Non-Catalog Model

Frequency Mixer SRA-215

Level 10 (LO Power +10 dBm)

Important Note

This is a non-catalog model and can be manufactured on specific request.
Pricing and delivery information can be supplied upon request.

Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : A01

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency	**LO** (fL to fU)	0.05		1500	MHz
	RF (fL to fU)	0.05		1500	MHz
	IF	0.05		500	MHz
Conversion Loss	**mid band**		5.2	7.5	dB
	Total Range			9.0	dB
LO-RF Isolation	**Low Range**	20	25		dB
	Mid Range	25	35		dB
	Upper Range	20	30		dB
LO-IF Isolation	**Low Range**	20	25		dB
	Mid Range	25	35		dB
	Upper Range	15	25		dB
1 dB Comp. Input Power			+5		dBm

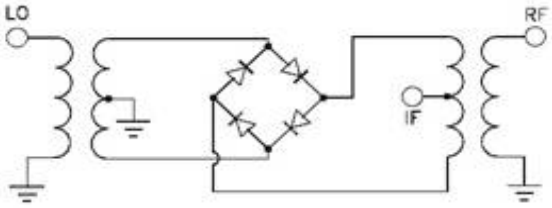
Notes: Low Range = [fL to 10fL] Mid Range = [10fL to fU/2] Upper Range = [fU/2 to fU]
mid band = [2fL to fU/2]

Hermetically sealed

MAXIMUM RATINGS	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

PIN CONNECTIONS	
LO	8
RF	1
IF	3
GROUND	2, 5, 6, 7

Electrical Schematics



Frequency Mixer SRA-215

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB) @LO (dBm)		
		+7	+10	+13
0.1	30.1	5.77	5.33	5.05
10.0	40.0	5.47	5.08	4.87
70.9	100.9	5.78	5.35	5.11
131.7	161.7	6.01	5.48	5.19
192.5	222.5	6.11	5.53	5.24
253.3	283.3	6.08	5.57	5.32
314.1	344.1	6.18	5.68	5.46
374.9	404.9	6.35	5.85	5.62
435.7	465.7	6.51	5.96	5.73
496.5	526.5	6.75	6.11	5.86
557.3	587.3	7.10	6.34	6.03
618.1	648.1	7.35	6.53	6.19
678.9	708.9	7.36	6.62	6.28
739.7	769.7	7.33	6.63	6.34
800.5	830.5	7.30	6.65	6.37
861.3	891.3	7.31	6.69	6.41
922.0	952.0	7.34	6.73	6.43
982.8	1012.8	7.41	6.81	6.52
1043.6	1073.6	7.59	7.03	6.75
1104.4	1134.4	7.69	7.15	6.86
1165.2	1195.2	7.52	7.01	6.72
1226.0	1256.0	7.51	7.04	6.79
1286.8	1316.8	7.66	7.20	6.95
1347.6	1377.6	7.81	7.33	7.08
1408.4	1438.4	7.93	7.45	7.19
1469.2	1499.2	8.09	7.60	7.34
1530.0	1560.0	8.25	7.78	7.52
1590.8	1620.8	8.41	7.91	7.66
1651.6	1681.6	8.56	8.02	7.77
1773.2	1803.2	8.95	8.34	8.02
1834.0	1864.0	9.26	8.55	8.20
1894.8	1924.8	9.59	8.80	8.42
1935.3	1965.3	9.78	8.98	8.57
1996.1	2026.1	10.04	9.20	8.74
2036.6	2066.6	10.19	9.33	8.85
2097.4	2127.4	10.37	9.54	9.04
2138.0	2168.0	10.56	9.72	9.21
2198.8	2228.8	10.87	9.99	9.45
2239.3	2269.3	11.07	10.21	9.65
2300.1	2330.1	11.30	10.42	9.85

RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm) @LO (dBm)		
		+7	+10	+13
10.1	40.1	26.56	28.94	26.18
70.9	100.9	21.02	23.14	26.38
131.7	161.7	21.65	24.31	22.99
192.5	222.5	23.61	22.19	24.81
253.3	283.3	19.28	20.63	25.73
314.1	344.1	19.34	29.31	28.48
374.9	404.9	22.15	24.54	29.88
435.7	465.7	21.79	21.84	26.33
496.5	526.5	22.09	24.72	25.94
557.3	587.3	22.19	24.84	26.00
618.1	648.1	22.98	23.47	27.19
678.9	708.9	20.11	22.90	22.82
739.7	769.7	18.74	20.61	26.06
800.5	830.5	18.20	21.02	26.54
861.3	891.3	18.66	20.73	26.15
922.0	952.0	17.80	25.26	24.06
982.8	1012.8	17.34	22.64	22.39
1043.6	1073.6	17.31	20.98	19.55
1104.4	1134.4	16.03	20.12	20.60
1165.2	1195.2	15.61	19.88	22.78
1226.0	1256.0	16.50	20.37	23.71
1286.8	1316.8	17.21	21.71	22.85
1347.6	1377.6	16.83	21.92	21.39
1408.4	1438.4	17.80	21.82	22.39
1469.2	1499.2	18.29	22.37	21.30
1530.0	1560.0	16.03	20.04	24.62
1590.8	1620.8	15.06	19.44	24.43
1651.6	1681.6	15.05	20.68	22.02
1712.4	1742.4	15.29	21.05	21.99
1773.2	1803.2	14.93	20.90	23.13
1834.0	1864.0	15.15	20.49	21.14
1894.8	1924.8	16.34	19.92	19.88
1935.3	1965.3	15.76	19.16	19.98
1996.1	2026.1	15.73	18.51	20.19
2036.6	2066.6	15.22	18.40	20.36
2097.4	2127.4	15.78	19.15	22.42
2138.0	2168.0	15.77	18.56	22.60
2198.8	2228.8	17.02	20.03	22.49
2239.3	2269.3	18.26	21.30	22.60
2300.1	2330.1	18.47	21.25	21.18

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+5dBm (dB) @LO (dBm)		
		+7	+10	+13
10.1	40.1	0.67	0.36	0.23
70.9	100.9	0.48	0.23	0.14
131.7	161.7	0.49	0.25	0.15
192.5	222.5	0.49	0.26	0.14
253.3	283.3	0.55	0.24	0.12
314.1	344.1	0.47	0.20	0.09
374.9	404.9	0.42	0.17	0.09
435.7	465.7	0.40	0.15	0.09
496.5	526.5	0.34	0.15	0.09
557.3	587.3	0.23	0.15	0.08
618.1	648.1	0.26	0.14	0.08
678.9	708.9	0.39	0.17	0.09
739.7	769.7	0.48	0.19	0.09
800.5	830.5	0.53	0.20	0.09
861.3	891.3	0.53	0.22	0.10
922.0	952.0	0.57	0.25	0.12
982.8	1012.8	0.58	0.26	0.12
1043.6	1073.6	0.61	0.26	0.12
1104.4	1134.4	0.62	0.28	0.12
1165.2	1195.2	0.80	0.36	0.17
1226.0	1256.0	0.84	0.37	0.16
1286.8	1316.8	0.86	0.34	0.15
1347.6	1377.6	0.90	0.36	0.17
1408.4	1438.4	0.86	0.36	0.19
1469.2	1499.2	0.88	0.37	0.21
1530.0	1560.0	0.88	0.37	0.20
1590.8	1620.8	0.84	0.33	0.20
1651.6	1681.6	0.81	0.30	0.18
1712.4	1742.4	0.74	0.29	0.17
1773.2	1803.2	0.75	0.32	0.20
1834.0	1864.0	0.71	0.35	0.22
1894.8	1924.8	0.62	0.35	0.27
1935.3	1965.3	0.57	0.37	0.31
1996.1	2026.1	0.52	0.34	0.32
2036.6	2066.6	0.51	0.32	0.28
2097.4	2127.4	0.46	0.28	0.20
2138.0	2168.0	0.48	0.27	0.18
2198.8	2228.8	0.48	0.25	0.15
2239.3	2269.3	0.48	0.25	0.16
2300.1	2330.1	0.58	0.30	0.18

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Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=750.1MHz (dB) @LO (dBm) +10
500.0	250.1	7.11
487.4	262.7	7.05
474.9	275.2	7.01
462.3	287.8	6.95
449.7	300.4	6.96
437.2	312.9	6.97
424.6	325.5	6.95
412.1	338.0	6.92
399.5	350.6	6.89
386.9	363.2	6.88
374.4	375.7	6.84
361.8	388.3	6.87
349.2	400.9	6.85
336.7	413.4	6.84
324.1	426.0	6.82
311.5	438.6	6.81
299.0	451.1	6.79
286.4	463.7	6.78
273.8	476.3	6.80
261.3	488.8	6.81
248.7	501.4	6.79
236.2	513.9	6.79
223.6	526.5	6.80
211.0	539.1	6.80
198.5	551.6	6.82
185.9	564.2	6.82
173.3	576.8	6.82
160.8	589.3	6.82
148.2	601.9	6.80
135.6	614.5	6.78
123.1	627.0	6.75
110.5	639.6	6.73
97.9	652.2	6.74
85.4	664.7	6.72
72.8	677.3	6.70
60.3	689.8	6.68
47.7	702.4	6.65
35.1	715.0	6.64
22.6	727.5	6.64
10.0	740.1	6.71

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10.1MHz (dB) @LO (dBm) +10
10.0	20.1	5.13
22.6	32.7	5.14
35.1	45.2	5.16
47.7	57.8	5.15
60.3	70.4	5.14
72.8	82.9	5.13
85.4	95.5	5.13
97.9	108.0	5.11
110.5	120.6	5.11
123.1	133.2	5.12
135.6	145.7	5.09
148.2	158.3	5.07
160.8	170.9	5.06
173.3	183.4	5.04
185.9	196.0	5.03
198.5	208.6	5.01
211.0	221.1	5.01
223.6	233.7	4.96
236.2	246.3	4.96
248.7	258.8	4.94
261.3	271.4	4.92
273.8	283.9	4.93
286.4	296.5	4.90
299.0	309.1	4.91
311.5	321.6	4.91
324.1	334.2	4.89
336.7	346.8	4.91
349.2	359.3	4.90
361.8	371.9	4.91
374.4	384.5	4.91
386.9	397.0	4.91
399.5	409.6	4.91
412.1	422.2	4.93
424.6	434.7	4.93
437.2	447.3	4.95
449.7	459.8	4.94
462.3	472.4	4.95
474.9	485.0	4.97
487.4	497.5	4.98
500.0	510.1	4.99

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1500.1MHz (dB) @LO (dBm) +10
500.0	1000.1	7.34
487.4	1012.7	7.34
474.9	1025.2	7.33
462.3	1037.8	7.34
449.7	1050.4	7.34
437.2	1062.9	7.38
424.6	1075.5	7.37
412.1	1088.0	7.35
399.5	1100.6	7.32
386.9	1113.2	7.29
374.4	1125.7	7.29
361.8	1138.3	7.28
349.2	1150.9	7.25
336.7	1163.4	7.26
324.1	1176.0	7.26
311.5	1188.6	7.28
299.0	1201.1	7.31
286.4	1213.7	7.31
273.8	1226.3	7.35
261.3	1238.8	7.38
248.7	1251.4	7.41
236.2	1263.9	7.44
223.6	1276.5	7.45
211.0	1289.1	7.48
198.5	1301.6	7.50
185.9	1314.2	7.51
173.3	1326.8	7.54
160.8	1339.3	7.57
148.2	1351.9	7.60
135.6	1364.5	7.62
123.1	1377.0	7.61
110.5	1389.6	7.63
97.9	1402.2	7.65
85.4	1414.7	7.68
72.8	1427.3	7.68
60.3	1439.8	7.67
47.7	1452.4	7.68
35.1	1465.0	7.69
22.6	1477.5	7.70
10.0	1490.1	7.73

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Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB) @LO (dBm)			LO-IF ISOLATION (dB) @LO (dBm)		
	+7	+10	+13	+7	+10	+13
0.1	22.98	24.71	26.17	21.28	23.12	24.73
10.0	45.65	48.23	50.78	43.04	46.45	49.49
70.9	46.95	47.68	48.17	41.78	44.20	46.27
131.7	42.87	43.53	44.14	42.04	44.46	46.22
192.5	40.23	40.97	41.68	43.03	45.60	47.44
253.3	38.61	39.35	39.98	45.44	48.63	50.84
314.1	37.88	38.58	39.15	48.50	54.52	58.39
374.9	37.25	37.91	38.31	50.53	60.49	52.77
435.7	37.18	37.52	37.69	50.03	51.95	46.42
496.5	37.04	37.52	37.81	51.30	49.74	44.35
557.3	36.77	36.95	37.19	50.88	46.34	42.17
618.1	36.84	37.31	37.68	44.06	42.25	39.87
678.9	36.21	37.12	37.78	39.19	38.39	37.00
739.7	36.27	37.53	38.22	35.71	34.80	33.72
800.5	36.64	38.11	38.98	33.31	32.17	31.18
861.3	36.11	37.72	38.70	31.47	30.34	29.59
922.0	36.07	37.87	39.20	29.90	28.89	28.32
982.8	36.88	38.68	39.98	28.42	27.66	27.22
1043.6	38.64	39.27	39.15	27.15	26.52	26.36
1104.4	35.45	35.56	35.19	25.52	24.79	24.63
1165.2	34.84	35.74	35.71	24.48	23.83	23.65
1226.0	35.47	37.30	37.86	23.45	22.71	22.43
1286.8	35.08	37.80	39.46	23.08	22.07	21.64
1347.6	34.31	37.50	40.19	23.00	21.57	20.98
1408.4	34.99	39.21	43.21	22.82	21.21	20.39
1469.2	36.27	42.40	50.59	22.75	20.98	19.87
1530.0	37.10	44.04	55.12	22.67	20.80	19.69
1590.8	36.66	43.46	55.79	22.80	20.75	19.62
1651.6	36.22	43.02	56.86	22.74	20.83	19.69
1773.2	34.89	40.07	43.17	22.16	20.89	19.78
1834.0	33.89	37.44	38.83	22.21	21.35	20.30
1894.8	32.13	33.99	34.99	22.14	21.82	20.98
1935.3	30.83	31.96	32.81	21.97	22.06	21.43
1996.1	29.21	29.90	30.59	21.47	22.21	22.29
2036.6	28.40	29.00	29.62	21.24	22.22	22.69
2097.4	27.26	27.95	28.53	20.78	22.11	23.08
2138.0	26.63	27.28	27.79	20.76	22.29	23.55
2198.8	26.08	26.57	26.97	20.38	22.07	23.69
2239.3	26.12	26.33	26.51	20.13	21.83	23.59
2300.1	26.14	26.37	26.45	19.70	21.52	23.44

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB) @LO (dBm)		
		+7	+10	+13
10.1	40.1	34.13	34.23	33.59
70.9	100.9	33.76	33.57	33.83
131.7	161.7	34.90	34.81	34.64
192.5	222.5	36.88	36.58	36.36
253.3	283.3	39.77	39.62	38.92
314.1	344.1	42.68	41.12	40.45
374.9	404.9	44.03	42.95	42.06
435.7	465.7	42.81	42.37	41.97
496.5	526.5	38.25	38.99	39.90
557.3	587.3	35.11	35.65	36.41
618.1	648.1	34.39	34.25	33.99
678.9	708.9	32.51	32.53	32.18
739.7	769.7	32.23	32.23	32.26
800.5	830.5	33.66	33.96	34.28
861.3	891.3	34.52	35.71	36.78
922.0	952.0	34.74	36.00	37.51
982.8	1012.8	33.64	34.57	35.04
1043.6	1073.6	31.49	31.89	31.95
1104.4	1134.4	30.93	31.01	31.23
1165.2	1195.2	30.29	30.14	30.11
1226.0	1256.0	29.65	29.23	28.91
1286.8	1316.8	30.34	29.71	29.20
1347.6	1377.6	32.43	31.32	30.71
1408.4	1438.4	35.19	33.58	32.65
1469.2	1499.2	38.55	35.91	34.45
1530.0	1560.0	39.27	35.97	34.39
1590.8	1620.8	37.01	34.61	33.49
1651.6	1681.6	36.70	35.17	34.20
1712.4	1742.4	36.35	35.99	35.22
1773.2	1803.2	36.26	36.89	35.64
1834.0	1864.0	34.70	36.09	34.78
1894.8	1924.8	32.65	35.12	34.30
1935.3	1965.3	31.63	34.57	34.95
1996.1	2026.1	30.89	33.47	36.34
2036.6	2066.6	31.25	33.05	36.03
2097.4	2127.4	32.68	33.78	35.67
2138.0	2168.0	33.66	34.66	35.57
2198.8	2228.8	34.33	35.40	35.60
2239.3	2269.3	33.11	33.98	34.49
2300.1	2330.1	29.81	30.60	31.12

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Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1) @LO (dBm)		
		+7	+10	+13
5.0	35.0	1.68	1.43	1.28
10.0	40.1	1.69	1.43	1.29
70.9	100.9	1.67	1.47	1.34
131.7	161.7	1.81	1.58	1.43
192.5	222.5	1.93	1.68	1.54
253.3	283.3	1.99	1.76	1.65
314.1	344.1	2.13	1.92	1.80
374.9	404.9	2.36	2.10	1.96
435.7	465.7	2.54	2.22	2.07
496.5	526.5	2.74	2.38	2.19
557.3	587.3	2.94	2.53	2.30
618.1	648.1	3.00	2.58	2.34
678.9	708.9	2.94	2.51	2.26
739.7	769.7	2.83	2.42	2.20
800.5	830.5	2.75	2.37	2.15
861.3	891.3	2.71	2.35	2.15
922.0	952.0	2.58	2.28	2.09
982.8	1012.8	2.36	2.12	1.98
1043.6	1073.6	2.11	1.94	1.83
1104.4	1134.4	1.90	1.77	1.71
1165.2	1195.2	1.64	1.56	1.54
1226.0	1256.0	1.44	1.44	1.49
1286.8	1316.8	1.31	1.39	1.48
1347.6	1377.6	1.21	1.36	1.47
1408.4	1438.4	1.21	1.36	1.49
1469.2	1499.2	1.30	1.41	1.52
1530.0	1560.0	1.43	1.50	1.59
1590.8	1620.8	1.57	1.59	1.64
1651.6	1681.6	1.71	1.67	1.67
1712.4	1742.4	1.82	1.73	1.70
1773.2	1803.2	1.93	1.81	1.75
1834.0	1864.0	2.05	1.90	1.82
1894.8	1924.8	2.15	1.98	1.89
1935.3	1965.3	2.22	2.02	1.92
1996.1	2026.1	2.29	2.08	1.97
2036.6	2066.6	2.30	2.11	2.00
2097.4	2127.4	2.25	2.11	2.02
2138.0	2168.0	2.21	2.09	2.01
2198.8	2228.8	2.14	2.05	1.98
2239.3	2269.3	2.11	2.03	1.97
2300.1	2330.1	2.08	1.99	1.94

LO (MHz)	LO VSWR (:1) @LO (dBm)		
	+7	+10	+13
5.0	1.09	1.50	2.29
10.0	1.11	1.45	2.13
70.9	1.17	1.38	1.96
131.7	1.24	1.34	1.90
192.5	1.30	1.25	1.77
253.3	1.40	1.16	1.64
314.1	1.59	1.11	1.53
374.9	1.82	1.14	1.37
435.7	2.01	1.21	1.23
496.5	2.20	1.31	1.16
557.3	2.34	1.42	1.24
618.1	2.39	1.55	1.43
678.9	2.51	1.76	1.69
739.7	2.58	1.93	1.95
800.5	2.45	2.02	2.18
861.3	2.31	2.10	2.39
922.0	2.15	2.17	2.58
982.8	2.00	2.20	2.70
1043.6	1.86	2.18	2.73
1104.4	1.77	2.19	2.78
1165.2	1.71	2.20	2.79
1226.0	1.65	2.15	2.73
1286.8	1.60	2.08	2.62
1347.6	1.58	2.04	2.53
1408.4	1.58	1.98	2.42
1469.2	1.58	1.89	2.26
1530.0	1.57	1.78	2.07
1590.8	1.56	1.64	1.86
1651.6	1.56	1.50	1.61
1712.4	1.55	1.36	1.40
1773.2	1.53	1.22	1.19
1834.0	1.48	1.14	1.08
1894.8	1.44	1.21	1.25
1935.3	1.42	1.29	1.40
1996.1	1.42	1.45	1.63
2036.6	1.42	1.54	1.78
2097.4	1.48	1.71	2.02
2138.0	1.53	1.82	2.17
2198.8	1.65	2.01	2.39
2239.3	1.74	2.12	2.50
2300.1	1.92	2.31	2.71

IF (OUT) (MHz)	IF VSWR @LO=1500.1MHz (:1) @LO (dBm)		
	+7	+10	+13
5.0	1.69	1.22	1.03
10.0	1.69	1.22	1.03
22.6	2.19	1.88	1.64
35.1	2.01	1.75	1.54
47.7	1.95	1.67	1.48
60.3	1.93	1.65	1.46
72.8	1.91	1.66	1.46
85.4	1.95	1.68	1.48
97.9	1.96	1.70	1.51
110.5	1.98	1.72	1.53
123.1	1.96	1.70	1.51
135.6	1.94	1.68	1.49
148.2	1.92	1.66	1.48
160.8	1.90	1.64	1.47
173.3	1.89	1.64	1.48
185.9	1.89	1.65	1.49
198.5	1.90	1.65	1.49
211.0	1.88	1.64	1.49
223.6	1.87	1.63	1.48
236.2	1.83	1.61	1.46
248.7	1.80	1.58	1.44
261.3	1.78	1.57	1.43
273.8	1.76	1.56	1.44
286.4	1.75	1.56	1.44
299.0	1.74	1.55	1.44
311.5	1.73	1.55	1.44
324.1	1.71	1.53	1.43
336.7	1.69	1.51	1.43
349.2	1.67	1.50	1.42
361.8	1.64	1.48	1.41
374.4	1.61	1.46	1.40
386.9	1.59	1.45	1.39
399.5	1.58	1.44	1.39
412.1	1.59	1.45	1.41
424.6	1.59	1.46	1.41
437.2	1.57	1.45	1.42
449.7	1.56	1.45	1.42
462.3	1.54	1.43	1.41
474.9	1.53	1.42	1.41
487.4	1.51	1.41	1.41
500.0	1.49	1.41	1.42

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Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	18	30	21	26	26	24	36	35	46	49
1	-	29	+0	33	16	30	27	36	37	39	53	50
2	86	46	41	60	45	41	61	52	62	42	51	51
3	>100	54	50	52	47	52	48	52	60	52	56	57
4	>100	73	76	61	74	61	70	64	71	65	67	68
5	>100	86	76	77	69	72	67	67	71	68	68	65
6	>100	91	>93	88	88	79	85	78	86	78	83	>93
7	>100	>93	>93	>93	>93	>93	>93	92	84	88	84	89
8	>100	>93	>93	>93	>93	>93	>93	>93	>93	89	>93	92
9	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	91	92
10	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: **RF IN: 750.1 MHz; 0.00 dBm.**
LO IN: 780.01 MHz; +10.00 dBm
IF OUT: 29.91 MHz; -6.59 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	8	17	10	14	15	12	23	22	30	37
1	-	27	+0	31	15	29	26	35	34	37	41	45
2	>100	57	52	60	54	50	68	57	64	51	60	61
3	>100	73	68	68	66	68	66	69	72	67	73	76
4	>100	>83	>83	>83	>83	83	>83	>83	>83	>83	>83	>83
5	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
6	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
7	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
8	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
9	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
10	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: **RF IN: 750.1 MHz; -10.00 dBm.**
LO IN: 780.01 MHz; +10.00 dBm
IF OUT: 29.91 MHz; -16.65 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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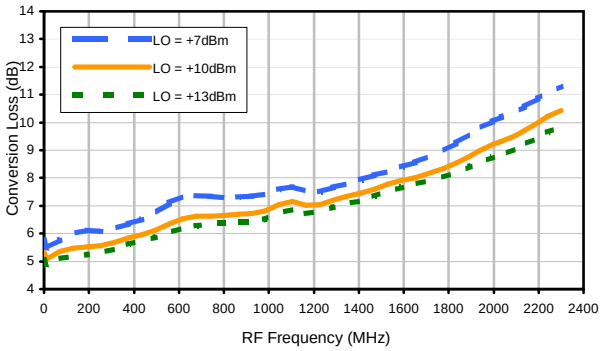
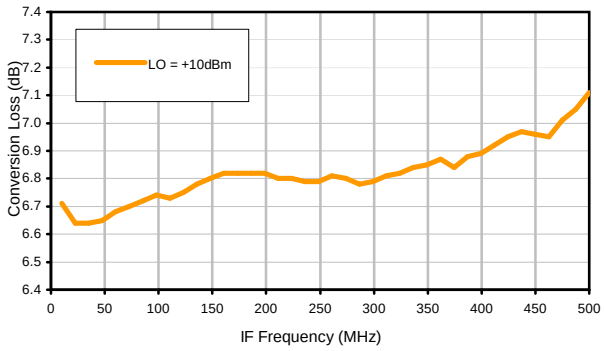
Typical Performance Curves

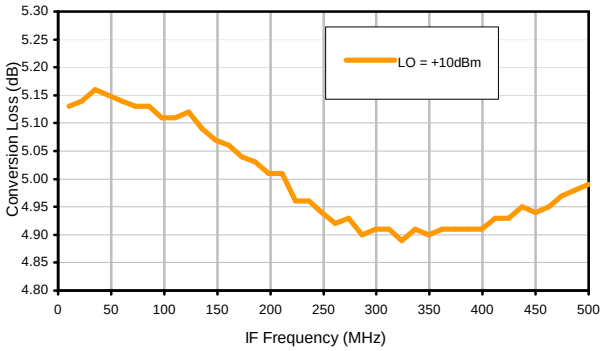
Conversion Loss @ IF=30MHz



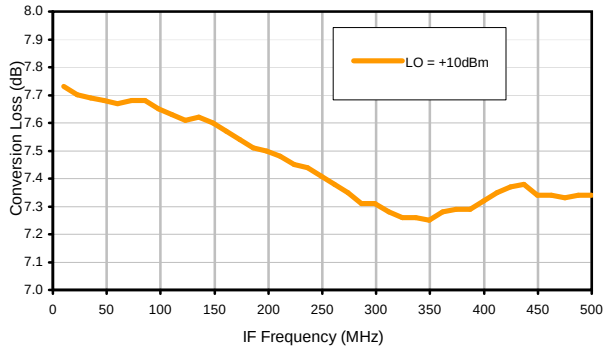
Conversion Loss vs. IF @ RF=750.1MHz



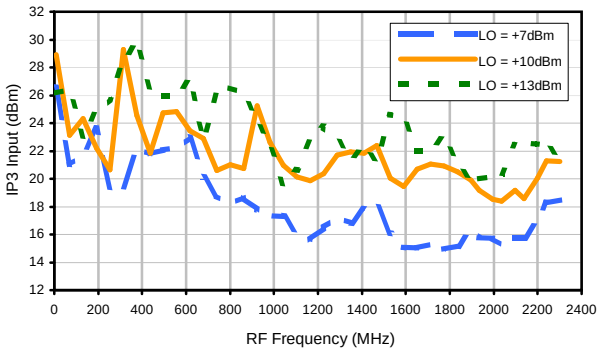
Conversion Loss vs. IF @ RF=10.1MHz



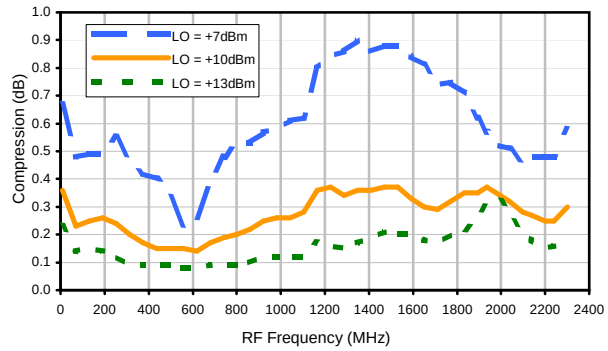
Conversion Loss vs. IF @ RF=1500.1MHz



IP3 Input



Compression @ RF IN=+5dBm



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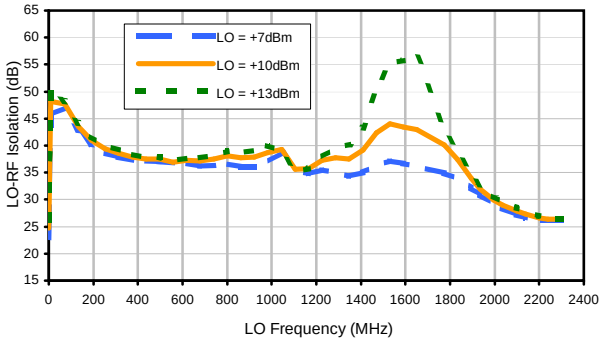
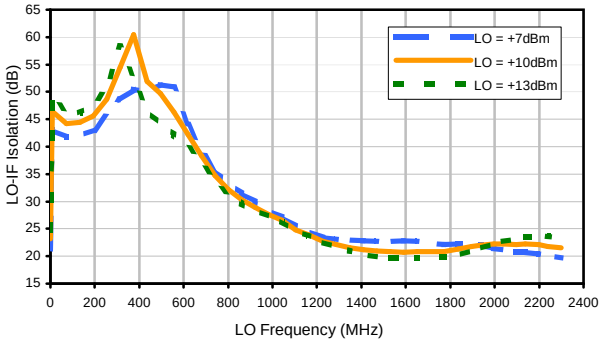
Typical Performance Curves

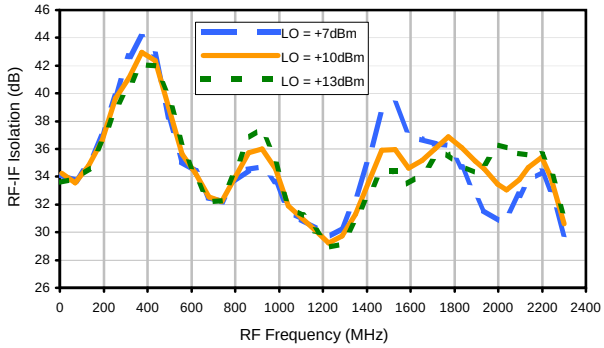
LO-RF Isolation



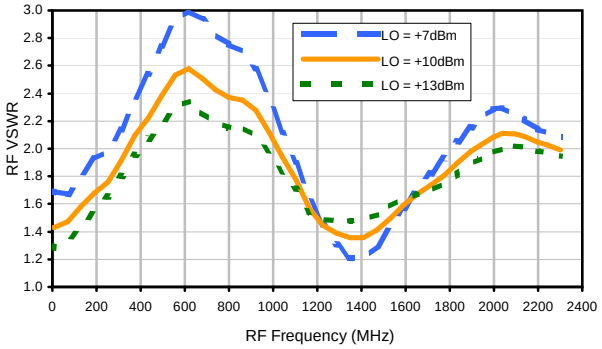
LO-IF Isolation



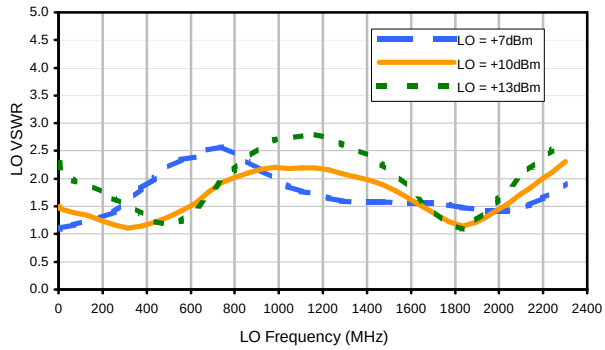
RF-IF Isolation



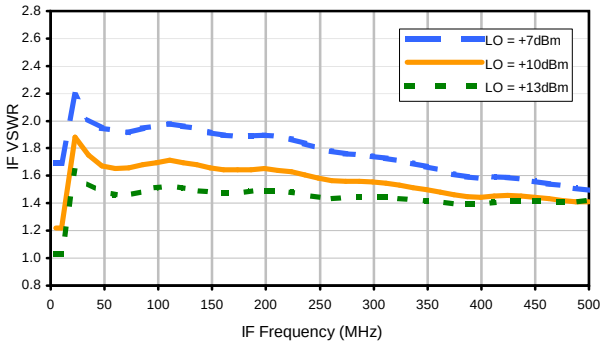
RF VSWR



LO VSWR



IF VSWR



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Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	18	30	21	26	26	24	36	35	46	49
1	-	29	+0	33	16	30	27	36	37	39	53	50
2	86	46	41	60	45	41	61	52	62	42	51	51
3	>100	54	50	52	47	52	48	52	60	52	56	57
4	>100	73	76	61	74	61	70	64	71	65	67	68
5	>100	86	76	77	69	72	67	67	71	68	68	65
6	>100	91	>93	88	88	79	85	78	86	78	83	>93
7	>100	>93	>93	>93	>93	>93	>93	92	84	88	84	89
8	>100	>93	>93	>93	>93	>93	>93	>93	>93	89	>93	92
9	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	91	92
10	>100	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93	>93
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: **RF IN: 750.1 MHz; 0.00 dBm.**
LO IN: 780.01 MHz; +10.00 dBm
IF OUT: 29.91 MHz; -6.59 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	8	17	10	14	15	12	23	22	30	37
1	-	27	+0	31	15	29	26	35	34	37	41	45
2	>100	57	52	60	54	50	68	57	64	51	60	61
3	>100	73	68	68	66	68	66	69	72	67	73	76
4	>100	>83	>83	>83	>83	83	>83	>83	>83	>83	>83	>83
5	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
6	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
7	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
8	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
9	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
10	>100	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83	>83
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: **RF IN: 750.1 MHz; -10.00 dBm.**
LO IN: 780.01 MHz; +10.00 dBm
IF OUT: 29.91 MHz; -16.65 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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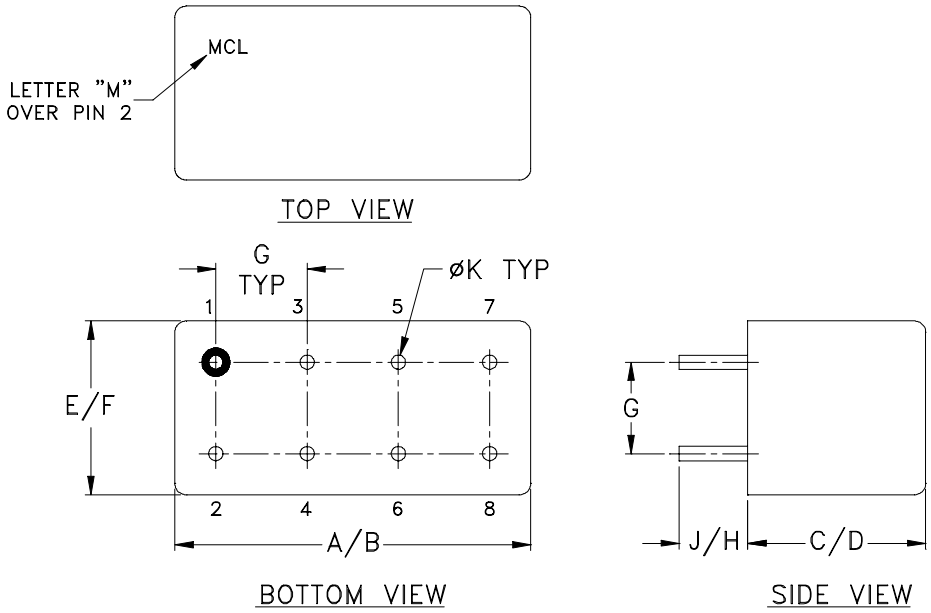
Case Style A

A01
A04
A05
A06

Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	WT, GRAM
A01	.770 (19.56)	.800 (20.32)	.385 (9.78)	.400 (10.16)	.370 (9.40)	.400 (10.16)	.200 (5.08)	.20 (5.08)	.14 (3.56)	.031 (.79)	5.2
A04			.200 (5.08)	.210 (5.33)							3.7
A05			.240 (6.10)	.250 (6.35)							3.7
A06			.285 (7.24)	.310 (7.87)							5.2

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015

Notes:

1. Header material: C.R.S.
   Pin material: #52 alloy.
   Cover material: Cupro-Nickel.
2. Pin finish: Electro Tin-Silver.
3. Insulated spacer available. Request P/N B14-045-01.
4. Tolerance on pin diameter +/-.005 inch.
5. Glass meniscus 0.015 inch max.
6. Blue bead indicates Pin 1. Pin numbers do not appear on unit, for reference only.

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