Frequency Mixer HJK-ED9346A/1

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=73.6MHz (dB) @LO (dBm)		
		+14	+17	+20
150.0	223.6	12.09	10.23	8.80
160.0	233.6	11.92	10.09	8.75
170.0	243.6	11.81	10.00	8.73
180.0	253.6	11.70	9.88	8.62
190.0	263.6	11.34	9.59	8.31
200.0	273.6	10.84	9.17	8.01
210.0	283.6	10.41	8.83	7.76
250.0	323.6	9.69	8.33	7.47
300.0	373.6	9.07	7.81	7.10
350.0	423.6	8.08	7.21	6.75
400.0	473.6	7.65	6.97	6.61
450.0	523.6	7.20	6.72	6.49
500.0	573.6	7.73	7.48	7.42
550.0	623.6	7.21	7.09	7.12
600.0	673.6	6.97	6.92	6.97
650.0	723.6	6.85	6.83	6.90
700.0	773.6	6.80	6.80	6.92
750.0	823.6	6.86	6.84	6.91
800.0	873.6	6.97	6.94	6.98
824.0	897.6	6.98	6.90	6.92
830.0	903.6	6.95	6.86	6.88
840.0	913.6	7.00	6.88	6.90
849.0	922.6	7.04	6.94	6.96
900.0	973.6	7.21	7.03	7.02
1000.0	1073.6	7.73	7.41	7.36
1100.0	1173.6	8.03	7.57	7.48
1200.0	1273.6	8.23	7.74	7.63
1400.0	1473.6	8.85	8.27	8.15
1600.0	1673.6	9.03	8.50	8.39
1800.0	1873.6	9.11	8.64	8.57
2000.0	2073.6	9.39	8.88	8.78
2200.0	2273.6	9.63	9.09	8.97
2400.0	2473.6	9.65	9.16	9.03
2600.0	2673.6	9.37	9.03	8.97
2800.0	2873.6	9.41	9.25	9.23
3000.0	3073.6	9.52	9.42	9.41
3050.0	3123.6	9.58	9.49	9.49
3100.0	3173.6	9.71	9.58	9.57
3150.0	3223.6	9.79	9.69	9.68
3200.0	3273.6	9.93	9.82	9.83
3250.0	3323.6	10.07	9.95	9.95

RF (IN) (MHz)	LO (MHz)	IP-3 INPUT (dBm) @LO (dBm)		
		+14	+17	+20
150.0	223.6	11.77		
160.0	233.6	12.01		
170.0	243.6	12.37		
180.0	253.6	12.84		
190.0	263.6	13.35		
200.0	273.6	14.09		
210.0	283.6	14.86		
250.0	323.6	17.23		
300.0	373.6	20.82		
350.0	423.6	20.86		
400.0	473.6	20.27		
450.0	523.6	18.25		
500.0	573.6	18.74		
550.0	623.6	24.51		
600.0	673.6	27.24		
650.0	723.6	30.09		
700.0	773.6	31.15		
750.0	823.6	30.26		
800.0	873.6	30.60		
824.0	897.6	29.54		
830.0	903.6	30.72		
840.0	913.6	30.21		
849.0	922.6	30.60		
900.0	973.6	28.55		
1000.0	1073.6	27.68		
1100.0	1173.6	23.27		
1200.0	1273.6	22.79		
1400.0	1473.6	23.70		
1600.0	1673.6	23.87		
1800.0	1873.6	25.10		
2000.0	2073.6	23.76		
2200.0	2273.6	23.84		
2400.0	2473.6	25.94		
2600.0	2673.6	27.82		
2800.0	2873.6	29.20		
3000.0	3073.6	29.44		
3050.0	3123.6	29.41		
3100.0	3173.6	29.29		
3150.0	3223.6	28.70		
3200.0	3273.6	28.66		
3250.0	3323.6	27.15		

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+16dBm (dB) @LO (dBm)		
		+14	+17	+20
150.0	223.6	2.61	2.31	1.91
160.0	233.6	2.76	2.42	1.98
170.0	243.6	2.76	2.38	1.91
180.0	253.6	2.67	2.28	1.80
190.0	263.6	2.62	2.25	1.79
200.0	273.6	2.67	2.29	1.73
210.0	283.6	2.66	2.24	1.62
250.0	323.6	2.64	2.02	1.37
300.0	373.6	2.30	1.70	0.98
350.0	423.6	2.13	1.30	0.62
400.0	473.6	2.02	1.02	0.40
450.0	523.6	1.41	0.70	0.30
500.0	573.6	0.89	0.51	0.38
550.0	623.6	0.99	0.55	0.20
600.0	673.6	0.67	0.29	0.07
650.0	723.6	0.39	0.17	0.03
700.0	773.6	0.23	0.08	0.00
750.0	823.6	0.25	0.11	0.03
800.0	873.6	0.30	0.12	0.03
824.0	897.6	0.38	0.16	0.04
830.0	903.6	0.38	0.16	0.04
840.0	913.6	0.34	0.17	0.05
849.0	922.6	0.33	0.14	0.04
900.0	973.6	0.51	0.25	0.12
1000.0	1073.6	0.95	0.55	0.28
1100.0	1173.6	1.39	0.88	0.46
1200.0	1273.6	1.30	0.87	0.47
1400.0	1473.6	1.47	1.01	0.60
1600.0	1673.6	1.28	0.93	0.59
1800.0	1873.6	1.18	0.86	0.53
2000.0	2073.6	1.05	0.88	0.55
2200.0	2273.6	0.90	0.76	0.48
2400.0	2473.6	0.92	0.68	0.43
2600.0	2673.6	0.93	0.58	0.34
2800.0	2873.6	0.80	0.38	0.20
3000.0	3073.6	0.56	0.21	0.09
3050.0	3123.6	0.53	0.21	0.09
3100.0	3173.6	0.48	0.21	0.09
3150.0	3223.6	0.46	0.18	0.09
3200.0	3273.6	0.41	0.16	0.05
3250.0	3323.6	0.40	0.17	0.06

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB) @LO (dBm)			LO-IF ISOLATION (dB) @LO (dBm)		
	+14	+17	+20	+14	+17	+20
223.6	64.74	60.98	58.70	57.34	55.99	54.81
233.6	64.40	60.81	58.61	57.17	55.91	54.73
243.6	63.97	60.34	58.29	57.43	55.75	54.67
253.6	62.96	59.56	57.76	57.06	55.25	54.11
263.6	61.75	58.67	56.97	56.41	54.62	53.58
273.6	60.49	57.74	56.18	55.62	53.93	53.06
283.6	59.20	56.72	55.27	55.18	53.25	52.57
323.6	57.28	55.26	54.02	54.27	52.68	52.11
373.6	54.66	53.09	52.09	55.14	53.64	52.87
423.6	52.85	51.90	51.23	56.07	54.92	53.15
473.6	51.84	50.88	50.02	58.69	55.01	52.02
523.6	46.43	44.57	43.35	51.15	47.10	44.17
573.6	42.39	41.93	41.75	45.84	45.72	45.28
623.6	40.16	40.07	40.00	39.52	40.01	40.44
673.6	38.09	37.97	37.97	35.24	35.83	36.30
723.6	36.09	36.01	36.12	31.69	32.33	32.79
773.6	35.13	35.04	35.11	28.63	29.31	29.78
823.6	39.60	39.69	39.48	28.59	29.09	29.75
873.6	42.74	42.49	41.62	29.94	30.66	31.61
897.6	41.20	41.09	40.60	30.41	31.28	32.18
903.6	40.70	40.59	40.16	30.38	31.29	32.18
913.6	40.01	39.89	39.46	30.21	31.16	32.10
922.6	39.07	38.93	38.55	29.93	30.95	31.86
973.6	37.32	37.44	37.19	30.00	30.88	31.64
1073.6	35.65	35.96	35.94	28.69	29.16	29.48
1173.6	36.43	37.29	37.86	27.63	28.36	29.02
1273.6	36.41	37.64	38.44	27.55	28.23	28.84
1473.6	38.84	41.16	42.97	29.30	29.86	30.46
1673.6	42.94	41.28	40.23	30.31	30.52	30.51
1873.6	38.80	39.06	39.11	29.79	30.01	30.02
2073.6	38.57	40.09	40.76	31.55	31.32	31.06
2273.6	41.80	42.02	41.12	34.26	32.31	31.17
2473.6	37.07	35.00	33.91	32.26	30.01	28.74
2673.6	34.37	33.93	33.67	33.64	32.03	31.03
2873.6	35.07	35.29	35.46	46.44	41.42	39.27
3073.6	38.71	40.25	41.25	34.59	35.87	37.25
3123.6	40.05	42.66	44.39	31.91	32.97	34.04
3173.6	40.68	43.96	45.94	29.88	30.88	31.88
3223.6	40.23	42.36	43.10	28.47	29.43	30.36
3273.6	38.47	39.35	39.46	27.36	28.25	29.18
3323.6	36.55	36.91	36.81	26.66	27.58	28.42

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB) @LO (dBm)		
		+14	+17	+20
150.0	223.6	36.87	33.81	31.82
160.0	233.6	36.90	33.88	31.93
170.0	243.6	36.89	33.95	32.47
180.0	253.6	36.99	34.43	33.85
190.0	263.6	36.68	34.56	35.02
200.0	273.6	36.48	34.52	35.16
210.0	283.6	35.89	34.31	34.42
250.0	323.6	35.73	34.73	34.28
300.0	373.6	35.77	34.19	32.33
350.0	423.6	36.68	36.48	39.09
400.0	473.6	37.19	36.02	36.24
450.0	523.6	36.60	37.46	39.25
500.0	573.6	36.95	38.51	37.86
550.0	623.6	35.28	36.59	41.78
600.0	673.6	34.57	36.24	40.73
650.0	723.6	35.80	38.53	43.80
700.0	773.6	36.16	38.74	42.44
750.0	823.6	36.64	39.22	43.01
800.0	873.6	38.39	42.55	51.60
824.0	897.6	39.90	44.63	52.21
830.0	903.6	40.33	45.52	50.94
840.0	913.6	40.89	46.19	49.68
849.0	922.6	41.61	47.38	49.02
900.0	973.6	43.13	44.83	40.28
1000.0	1073.6	36.44	37.37	37.04
1100.0	1173.6	32.25	32.30	33.00
1200.0	1273.6	30.67	31.25	32.62
1400.0	1473.6	29.53	31.57	34.37
1600.0	1673.6	28.26	32.71	45.42
1800.0	1873.6	30.35	32.77	37.32
2000.0	2073.6	30.48	33.03	37.34
2200.0	2273.6	29.97	31.52	32.13
2400.0	2473.6	30.47	30.96	29.69
2600.0	2673.6	35.70	36.00	34.26
2800.0	2873.6	45.43	60.83	48.22
3000.0	3073.6	38.57	39.55	40.80
3050.0	3123.6	37.74	38.57	39.68
3100.0	3173.6	37.01	37.69	38.60
3150.0	3223.6	35.92	36.50	37.21
3200.0	3273.6	35.07	35.39	35.92
3250.0	3323.6	34.02	34.16	34.53

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1) @LO (dBm)		
		+14	+17	+20
150.0	223.6	1.77	1.56	1.36
160.0	233.6	1.76	1.55	1.35
170.0	243.6	1.73	1.52	1.34
180.0	253.6	1.71	1.49	1.30
190.0	263.6	1.67	1.46	1.27
200.0	273.6	1.63	1.42	1.25
210.0	283.6	1.58	1.38	1.22
250.0	323.6	1.50	1.31	1.19
300.0	373.6	1.41	1.28	1.22
350.0	423.6	1.36	1.28	1.27
400.0	473.6	1.36	1.32	1.33
450.0	523.6	1.38	1.35	1.35
500.0	573.6	1.36	1.52	1.78
550.0	623.6	1.50	1.68	1.83
600.0	673.6	1.63	1.77	1.92
650.0	723.6	1.59	1.70	1.82
700.0	773.6	1.61	1.70	1.79
750.0	823.6	1.58	1.65	1.73
800.0	873.6	1.54	1.59	1.65
824.0	897.6	1.54	1.58	1.63
830.0	903.6	1.55	1.59	1.64
840.0	913.6	1.56	1.60	1.66
849.0	922.6	1.58	1.62	1.67
900.0	973.6	1.57	1.58	1.60
1000.0	1073.6	1.73	1.68	1.66
1100.0	1173.6	1.96	1.88	1.84
1200.0	1273.6	2.20	2.09	2.04
1400.0	1473.6	2.37	2.18	2.08
1600.0	1673.6	2.15	1.94	1.82
1800.0	1873.6	1.96	1.74	1.63
2000.0	2073.6	1.82	1.61	1.50
2200.0	2273.6	1.78	1.61	1.51
2400.0	2473.6	1.79	1.65	1.57
2600.0	2673.6	1.72	1.60	1.54
2800.0	2873.6	1.61	1.51	1.46
3000.0	3073.6	1.41	1.33	1.31
3050.0	3123.6	1.37	1.30	1.29
3100.0	3173.6	1.33	1.26	1.25
3150.0	3223.6	1.29	1.24	1.24
3200.0	3273.6	1.26	1.21	1.22
3250.0	3323.6	1.24	1.20	1.21

LO (MHz)	LO VSWR (:1) @LO (dBm)		
	+14	+17	+20
223.6	71.41	77.09	40.27
233.6	52.10	51.89	32.46
243.6	36.57	34.17	27.96
253.6	27.81	27.29	21.82
263.6	17.08	17.18	13.24
273.6	10.28	10.36	8.86
283.6	5.18	5.12	4.63
323.6	2.33	2.29	2.18
373.6	1.86	1.91	1.92
423.6	3.42	3.58	3.56
473.6	5.72	6.03	5.94
523.6	7.85	8.20	7.71
573.6	10.04	10.45	9.89
623.6	11.67	12.29	11.91
673.6	12.59	13.44	13.07
723.6	13.31	14.23	13.78
773.6	14.26	15.42	15.06
823.6	14.23	15.56	15.53
873.6	14.15	15.18	14.74
897.6	13.85	14.49	13.74
903.6	13.69	14.63	14.43
913.6	12.76	14.22	14.60
922.6	11.67	12.44	11.90
973.6	11.04	11.58	10.75
1073.6	10.64	11.25	10.81
1173.6	9.95	10.44	10.00
1273.6	9.09	9.56	9.00
1473.6	8.48	8.81	8.34
1673.6	7.97	8.19	7.83
1873.6	7.36	7.53	7.24
2073.6	6.70	6.80	6.49
2273.6	6.11	6.14	5.89
2473.6	5.56	5.59	5.40
2673.6	4.91	4.93	4.79
2873.6	4.18	4.15	4.02
3073.6	3.41	3.39	3.30
3123.6	2.82	2.81	2.82
3173.6	2.20	2.17	2.16
3223.6	1.74	1.74	1.74
3273.6	1.54	1.59	1.63
3323.6	1.69	1.78	1.85

IF (OUT) (MHz)	IF VSWR (:1) @LO (dBm)		
	+14	+17	+20
10.0	1.06	1.21	1.34
37.0	1.08	1.21	1.34
64.0	1.14	1.24	1.35
91.0	1.19	1.26	1.37
115.0	1.24	1.29	1.39
145.0	1.31	1.35	1.43
170.0	1.37	1.40	1.47
200.0	1.43	1.45	1.51
225.0	1.49	1.49	1.55
255.0	1.57	1.57	1.61
280.0	1.65	1.63	1.66
305.0	1.71	1.68	1.70
335.0	1.78	1.74	1.76
360.0	1.86	1.81	1.81
390.0	1.94	1.88	1.87
415.0	2.00	1.92	1.90
445.0	2.07	1.98	1.95
470.0	2.14	2.04	2.00
500.0	2.21	2.09	2.04
525.0	2.25	2.13	2.07
555.0	2.31	2.17	2.10
580.0	2.36	2.21	2.13
605.0	2.40	2.24	2.15
635.0	2.44	2.26	2.16
660.0	2.47	2.28	2.17
690.0	2.50	2.30	2.18
715.0	2.52	2.31	2.19
745.0	2.54	2.33	2.19
770.0	2.54	2.33	2.18
800.0	2.54	2.32	2.17
825.0	2.54	2.32	2.17
850.0	2.54	2.31	2.16
880.0	2.51	2.28	2.13
905.0	2.48	2.26	2.10
935.0	2.46	2.24	2.08
960.0	2.44	2.21	2.05
990.0	2.38	2.16	2.00
1015.0	2.34	2.12	1.96
1045.0	2.30	2.09	1.94
1070.0	2.26	2.05	1.90
1100.0	1.55	1.39	1.34