Non-Catalog Model

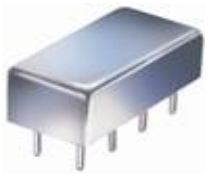
Frequency Mixer SIMA-5

Level 7 (LO Power +7 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 : A06

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		**Min.**	**Typ.**	**Max.**	**Units**
Frequency	**LO** (fL to fU)	2		1500	MHz
	RF (fL to fU)	2		1500	MHz
	IF	0		1000	MHz
Conversion Loss	**mid band**		7.0	8.0	dB
	Total Range			9.0	dB
LO-RF Isolation	**Low Range**	44	65		dB
	Mid Range	23	44		dB
	Upper Range	22	31		dB
LO-IF Isolation	**Low Range**	38	54		dB
	Mid Range	18	30		dB
	Upper Range	11	25		dB
1 dB Comp. Input Power			+1		dBm

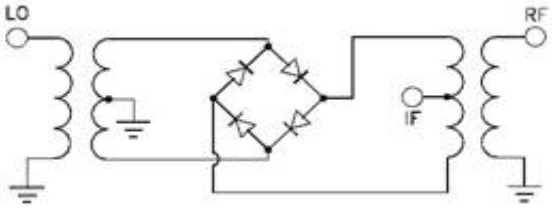
Notes: Low Range = [fL to 10fL] Mid Range = [10fL to fU/2] Upper Range = [fU/2 to fU]
mid band = [2fL to fU/2]

Hermetic metal case

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 SIMA-5

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=30MHz (dB) @LO (dBm)		
		+4	+7	+10
2.0	32.0	7.47	7.18	7.04
4.0	34.0	7.12	6.83	6.69
5.0	35.0	7.06	6.76	6.63
10.0	40.0	6.90	6.63	6.51
50.2	80.2	6.92	6.53	6.38
90.5	120.5	6.93	6.60	6.41
130.7	160.7	7.00	6.62	6.46
170.9	200.9	7.11	6.69	6.51
211.1	241.1	7.18	6.72	6.52
251.4	281.4	7.20	6.77	6.55
291.6	321.6	7.27	6.81	6.57
372.0	402.0	7.33	6.85	6.56
412.3	442.3	7.51	6.91	6.64
452.5	482.5	7.73	7.06	6.75
492.7	522.7	7.75	7.15	6.79
533.0	563.0	7.94	7.23	6.85
573.2	603.2	7.94	7.26	6.86
613.4	643.4	7.67	7.05	6.71
653.6	683.6	7.49	6.90	6.60
734.1	764.1	7.27	6.75	6.42
794.4	824.4	7.11	6.66	6.37
834.7	864.7	7.10	6.65	6.43
895.0	925.0	7.07	6.70	6.57
935.2	965.2	7.04	6.75	6.62
995.6	1025.6	7.16	6.78	6.62
1035.8	1065.8	7.25	6.86	6.68
1096.1	1126.1	7.43	7.00	6.85
1136.4	1166.4	7.52	7.12	6.97
1196.7	1226.7	7.65	7.30	7.19
1236.9	1266.9	7.84	7.46	7.34
1297.3	1327.3	7.90	7.58	7.51
1337.5	1367.5	8.01	7.64	7.51
1397.8	1427.8	8.12	7.74	7.56
1498.4	1528.4	8.53	7.95	7.73
1538.6	1568.6	8.70	8.08	7.81
1599.0	1629.0	9.12	8.42	8.08
1639.2	1669.2	9.41	8.70	8.37
1699.5	1729.5	9.67	9.08	8.78
1739.8	1769.8	9.83	9.26	8.98
1800.1	1830.1	10.13	9.59	9.36

RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm) @LO (dBm)		
		+4	+7	+10
10.0	40.0	18.54	18.77	20.18
50.2	80.2	17.55	16.88	15.27
90.5	120.5	15.04	14.32	15.32
130.7	160.7	12.94	14.71	17.76
170.9	200.9	12.43	14.42	17.29
211.1	241.1	12.53	15.61	18.98
251.4	281.4	13.96	17.70	24.49
291.6	321.6	14.21	18.22	20.53
331.8	361.8	13.61	18.84	16.99
372.0	402.0	15.76	18.20	17.12
412.3	442.3	14.52	16.25	20.32
452.5	482.5	12.23	15.93	21.65
492.7	522.7	12.18	15.27	17.94
533.0	563.0	11.61	12.83	15.31
573.2	603.2	10.20	11.62	12.32
613.4	643.4	9.48	10.32	11.34
653.6	683.6	8.36	10.21	11.01
693.9	723.9	7.99	9.53	10.78
734.1	764.1	7.56	9.11	10.51
794.4	824.4	7.56	9.01	10.57
834.7	864.7	7.50	8.87	10.33
895.0	925.0	8.70	8.96	10.58
935.2	965.2	9.68	10.20	10.88
995.6	1025.6	9.65	10.87	12.28
1035.8	1065.8	9.65	11.27	12.59
1096.1	1126.1	9.56	11.69	13.70
1136.4	1166.4	10.66	12.01	14.47
1196.7	1226.7	12.12	13.58	14.83
1236.9	1266.9	13.18	14.16	16.23
1297.3	1327.3	15.86	16.63	16.27
1337.5	1367.5	16.86	15.81	19.08
1397.8	1427.8	15.34	22.67	17.66
1438.1	1468.1	13.83	21.13	16.36
1498.4	1528.4	13.47	20.50	15.96
1538.6	1568.6	13.90	24.21	17.76
1599.0	1629.0	13.89	24.20	19.26
1639.2	1669.2	15.86	18.98	20.86
1699.5	1729.5	19.25	17.93	16.79
1739.8	1769.8	19.04	20.61	16.97
1800.1	1830.1	19.58	18.85	17.75

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+1dBm (dB) @LO (dBm)		
		+4	+7	+10
10.0	40.0	0.33	0.19	0.12
50.2	80.2	0.35	0.20	0.12
90.5	120.5	0.31	0.19	0.11
130.7	160.7	0.30	0.18	0.11
170.9	200.9	0.26	0.15	0.11
211.1	241.1	0.28	0.23	0.14
251.4	281.4	0.29	0.19	0.16
291.6	321.6	0.35	0.25	0.18
331.8	361.8	0.39	0.30	0.23
372.0	402.0	0.47	0.36	0.25
412.3	442.3	0.56	0.45	0.36
452.5	482.5	0.54	0.49	0.37
492.7	522.7	0.65	0.61	0.49
533.0	563.0	0.70	0.66	0.58
573.2	603.2	0.80	0.75	0.69
613.4	643.4	1.03	0.92	0.80
653.6	683.6	1.12	0.94	0.77
693.9	723.9	1.22	1.00	0.80
734.1	764.1	1.11	0.86	0.68
794.4	824.4	0.82	0.61	0.48
834.7	864.7	0.82	0.61	0.48
895.0	925.0	0.68	0.50	0.40
935.2	965.2	0.55	0.36	0.29
995.6	1025.6	0.49	0.30	0.24
1035.8	1065.8	0.50	0.31	0.25
1096.1	1126.1	0.42	0.24	0.19
1136.4	1166.4	0.34	0.20	0.15
1196.7	1226.7	0.30	0.16	0.12
1236.9	1266.9	0.38	0.17	0.13
1297.3	1327.3	0.32	0.17	0.13
1337.5	1367.5	0.31	0.16	0.11
1397.8	1427.8	0.32	0.17	0.12
1438.1	1468.1	0.36	0.20	0.14
1498.4	1528.4	0.39	0.24	0.17
1538.6	1568.6	0.33	0.22	0.16
1599.0	1629.0	0.26	0.22	0.18
1639.2	1669.2	0.22	0.19	0.18
1699.5	1729.5	0.12	0.09	0.10
1739.8	1769.8	0.09	0.05	0.08
1800.1	1830.1	0.06	0.06	0.08

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Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=750.1MHz (dB) @LO (dBm) +7
740.0	10.1	7.26
721.3	28.8	7.30
702.6	47.5	7.29
683.8	66.3	7.30
665.1	85.0	7.32
646.4	103.7	7.32
627.7	122.4	7.33
609.0	141.1	7.24
590.3	159.8	7.30
571.5	178.6	7.26
552.8	197.3	7.32
534.1	216.0	7.22
515.4	234.7	7.16
496.7	253.4	7.24
477.9	272.2	7.20
459.2	290.9	7.27
440.5	309.6	7.17
421.8	328.3	7.22
403.1	347.0	7.23
384.4	365.7	7.19
365.6	384.5	7.17
346.9	403.2	7.15
328.2	421.9	7.24
309.5	440.6	7.21
290.8	459.3	7.12
272.1	478.0	7.13
253.3	496.8	7.16
234.6	515.5	7.11
215.9	534.2	7.01
197.2	552.9	6.90
178.5	571.6	6.92
159.7	590.4	6.81
141.0	609.1	6.72
122.3	627.8	6.71
103.6	646.5	6.66
84.9	665.2	6.68
66.2	683.9	6.58
47.4	702.7	6.66
28.7	721.4	6.62
10.0	740.1	6.62

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=10.1MHz (dB) @LO (dBm) +7
10.0	20.1	6.54
30.2	40.3	6.52
50.4	60.5	6.62
70.6	80.7	6.65
90.8	100.9	6.67
111.0	121.1	6.70
131.2	141.3	6.66
151.4	161.5	6.77
171.6	181.7	6.79
191.8	201.9	6.79
212.0	222.1	6.79
232.2	242.3	6.84
252.4	262.5	6.91
272.7	282.8	6.92
292.9	303.0	6.93
313.1	323.2	6.95
333.3	343.4	6.96
353.5	363.6	7.01
373.7	383.8	7.03
393.9	404.0	7.04
434.3	444.4	7.09
454.5	464.6	7.17
494.9	505.0	7.10
515.1	525.2	7.20
555.5	565.6	7.22
575.7	585.8	7.25
616.1	626.2	7.25
636.3	646.4	7.24
676.7	686.8	7.22
696.9	707.0	7.27
737.3	747.4	7.37
757.6	767.7	7.40
798.0	808.1	7.51
818.2	828.3	7.56
858.6	868.7	7.70
878.8	888.9	7.81
919.2	929.3	8.10
939.4	949.5	8.25
979.8	989.9	8.66
1000.0	1010.1	8.84

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=1500.1MHz (dB) @LO (dBm) +7
1000.0	500.1	8.91
979.8	520.3	8.96
959.6	540.5	8.93
939.4	560.7	8.94
919.2	580.9	8.89
899.0	601.1	8.81
878.8	621.3	8.82
858.6	641.5	8.88
838.4	661.7	8.78
818.2	681.9	8.73
798.0	702.1	8.67
777.8	722.3	8.59
757.6	742.5	8.57
737.3	762.8	8.44
717.1	783.0	8.37
696.9	803.2	8.24
676.7	823.4	8.12
656.5	843.6	8.04
636.3	863.8	7.97
616.1	884.0	7.94
575.7	924.4	7.93
555.5	944.6	7.96
515.1	985.0	8.00
494.9	1005.2	8.07
454.5	1045.6	8.15
434.3	1065.8	8.23
393.9	1106.2	8.23
373.7	1126.4	8.23
333.3	1166.8	8.22
313.1	1187.0	8.18
272.7	1227.4	8.16
252.4	1247.7	8.15
212.0	1288.1	8.10
191.8	1308.3	8.10
151.4	1348.7	8.09
131.2	1368.9	8.04
90.8	1409.3	8.05
70.6	1429.5	8.04
30.2	1469.9	8.04
10.0	1490.1	8.00

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Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB) @LO (dBm)			LO-IF ISOLATION (dB) @LO (dBm)		
	+4	+7	+10	+4	+7	+10
2.0	66.17	71.44	80.12	71.67	75.64	80.12
4.0	65.57	70.85	78.74	71.47	75.65	79.24
5.0	65.37	70.64	77.71	71.67	75.44	78.61
10.0	64.98	69.77	74.75	71.48	74.07	74.55
50.2	62.87	61.27	60.16	54.02	56.95	60.15
90.5	58.70	56.99	55.91	54.54	57.42	58.93
130.7	55.40	54.29	53.30	55.82	57.17	57.41
170.9	54.16	52.41	51.46	56.30	56.55	55.73
211.1	52.13	51.07	49.81	56.12	54.60	52.92
251.4	51.33	49.91	48.75	54.18	52.05	50.18
291.6	50.69	49.00	47.91	52.03	49.73	48.00
372.0	48.94	47.31	46.11	45.63	44.04	42.71
412.3	49.21	47.31	45.94	44.26	42.46	40.98
452.5	48.83	47.14	45.74	42.74	40.99	39.52
492.7	47.99	46.68	45.49	40.85	39.10	37.75
533.0	46.64	45.82	45.02	38.62	37.18	35.95
573.2	44.96	44.32	43.81	37.46	35.96	34.76
613.4	43.50	42.79	42.16	35.72	34.40	33.30
653.6	42.45	41.59	40.71	34.43	33.19	32.10
734.1	40.73	39.75	38.86	31.65	30.54	29.71
794.4	39.70	38.76	37.88	29.85	28.92	28.25
834.7	38.96	38.04	37.00	28.83	27.89	27.08
895.0	38.12	37.03	36.06	27.22	26.31	25.65
935.2	37.79	36.73	35.57	26.45	25.53	24.80
995.6	37.26	36.23	35.10	25.22	24.27	23.68
1035.8	36.82	35.80	34.83	24.63	23.70	23.21
1096.1	36.47	35.33	34.38	23.59	22.88	22.42
1136.4	36.56	35.39	34.37	23.20	22.59	22.08
1196.7	36.31	35.14	34.19	22.71	22.20	21.75
1236.9	36.32	35.07	34.08	22.53	21.91	21.44
1297.3	36.27	35.08	34.03	22.76	22.02	21.45
1337.5	36.02	34.84	33.75	22.97	22.17	21.47
1397.8	35.51	34.27	33.27	23.42	22.40	21.73
1498.4	34.80	33.51	32.43	24.47	23.12	22.19
1538.6	34.54	33.22	32.13	24.92	23.38	22.35
1599.0	33.93	32.75	31.73	25.33	23.76	22.71
1639.2	33.57	32.51	31.40	25.72	24.02	22.85
1699.5	32.98	32.14	31.14	26.24	24.39	23.15
1739.8	32.55	31.90	31.09	26.63	24.66	23.41
1800.1	31.77	31.47	30.70	27.10	24.99	23.50

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB) @LO (dBm)		
		+4	+7	+10
10.0	40.0	64.18	42.27	37.78
50.2	80.2	36.50	36.44	36.66
90.5	120.5	31.80	31.70	31.54
130.7	160.7	29.18	29.16	29.26
170.9	200.9	27.53	27.51	27.52
211.1	241.1	26.27	26.27	26.36
251.4	281.4	25.50	25.54	25.67
291.6	321.6	25.19	25.30	25.40
331.8	361.8	24.71	24.77	24.86
372.0	402.0	24.19	24.51	24.76
412.3	442.3	24.12	24.63	25.09
452.5	482.5	24.59	25.23	25.74
492.7	522.7	24.92	25.39	25.67
533.0	563.0	23.71	23.87	23.95
573.2	603.2	21.77	21.70	21.76
613.4	643.4	20.13	19.98	20.00
653.6	683.6	19.19	18.97	18.91
693.9	723.9	18.79	18.54	18.39
734.1	764.1	18.74	18.46	18.27
794.4	824.4	18.70	18.53	18.48
834.7	864.7	18.55	18.57	18.52
895.0	925.0	17.97	18.20	18.30
935.2	965.2	17.35	17.52	17.76
995.6	1025.6	16.29	16.39	16.53
1035.8	1065.8	15.72	15.76	15.83
1096.1	1126.1	14.65	14.58	14.48
1136.4	1166.4	14.02	13.79	13.61
1196.7	1226.7	13.12	12.69	12.55
1236.9	1266.9	12.61	12.24	12.04
1297.3	1327.3	11.87	11.52	11.36
1337.5	1367.5	11.58	11.23	11.07
1397.8	1427.8	11.11	10.82	10.63
1438.1	1468.1	10.86	10.63	10.54
1498.4	1528.4	10.57	10.38	10.32
1538.6	1568.6	10.32	10.15	10.13
1599.0	1629.0	9.97	9.81	9.91
1639.2	1669.2	9.71	9.66	9.70
1699.5	1729.5	9.51	9.46	9.55
1739.8	1769.8	9.42	9.44	9.48
1800.1	1830.1	9.24	9.31	9.33

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Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1) @LO (dBm)		
		+4	+7	+10
5.0	35.0	1.27	1.31	1.34
10.0	40.0	1.15	1.20	1.23
50.2	80.2	1.17	1.23	1.28
90.5	120.5	1.15	1.22	1.27
130.7	160.7	1.15	1.21	1.25
170.9	200.9	1.13	1.19	1.24
211.1	241.1	1.12	1.18	1.23
251.4	281.4	1.12	1.17	1.22
291.6	321.6	1.12	1.17	1.22
331.8	361.8	1.12	1.17	1.22
372.0	402.0	1.13	1.18	1.23
412.3	442.3	1.14	1.18	1.22
452.5	482.5	1.17	1.18	1.21
492.7	522.7	1.21	1.21	1.23
533.0	563.0	1.30	1.29	1.29
573.2	603.2	1.44	1.42	1.41
613.4	643.4	1.59	1.57	1.57
653.6	683.6	1.72	1.72	1.72
693.9	723.9	1.86	1.85	1.84
734.1	764.1	1.99	1.98	1.97
794.4	824.4	2.18	2.19	2.17
834.7	864.7	2.28	2.31	2.30
895.0	925.0	2.36	2.44	2.48
935.2	965.2	2.38	2.48	2.55
995.6	1025.6	2.42	2.50	2.55
1035.8	1065.8	2.48	2.54	2.59
1096.1	1126.1	2.53	2.60	2.62
1136.4	1166.4	2.52	2.59	2.62
1196.7	1226.7	2.48	2.55	2.58
1236.9	1266.9	2.43	2.49	2.53
1297.3	1327.3	2.37	2.41	2.44
1337.5	1367.5	2.31	2.34	2.36
1397.8	1427.8	2.30	2.30	2.31
1438.1	1468.1	2.34	2.32	2.32
1498.4	1528.4	2.43	2.38	2.37
1538.6	1568.6	2.52	2.46	2.43
1599.0	1629.0	2.67	2.59	2.53
1639.2	1669.2	2.77	2.69	2.63
1699.5	1729.5	2.94	2.89	2.83
1739.8	1769.8	3.07	3.01	2.95
1800.1	1830.1	3.24	3.18	3.13

LO (MHz)	LO VSWR (:1) @LO (dBm)		
	+4	+7	+10
5.0	1.62	2.40	3.37
10.0	1.57	2.35	3.29
50.2	1.61	2.39	3.42
90.5	1.56	2.35	3.28
130.7	1.61	2.36	3.34
170.9	1.56	2.27	3.14
211.1	1.60	2.31	3.21
251.4	1.63	2.27	3.15
291.6	1.61	2.26	3.12
331.8	1.70	2.34	3.19
372.0	1.72	2.36	3.13
412.3	1.74	2.40	3.22
452.5	1.78	2.42	3.22
492.7	1.76	2.32	3.08
533.0	1.74	2.26	3.00
573.2	1.77	2.27	2.98
613.4	1.79	2.27	2.96
653.6	1.78	2.20	2.87
693.9	1.83	2.24	2.88
734.1	1.87	2.28	2.89
794.4	1.91	2.21	2.77
834.7	1.94	2.19	2.69
895.0	2.01	2.18	2.65
935.2	2.03	2.15	2.58
995.6	2.08	2.14	2.54
1035.8	2.10	2.09	2.44
1096.1	2.09	2.08	2.41
1136.4	2.15	2.04	2.30
1196.7	2.11	1.99	2.20
1236.9	2.11	1.95	2.13
1297.3	2.14	1.89	2.04
1337.5	2.09	1.85	1.96
1397.8	2.11	1.78	1.88
1438.1	2.06	1.73	1.80
1498.4	1.99	1.64	1.73
1538.6	1.93	1.59	1.66
1599.0	1.78	1.49	1.58
1639.2	1.75	1.43	1.52
1699.5	1.64	1.35	1.45
1739.8	1.58	1.30	1.43
1800.1	1.51	1.24	1.41

IF (OUT) (MHz)	IF VSWR @LO=1500.1MHz (:1) @LO (dBm)		
	+4	+7	+10
5.0	1.32	1.16	1.07
10.0	1.33	1.17	1.07
30.2	1.69	1.39	1.27
50.4	1.68	1.42	1.23
70.6	1.69	1.44	1.23
90.8	1.69	1.42	1.25
111.0	1.68	1.40	1.25
131.2	1.67	1.40	1.23
151.4	1.66	1.40	1.21
171.6	1.66	1.39	1.21
191.8	1.65	1.37	1.21
212.0	1.62	1.34	1.19
232.2	1.60	1.34	1.18
252.4	1.59	1.33	1.16
272.7	1.55	1.30	1.14
292.9	1.52	1.27	1.12
313.1	1.51	1.26	1.12
333.3	1.49	1.25	1.11
353.5	1.47	1.23	1.09
373.7	1.46	1.22	1.09
393.9	1.44	1.21	1.09
434.3	1.41	1.21	1.08
454.5	1.42	1.21	1.09
494.9	1.36	1.18	1.09
515.1	1.37	1.20	1.11
555.5	1.34	1.18	1.11
575.7	1.31	1.16	1.11
616.1	1.29	1.18	1.16
636.3	1.28	1.16	1.14
676.7	1.20	1.14	1.18
696.9	1.16	1.15	1.21
737.3	1.16	1.17	1.24
757.6	1.10	1.15	1.25
798.0	1.09	1.23	1.35
818.2	1.12	1.26	1.39
858.6	1.11	1.28	1.41
878.8	1.20	1.38	1.52
919.2	1.30	1.49	1.63
939.4	1.32	1.52	1.65
979.8	1.53	1.73	1.88
1000.0	1.62	1.84	1.99

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Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	7	27	18	20	24	35	34	47	46	65
1	-	16	+0	45	27	41	19	41	46	40	52	56
2	>100	70	51	57	53	77	53	60	59	59	68	71
3	>100	>79	70	73	59	76	>79	>79	60	75	75	74
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: 750.1 MHz; -14.00 dBm.
LO IN: 780.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -20.83 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	17	38	29	32	35	48	48	67	64	85
1	-	16	+0	40	27	41	20	48	53	46	58	65
2	89	59	42	52	43	64	47	52	53	56	64	71
3	>100	59	51	57	39	62	67	62	44	58	59	59
4	>100	84	69	82	57	61	57	72	58	61	62	63
5	>100	76	60	76	67	72	54	69	73	70	56	75
6	>100	84	81	78	85	84	69	71	67	84	68	71
7	>100	86	>89	>89	78	89	76	85	68	85	84	81
8	>100	>89	>89	>89	>89	>89	>89	>89	82	85	81	>89
9	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	81	>89
10	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions:
RF IN: 750.1 MHz; -4.00 dBm.
LO IN: 780.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -10.9 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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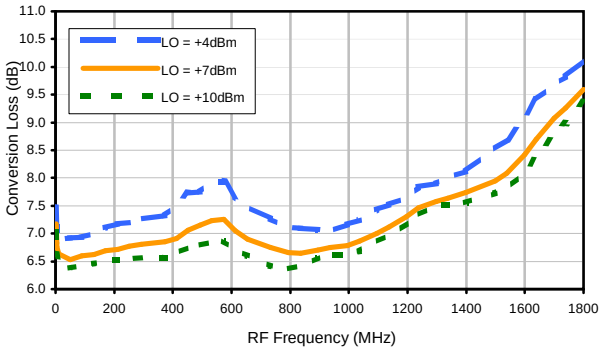
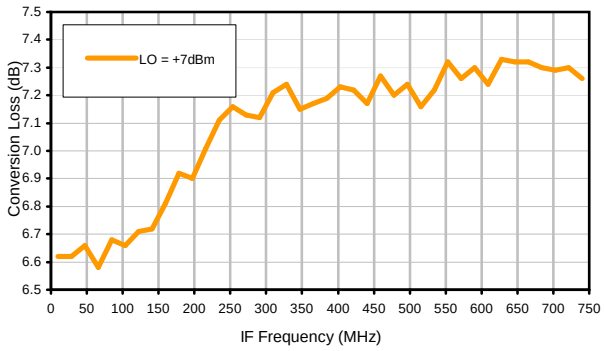
Typical Performance Curves

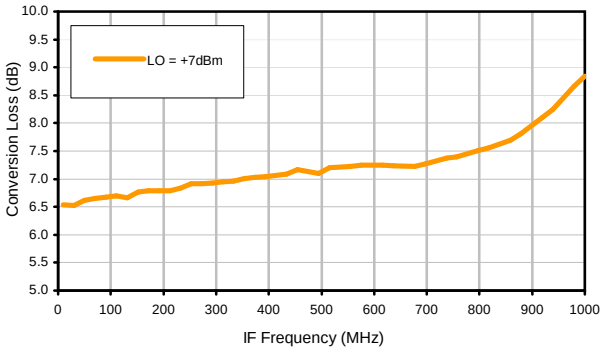
Conversion Loss @ IF=30MHz



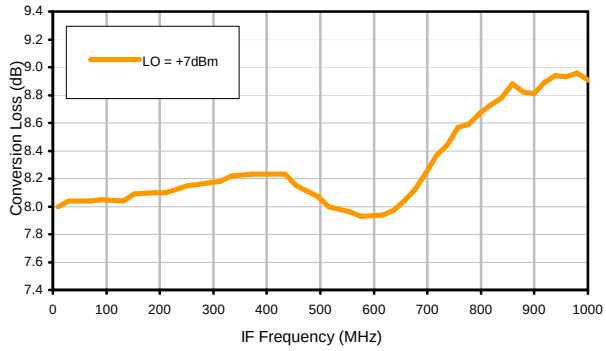
Conversion Loss vs. IF @ RF=750.1MHz



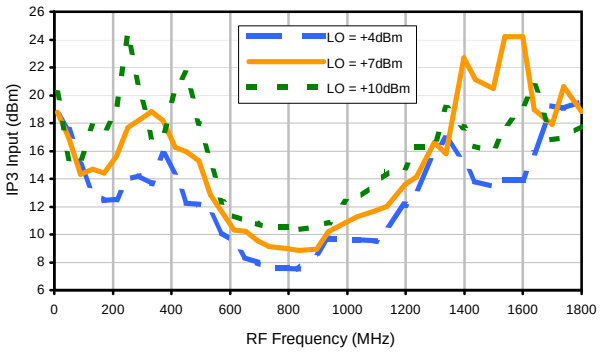
Conversion Loss vs. IF @ RF=10.1MHz



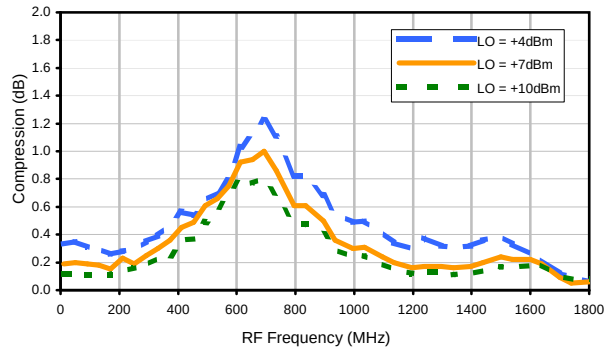
Conversion Loss vs. IF @ RF=1500.1MHz



IP3 Input



Compression @ RF IN=+1dBm



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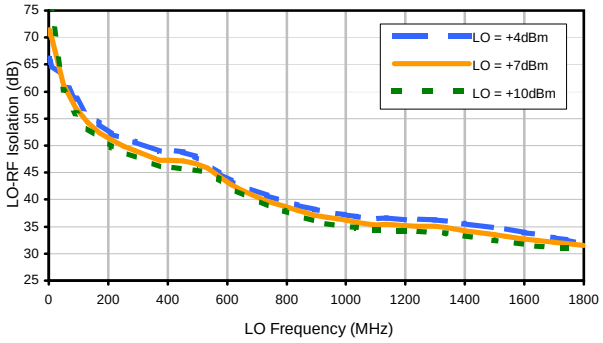
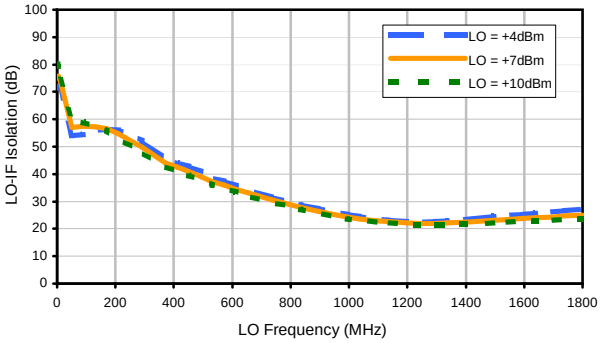
Typical Performance Curves

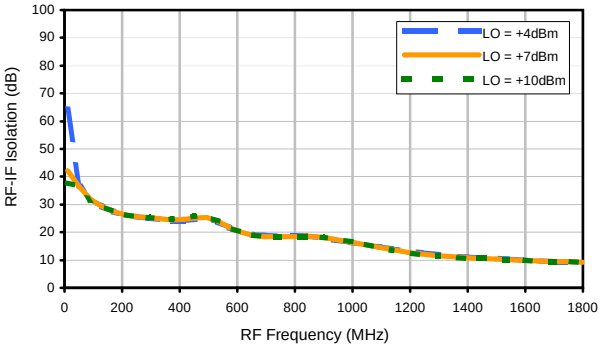
LO-RF Isolation



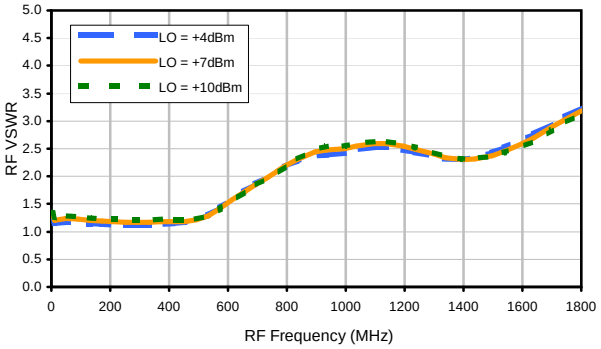
LO-IF Isolation



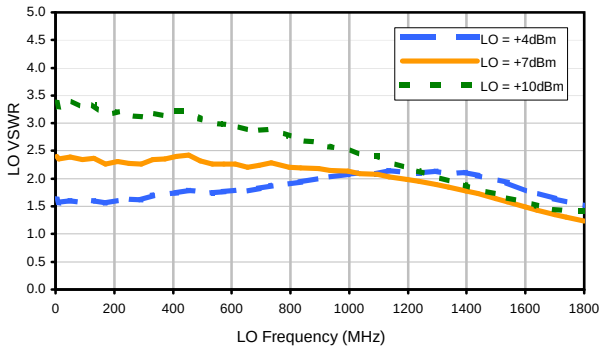
RF-IF Isolation



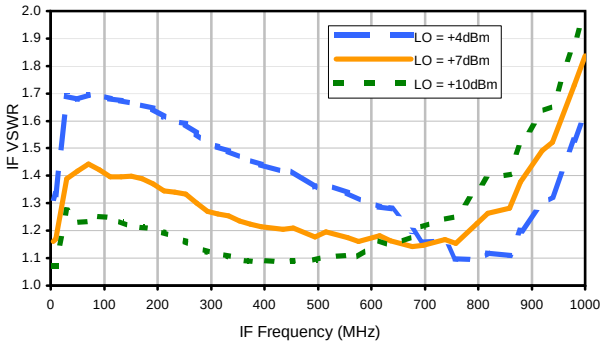
RF VSWR



LO VSWR



IF VSWR



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Harmonics Tables

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	7	27	18	20	24	35	34	47	46	65
1	-	16	+0	45	27	41	19	41	46	40	52	56
2	>100	70	51	57	53	77	53	60	59	59	68	71
3	>100	>79	70	73	59	76	>79	>79	60	75	75	74
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: 750.1 MHz; -14.00 dBm.
LO IN: 780.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -20.83 dBm

RF HARMONICS ORDER	(-dBm)	(-dBc)										
0	-	-	17	38	29	32	35	48	48	67	64	85
1	-	16	+0	40	27	41	20	48	53	46	58	65
2	89	59	42	52	43	64	47	52	53	56	64	71
3	>100	59	51	57	39	62	67	62	44	58	59	59
4	>100	84	69	82	57	61	57	72	58	61	62	63
5	>100	76	60	76	67	72	54	69	73	70	56	75
6	>100	84	81	78	85	84	69	71	67	84	68	71
7	>100	86	>89	>89	78	89	76	85	68	85	84	81
8	>100	>89	>89	>89	>89	>89	>89	>89	82	85	81	>89
9	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	81	>89
10	>100	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89	>89
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions:
RF IN: 750.1 MHz; -4.00 dBm.
LO IN: 780.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -10.9 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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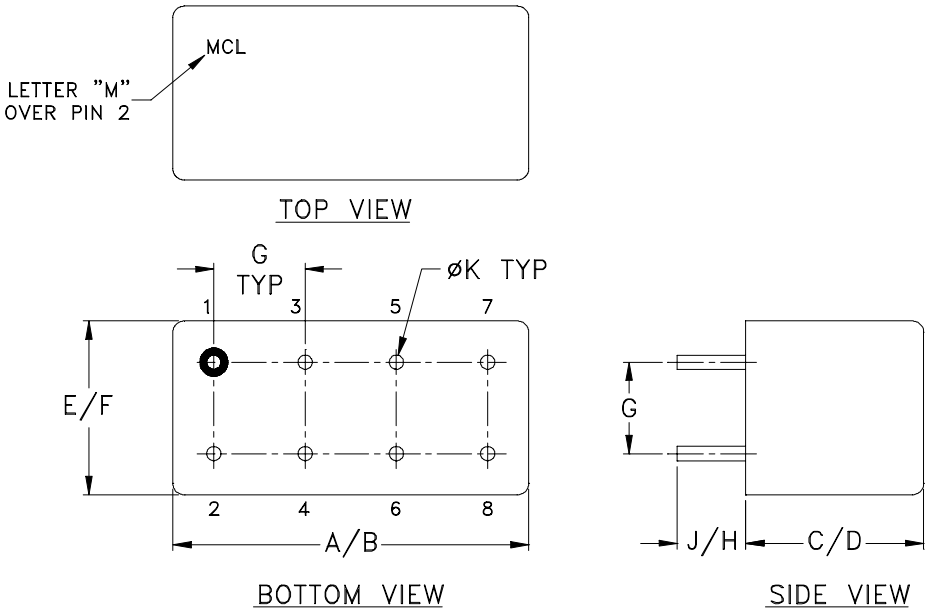
Case Style A

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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