

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.



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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 band = [2fL to fU/2]

Mid Range = [10fL to fU/2]

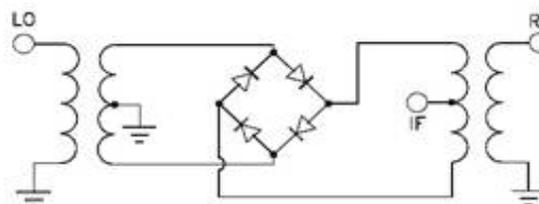
Upper Range = [fU/2 to fU]

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)			RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm)			RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+5dBm (dB)		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+7	+10	+13			+7	+10	+13			+7	+10	+13
0.1	30.1	5.77	5.33	5.05	10.1	40.1	26.56	28.94	26.18	10.1	40.1	0.67	0.36	0.23
10.0	40.0	5.47	5.08	4.87	70.9	100.9	21.02	23.14	26.38	70.9	100.9	0.48	0.23	0.14
70.9	100.9	5.78	5.35	5.11	131.7	161.7	21.65	24.31	22.99	131.7	161.7	0.49	0.25	0.15
131.7	161.7	6.01	5.48	5.19	192.5	222.5	23.61	22.19	24.81	192.5	222.5	0.49	0.26	0.14
192.5	222.5	6.11	5.53	5.24	253.3	283.3	19.28	20.63	25.73	253.3	283.3	0.55	0.24	0.12
253.3	283.3	6.08	5.57	5.32	314.1	344.1	19.34	29.31	28.48	314.1	344.1	0.47	0.20	0.09
314.1	344.1	6.18	5.68	5.46	374.9	404.9	22.15	24.54	29.88	374.9	404.9	0.42	0.17	0.09
374.9	404.9	6.35	5.85	5.62	435.7	465.7	21.79	21.84	26.33	435.7	465.7	0.40	0.15	0.09
435.7	465.7	6.51	5.96	5.73	496.5	526.5	22.09	24.72	25.94	496.5	526.5	0.34	0.15	0.09
496.5	526.5	6.75	6.11	5.86	557.3	587.3	22.19	24.84	26.00	557.3	587.3	0.23	0.15	0.08
557.3	587.3	7.10	6.34	6.03	618.1	648.1	22.98	23.47	27.19	618.1	648.1	0.26	0.14	0.08
618.1	648.1	7.35	6.53	6.19	678.9	708.9	20.11	22.90	22.82	678.9	708.9	0.39	0.17	0.09
678.9	708.9	7.36	6.62	6.28	739.7	769.7	18.74	20.61	26.06	739.7	769.7	0.48	0.19	0.09
739.7	769.7	7.33	6.63	6.34	800.5	830.5	18.20	21.02	26.54	800.5	830.5	0.53	0.20	0.09
800.5	830.5	7.30	6.65	6.37	861.3	891.3	18.66	20.73	26.15	861.3	891.3	0.53	0.22	0.10
861.3	891.3	7.31	6.69	6.41	922.0	952.0	17.80	25.26	24.06	922.0	952.0	0.57	0.25	0.12
922.0	952.0	7.34	6.73	6.43	982.8	1012.8	17.34	22.64	22.39	982.8	1012.8	0.58	0.26	0.12
982.8	1012.8	7.41	6.81	6.52	1043.6	1073.6	17.31	20.98	19.55	1043.6	1073.6	0.61	0.26	0.12
1043.6	1073.6	7.59	7.03	6.75	1104.4	1134.4	16.03	20.12	20.60	1104.4	1134.4	0.62	0.28	0.12
1104.4	1134.4	7.69	7.15	6.86	1165.2	1195.2	15.61	19.88	22.78	1165.2	1195.2	0.80	0.36	0.17
1165.2	1195.2	7.52	7.01	6.72	1226.0	1256.0	16.50	20.37	23.71	1226.0	1256.0	0.84	0.37	0.16
1226.0	1256.0	7.51	7.04	6.79	1286.8	1316.8	17.21	21.71	22.85	1286.8	1316.8	0.86	0.34	0.15
1286.8	1316.8	7.66	7.20	6.95	1347.6	1377.6	16.83	21.92	21.39	1347.6	1377.6	0.90	0.36	0.17
1347.6	1377.6	7.81	7.33	7.08	1408.4	1438.4	17.80	21.82	22.39	1408.4	1438.4	0.86	0.36	0.19
1408.4	1438.4	7.93	7.45	7.19	1469.2	1499.2	18.29	22.37	21.30	1469.2	1499.2	0.88	0.37	0.21
1469.2	1499.2	8.09	7.60	7.34	1530.0	1560.0	16.03	20.04	24.62	1530.0	1560.0	0.88	0.37	0.20
1530.0	1560.0	8.25	7.78	7.52	1590.8	1620.8	15.06	19.44	24.43	1590.8	1620.8	0.84	0.33	0.20
1590.8	1620.8	8.41	7.91	7.66	1651.6	1681.6	15.05	20.68	22.02	1651.6	1681.6	0.81	0.30	0.18
1651.6	1681.6	8.56	8.02	7.77	1712.4	1742.4	15.29	21.05	21.99	1712.4	1742.4	0.74	0.29	0.17
1773.2	1803.2	8.95	8.34	8.02	1773.2	1803.2	14.93	20.90	23.13	1773.2	1803.2	0.75	0.32	0.20
1834.0	1864.0	9.26	8.55	8.20	1834.0	1864.0	15.15	20.49	21.14	1834.0	1864.0	0.71	0.35	0.22
1894.8	1924.8	9.59	8.80	8.42	1894.8	1924.8	16.34	19.92	19.88	1894.8	1924.8	0.62	0.35	0.27
1935.3	1965.3	9.78	8.98	8.57	1935.3	1965.3	15.76	19.16	19.98	1935.3	1965.3	0.57	0.37	0.31
1996.1	2026.1	10.04	9.20	8.74	1996.1	2026.1	15.73	18.51	20.19	1996.1	2026.1	0.52	0.34	0.32
2036.6	2066.6	10.19	9.33	8.85	2036.6	2066.6	15.22	18.40	20.36	2036.6	2066.6	0.51	0.32	0.28
2097.4	2127.4	10.37	9.54	9.04	2097.4	2127.4	15.78	19.15	22.42	2097.4	2127.4	0.46	0.28	0.20
2138.0	2168.0	10.56	9.72	9.21	2138.0	2168.0	15.77	18.56	22.60	2138.0	2168.0	0.48	0.27	0.18
2198.8	2228.8	10.87	9.99	9.45	2198.8	2228.8	17.02	20.03	22.49	2198.8	2228.8	0.48	0.25	0.15
2239.3	2269.3	11.07	10.21	9.65	2239.3	2269.3	18.26	21.30	22.60	2239.3	2269.3	0.48	0.25	0.16
2300.1	2330.1	11.30	10.42	9.85	2300.1	2330.1	18.47	21.25	21.18	2300.1	2330.1	0.58	0.30	0.18



Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=750.1MHz (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)=1500.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+10			+10			+10
500.0	250.1	7.11	10.0	20.1	5.13	500.0	1000.1	7.34
487.4	262.7	7.05	22.6	32.7	5.14	487.4	1012.7	7.34
474.9	275.2	7.01	35.1	45.2	5.16	474.9	1025.2	7.33
462.3	287.8	6.95	47.7	57.8	5.15	462.3	1037.8	7.34
449.7	300.4	6.96	60.3	70.4	5.14	449.7	1050.4	7.34
437.2	312.9	6.97	72.8	82.9	5.13	437.2	1062.9	7.38
424.6	325.5	6.95	85.4	95.5	5.13	424.6	1075.5	7.37
412.1	338.0	6.92	97.9	108.0	5.11	412.1	1088.0	7.35
399.5	350.6	6.89	110.5	120.6	5.11	399.5	1100.6	7.32
386.9	363.2	6.88	123.1	133.2	5.12	386.9	1113.2	7.29
374.4	375.7	6.84	135.6	145.7	5.09	374.4	1125.7	7.29
361.8	388.3	6.87	148.2	158.3	5.07	361.8	1138.3	7.28
349.2	400.9	6.85	160.8	170.9	5.06	349.2	1150.9	7.25
336.7	413.4	6.84	173.3	183.4	5.04	336.7	1163.4	7.26
324.1	426.0	6.82	185.9	196.0	5.03	324.1	1176.0	7.26
311.5	438.6	6.81	198.5	208.6	5.01	311.5	1188.6	7.28
299.0	451.1	6.79	211.0	221.1	5.01	299.0	1201.1	7.31
286.4	463.7	6.78	223.6	233.7	4.96	286.4	1213.7	7.31
273.8	476.3	6.80	236.2	246.3	4.96	273.8	1226.3	7.35
261.3	488.8	6.81	248.7	258.8	4.94	261.3	1238.8	7.38
248.7	501.4	6.79	261.3	271.4	4.92	248.7	1251.4	7.41
236.2	513.9	6.79	273.8	283.9	4.93	236.2	1263.9	7.44
223.6	526.5	6.80	286.4	296.5	4.90	223.6	1276.5	7.45
211.0	539.1	6.80	299.0	309.1	4.91	211.0	1289.1	7.48
198.5	551.6	6.82	311.5	321.6	4.91	198.5	1301.6	7.50
185.9	564.2	6.82	324.1	334.2	4.89	185.9	1314.2	7.51
173.3	576.8	6.82	336.7	346.8	4.91	173.3	1326.8	7.54
160.8	589.3	6.82	349.2	359.3	4.90	160.8	1339.3	7.57
148.2	601.9	6.80	361.8	371.9	4.91	148.2	1351.9	7.60
135.6	614.5	6.78	374.4	384.5	4.91	135.6	1364.5	7.62
123.1	627.0	6.75	386.9	397.0	4.91	123.1	1377.0	7.61
110.5	639.6	6.73	399.5	409.6	4.91	110.5	1389.6	7.63
97.9	652.2	6.74	412.1	422.2	4.93	97.9	1402.2	7.65
85.4	664.7	6.72	424.6	434.7	4.93	85.4	1414.7	7.68
72.8	677.3	6.70	437.2	447.3	4.95	72.8	1427.3	7.68
60.3	689.8	6.68	449.7	459.8	4.94	60.3	1439.8	7.67
47.7	702.4	6.65	462.3	472.4	4.95	47.7	1452.4	7.68
35.1	715.0	6.64	474.9	485.0	4.97	35.1	1465.0	7.69
22.6	727.5	6.64	487.4	497.5	4.98	22.6	1477.5	7.70
10.0	740.1	6.71	500.0	510.1	4.99	10.0	1490.1	7.73

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@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	62.77
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

Frequency Mixer

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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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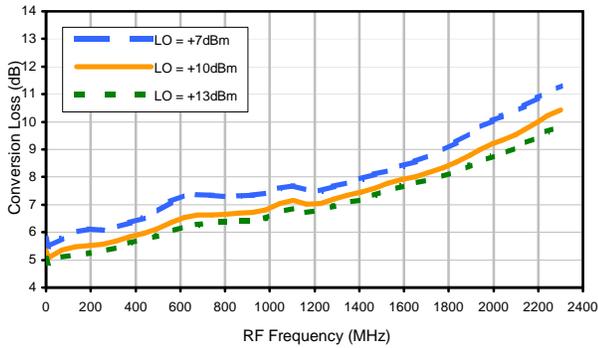


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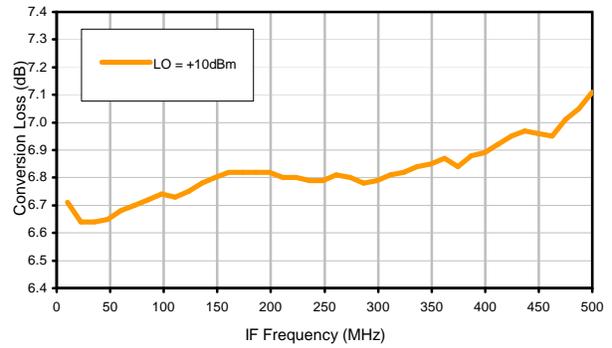


Typical Performance Curves

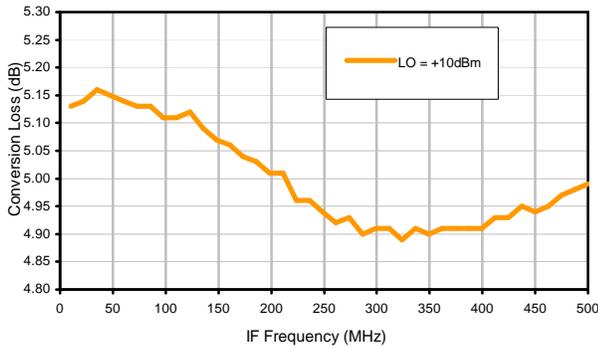
Conversion Loss @ IF=30MHz



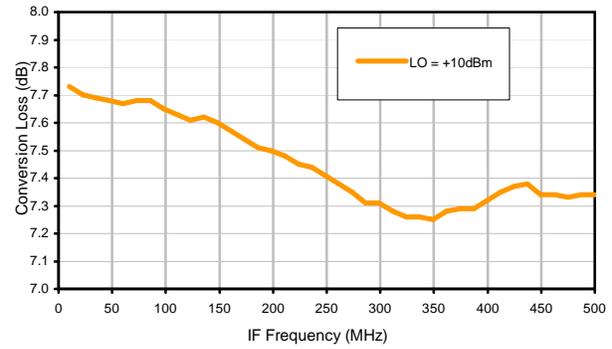
Conversion Loss vs. IF @ RF=750.1MHz



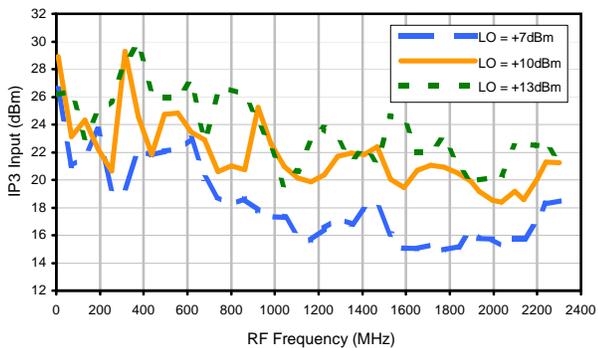
Conversion Loss vs. IF @ RF=10.1MHz



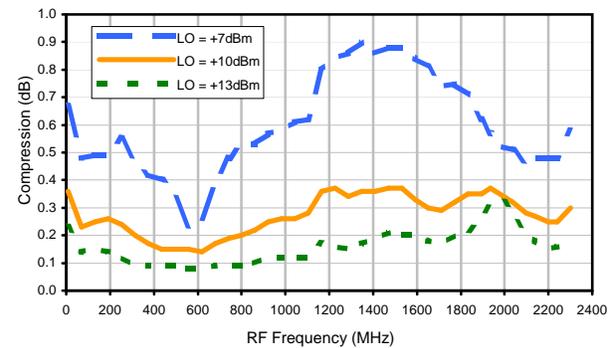
Conversion Loss vs. IF @ RF=1500.1MHz



IP3 Input

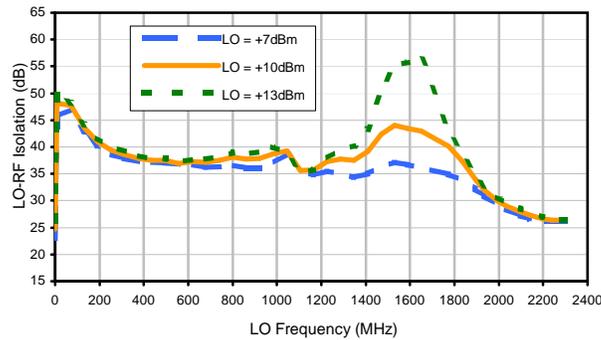


Compression @ RF IN=+5dBm

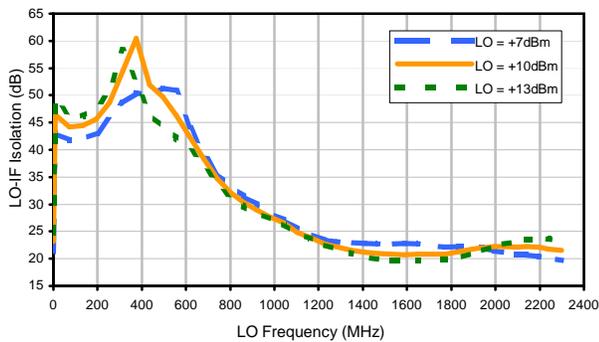


Typical Performance Curves

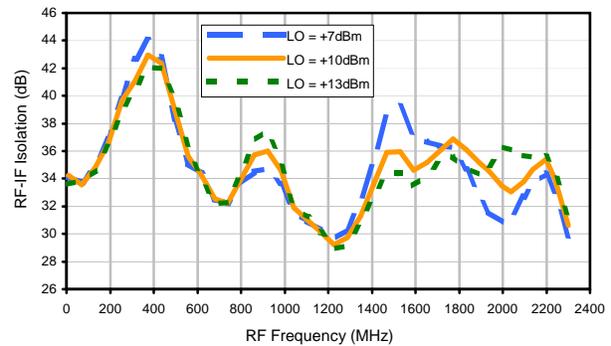
LO-RF Isolation



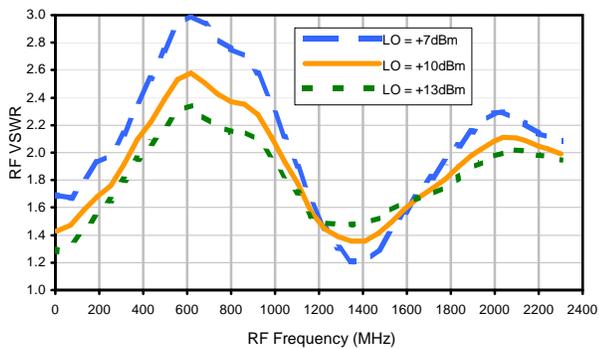
LO-IF Isolation



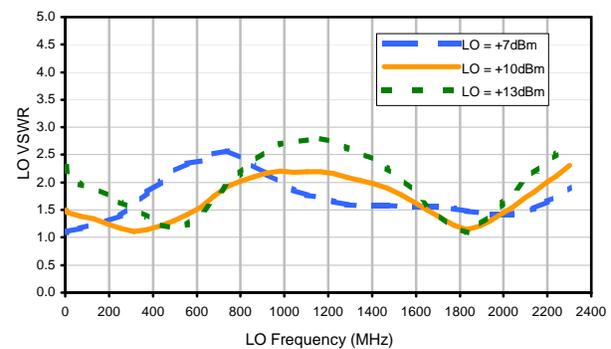
RF-IF Isolation



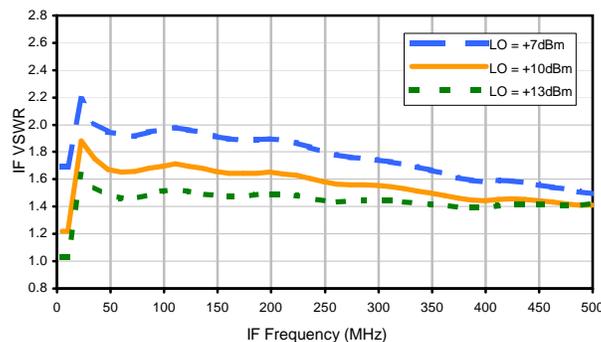
RF VSWR



LO VSWR



IF VSWR



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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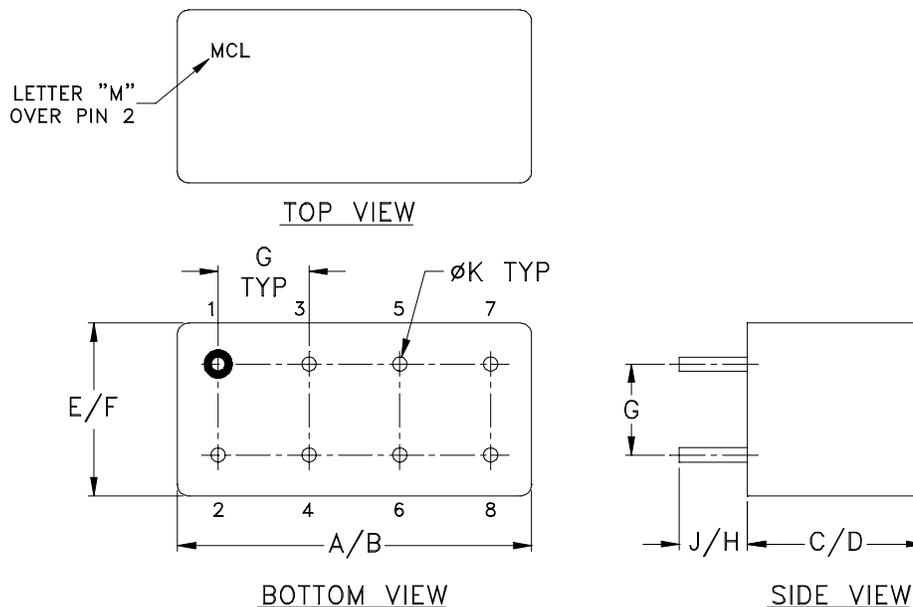


Case Style

A

A01
A04
A05
A06

Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	WT, GRAM
A01			.385 (9.78)	.400 (10.16)							5.2
A04	.770 (19.56)	.800 (20.32)	.200 (5.08)	.210 (5.33)	.370 (9.40)	.400 (10.16)	.200 (5.08)	.20 (5.08)	.14 (3.56)	.031 (.79)	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. $\pm .03$; 3 Pl. $\pm .015$

Notes:

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

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