	28.76	25.49	23.40	21.24	18.30	16.18
152.1	27.46	24.37	22.44	20.39	17.67	15.68
155.1	26.35	23.63	21.75	19.69	17.21	15.35
159.1	25.20	22.93	21.21	18.75	16.74	14.95
162.1	24.28	22.26	20.76	17.99	16.32	14.76
166.1	23.20	21.61	20.19	17.44	15.97	14.47
169.1	22.47	21.20	19.64	16.93	15.69	14.11
173.1	21.53	20.30	19.14	16.48	15.12	13.88
176.1	21.06	19.90	18.68	16.23	14.87	13.59
180.1	20.43	19.19	18.08	15.92	14.52	13.25
183.1	20.06	18.68	17.60	15.69	14.21	12.98
187.1	19.28	18.08	16.84	15.29	14.05	12.56
190.1	18.67	17.51	16.25	15.13	13.68	12.33

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+4	+7	+10
10.1	40.1	26.91	25.86	26.43
14.1	44.1	24.63	24.38	24.33
18.1	48.1	24.31	25.21	24.84
22.1	52.1	24.51	24.40	24.48
26.1	56.1	22.68	23.07	23.67
30.1	60.1	22.07	22.11	23.00
34.1	64.1	22.86	23.02	23.08
38.1	68.1	24.36	24.92	25.37
42.1	72.1	24.66	25.37	26.17
46.1	76.1	25.46	26.60	27.89
50.1	80.1	28.65	29.65	33.45
54.1	84.1	26.29	26.28	27.84
58.1	88.1	22.52	23.14	21.75
62.1	92.1	19.31	21.59	21.72
66.1	96.1	19.20	20.02	20.71
70.1	100.1	17.85	19.13	19.20
74.1	104.1	16.30	16.70	17.41
78.1	108.1	16.19	16.33	18.31
82.1	112.1	15.02	17.25	17.55
86.1	116.1	14.88	16.20	17.87
90.1	120.1	15.17	16.56	16.11
94.1	124.1	15.81	15.93	16.66
98.1	128.1	15.68	15.66	16.55
102.1	132.1	15.21	15.86	16.01
106.1	136.1	14.51	15.06	14.84
110.1	140.1	14.71	14.95	15.03
114.1	144.1	14.35	14.67	14.14
118.1	148.1	14.89	13.65	13.22
122.1	152.1	13.21	12.93	12.42
125.1	155.1	12.37	12.20	11.42
129.1	159.1	11.56	10.96	10.47
132.1	162.1	10.03	9.45	9.14
136.1	166.1	9.77	8.41	8.35
139.1	169.1	8.63	8.87	8.13
143.1	173.1	7.76	8.02	7.40
146.1	176.1	7.49	7.38	6.99
150.1	180.1	7.13	6.48	6.53
153.1	183.1	6.82	6.32	6.54
157.1	187.1	6.78	6.50	6.11
160.1	190.1	6.63	6.01	6.04

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=100MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+4	+7	+10		+4	+7	+10		+4	+7	+10
10.1	40.1	1.34	1.35	1.22	40.1	2.31	3.93	6.94	10.1	2.30	1.99	1.70
14.1	44.1	1.41	1.29	1.17	44.1	2.26	3.73	6.17	12.1	2.40	2.07	1.77
18.1	48.1	1.34	1.26	1.21	48.1	2.23	3.57	5.70	14.1	2.45	2.12	1.81
22.1	52.1	1.34	1.24	1.19	52.1	2.20	3.39	5.16	16.1	2.50	2.15	1.85
26.1	56.1	1.30	1.20	1.15	56.1	2.15	3.20	4.66	18.1	2.52	2.17	1.87
30.1	60.1	1.29	1.24	1.14	60.1	2.15	3.13	4.45	20.1	2.48	2.16	1.87
34.1	64.1	1.29	1.21	1.14	64.1	2.11	3.03	4.23	22.1	2.48	2.15	1.87
38.1	68.1	1.24	1.17	1.14	68.1	2.10	2.97	4.09	24.1	2.44	2.13	1.85
42.1	72.1	1.19	1.14	1.13	72.1	2.08	2.92	3.95	26.1	2.39	2.09	1.83
46.1	76.1	1.17	1.17	1.19	76.1	2.10	2.89	3.86	28.1	2.34	2.05	1.79
50.1	80.1	1.21	1.23	1.26	80.1	2.13	2.90	3.85	30.1	2.30	2.01	1.77
54.1	84.1	1.25	1.28	1.33	84.1	2.16	2.90	3.79	32.1	2.26	1.99	1.75
58.1	88.1	1.29	1.31	1.36	88.1	2.25	2.99	3.88	34.1	2.25	1.97	1.74
62.1	92.1	1.36	1.37	1.39	92.1	2.33	3.07	3.94	36.1	2.23	1.97	1.73
66.1	96.1	1.42	1.41	1.44	96.1	2.40	3.16	4.01	38.1	2.25	1.99	1.76
70.1	100.1	1.49	1.46	1.44	100.1	2.43	3.20	4.06	40.1	2.29	2.02	1.80
74.1	104.1	1.52	1.47	1.43	104.1	2.47	3.25	4.10	42.1	2.32	2.07	1.84
78.1	108.1	1.53	1.46	1.40	108.1	2.51	3.29	4.15	44.1	2.38	2.12	1.90
82.1	112.1	1.50	1.44	1.37	112.1	2.54	3.32	4.16	46.1	2.42	2.16	1.95
86.1	116.1	1.46	1.38	1.31	116.1	2.57	3.34	4.17	48.1	2.44	2.21	2.00
90.1	120.1	1.42	1.33	1.26	120.1	2.60	3.35	4.16	50.1	2.47	2.23	2.03
94.1	124.1	1.35	1.25	1.18	124.1	2.61	3.33	4.10	52.1	2.47	2.25	2.06
98.1	128.1	1.27	1.16	1.09	128.1	2.62	3.32	4.05	54.1	2.46	2.25	2.07
102.1	132.1	1.19	1.11	1.06	132.1	2.64	3.30	4.01	56.1	2.44	2.23	2.07
106.1	136.1	1.17	1.13	1.12	136.1	2.65	3.29	3.95	58.1	2.39	2.19	2.04
110.1	140.1	1.22	1.21	1.22	140.1	2.66	3.26	3.90	60.1	2.32	2.14	2.00
114.1	144.1	1.32	1.33	1.34	144.1	2.68	3.25	3.85	62.1	2.26	2.08	1.94
118.1	148.1	1.41	1.44	1.47	148.1	2.69	3.22	3.79	64.1	2.20	2.02	1.89
122.1	152.1	1.49	1.53	1.58	152.1	2.72	3.21	3.75	66.1	2.13	1.96	1.83
125.1	155.1	1.54	1.59	1.63	155.1	2.74	3.20	3.70	68.1	2.10	1.93	1.79
129.1	159.1	1.63	1.68	1.73	159.1	2.76	3.19	3.65	70.1	2.08	1.89	1.75
132.1	162.1	1.71	1.76	1.81	162.1	2.78	3.18	3.61	72.1	2.08	1.88	1.74
136.1	166.1	1.80	1.85	1.89	166.1	2.79	3.15	3.54	74.1	2.09	1.88	1.73
139.1	169.1	1.84	1.90	1.94	169.1	2.78	3.13	3.47	76.1	2.11	1.91	1.75
143.1	173.1	1.88	1.93	1.99	173.1	2.77	3.07	3.39	78.1	2.15	1.95	1.78
146.1	176.1	1.90	1.94	1.99	176.1	2.75	3.02	3.30	80.1	2.24	2.01	1.84
150.1	180.1	1.93	1.95	1.98	180.1	2.71	2.97	3.22	82.1	2.25	2.02	1.85
153.1	183.1	1.95	1.95	1.97	183.1	2.70	2.93	3.18	85.1	2.29	2.05	1.87
157.1	187.1	1.97	1.96	1.96	187.1	2.68	2.92	3.14	87.1	2.29	2.06	1.88
160.1	190.1	1.99	1.95	1.95	190.1	2.67	2.89	3.13	90.1	2.26	2.03	1.86

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	7	22	18	35	24	35	27	53	27	40
1	-	19	+0	35	15	47	30	45	37	39	29	39
2	>90	55	44	57	44	58	56	70	56	>71	50	67
3	>90	64	53	63	54	>71	66	>71	>71	68	59	65
4	>90	>71	>71	>71	>71	>71	>71	>71	>71	>71	>71	>71
5	>90	65	>71	54	64	52	64	64	>71	63	>71	59
6	>90	56	58	45	57	44	55	44	63	61	60	65
7	>90	30	47	15	35	+0	19	1	28	23	32	50
8	>90	24	35	18	22	7	+19	7	22	18	35	24
9	>90	51	32	23	28	+0	19	+0	35	14	47	30
10	>90	64	61	61	63	44	55	44	57	45	58	57
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

Test conditions:

RF IN: 50 MHz; -14.00 dBm.

LO IN: 80 MHz; +7.00 dBm

IF OUT: 30 MHz; -19.41 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	16	32	30	46	35	46	43	67	47	61
1	-	20	+0	44	16	47	31	67	40	40	35	47
2	73	48	40	49	42	50	52	62	51	58	47	56
3	>90	41	32	47	34	46	46	55	56	58	46	45
4	>90	58	54	57	58	54	58	64	63	74	66	67
5	>90	46	46	33	46	31	41	49	54	51	52	43
6	>90	53	50	42	49	40	48	37	60	58	60	53
7	>90	31	47	16	44	+0	20	1	29	23	35	41
8	>90	35	46	30	32	16	+10	16	32	30	46	35
9	>90	41	35	23	29	1	20	+0	44	16	47	31
10	>90	53	60	58	60	37	49	40	49	42	50	52
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions:

RF IN: 50 MHz; -4.00 dBm.

LO IN: 80 MHz; +7.00 dBm

IF OUT: 30 MHz; -9.51 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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SRA-6+

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