

Non-Catalog Model

Frequency Mixer

Level 7 (LO Power +7 dBm)

SRA-149

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 : A06

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency	LO (fL to fU)	5		500	MHz
	RF (fL to fU)	5		500	MHz
	IF	0		500	MHz
Conversion Loss	mid band		5.6	6.5	dB
	Total Range			8.0	dB
LO-RF Isolation	Low Range	50	60		dB
	Mid Range	45	55		dB
	Upper Range	40	53		dB
LO-IF Isolation	Low Range	40	50		dB
	Mid Range	25	35		dB
	Upper Range	24	30		dB
1 dB Comp. Input Power			+1		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]

Blue bead pin 4

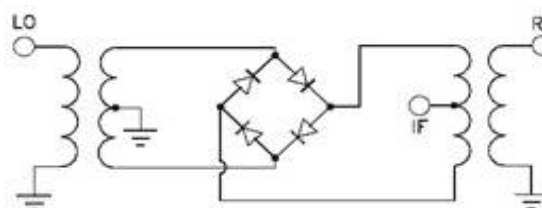
Hermetically sealed

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	2
IF	5, 6 ^
GROUND	1, 3, 4, 7

^ - pins must be connected together externally

Electrical Schematics



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	+4	+7	+10			
5.0	35.0	5.73	5.49	5.37	10.1	40.1	20.53	19.13	22.04	10.1	40.1	1.12	0.87	0.68
10.0	40.0	5.72	5.44	5.30	30.3	60.3	16.55	19.44	21.26	30.3	60.3	1.11	0.85	0.65
30.3	60.3	5.88	5.61	5.47	50.5	80.5	17.88	20.74	21.62	50.5	80.5	1.10	0.83	0.63
50.5	80.5	5.86	5.61	5.49	70.7	100.7	19.10	21.54	20.59	70.7	100.7	1.05	0.78	0.59
70.7	100.7	5.84	5.62	5.50	90.9	120.9	19.58	20.42	24.47	90.9	120.9	1.04	0.76	0.57
90.9	120.9	5.87	5.65	5.54	111.1	141.1	19.18	21.00	26.21	111.1	141.1	1.07	0.79	0.60
111.1	141.1	5.89	5.69	5.58	131.3	161.3	18.48	22.16	23.04	131.3	161.3	1.00	0.73	0.55
131.3	161.3	5.88	5.68	5.58	151.5	181.5	19.70	23.32	20.31	151.5	181.5	0.97	0.70	0.53
151.5	181.5	5.88	5.69	5.58	171.7	201.7	21.35	26.17	24.87	171.7	201.7	0.94	0.69	0.53
171.7	201.7	5.85	5.66	5.56	191.9	221.9	17.94	21.57	18.32	191.9	221.9	0.95	0.68	0.53
191.9	221.9	5.94	5.75	5.64	212.1	242.1	16.30	16.82	20.60	212.1	242.1	0.95	0.71	0.56
212.1	242.1	5.94	5.75	5.63	232.3	262.3	17.48	15.26	16.18	232.3	262.3	0.87	0.64	0.50
232.3	262.3	5.92	5.75	5.64	252.5	282.5	17.02	13.95	14.32	252.5	282.5	0.87	0.66	0.51
252.5	282.5	5.93	5.75	5.65	272.8	302.8	17.47	21.30	23.14	272.8	302.8	0.87	0.66	0.51
272.8	302.8	5.98	5.77	5.66	293.0	323.0	11.62	12.80	19.29	293.0	323.0	0.83	0.63	0.51
293.0	323.0	6.12	5.92	5.78	313.2	343.2	13.94	12.57	13.38	313.2	343.2	0.79	0.58	0.47
313.2	343.2	6.16	5.96	5.82	333.4	363.4	16.27	21.93	22.75	333.4	363.4	0.80	0.58	0.47
333.4	363.4	6.17	5.97	5.83	353.6	383.6	12.24	18.59	22.16	353.6	383.6	0.90	0.64	0.50
353.6	383.6	6.20	5.97	5.83	373.8	403.8	11.04	13.34	16.52	373.8	403.8	0.97	0.72	0.54
373.8	403.8	6.28	6.05	5.93	394.0	424.0	18.89	13.81	14.15	394.0	424.0	1.06	0.80	0.61
394.0	424.0	6.42	6.20	6.05	434.4	464.4	9.46	9.93	12.31	434.4	464.4	1.18	0.91	0.74
434.4	464.4	6.52	6.35	6.23	454.6	484.6	9.19	9.08	10.11	454.6	484.6	1.27	0.99	0.82
454.6	484.6	6.62	6.47	6.36	495.0	525.0	9.67	9.99	11.17	495.0	525.0	1.63	1.26	1.07
495.0	525.0	6.78	6.60	6.47	515.2	545.2	11.34	12.97	16.20	515.2	545.2	1.77	1.36	1.15
515.2	545.2	6.79	6.59	6.46	555.6	585.6	14.94	17.44	15.82	555.6	585.6	2.02	1.56	1.36
555.6	585.6	6.98	6.71	6.54	575.8	605.8	11.60	18.85	15.46	575.8	605.8	2.21	1.78	1.52
575.8	605.8	7.14	6.79	6.57	616.2	646.2	5.51	11.18	17.93	616.2	646.2	2.34	2.01	1.71
616.2	646.2	7.56	7.04	6.70	636.4	666.4	4.49	9.95	21.93	636.4	666.4	2.34	2.02	1.77
636.4	666.4	7.74	7.18	6.78	676.8	706.8	3.38	7.27	15.54	676.8	706.8	2.31	2.06	1.85
676.8	706.8	8.11	7.48	6.98	697.0	727.0	3.54	7.42	14.62	697.0	727.0	2.23	2.05	1.83
697.0	727.0	8.31	7.65	7.14	737.4	767.4	5.14	8.93	5.64	737.4	767.4	1.88	1.82	1.64
737.4	767.4	8.31	7.65	7.14	757.7	787.7	5.02	7.29	4.66	757.7	787.7	1.71	1.71	1.62
757.7	787.7	9.08	8.30	7.67	798.1	828.1	4.23	7.05	12.44	798.1	828.1	1.32	1.32	1.41
798.1	828.1	9.74	8.94	8.17	818.3	848.3	4.40	9.06	9.65	818.3	848.3	1.22	1.24	1.32
818.3	848.3	9.91	9.06	8.27	858.7	888.7	7.32	10.78	10.73	858.7	888.7	1.30	1.35	1.20
858.7	888.7	9.92	8.93	8.32	878.9	908.9	11.21	11.51	11.92	878.9	908.9	1.38	1.36	1.18
878.9	908.9	9.97	8.97	8.39	919.3	949.3	10.78	12.00	13.38	919.3	949.3	1.46	1.25	1.07
919.3	949.3	9.96	9.13	8.69	939.5	969.5	10.52	12.49	14.09	939.5	969.5	1.37	1.13	0.98
939.5	969.5	9.99	9.29	8.91	979.9	1009.9	12.27	13.62	15.11	979.9	1009.9	0.91	0.71	0.66
979.9	1009.9	10.59	10.05	9.69	1000.1	1030.1	13.59	14.22	15.71	1000.1	1030.1	0.72	0.52	0.47
1000.1	1030.1	10.84	10.37	10.06										

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=250.1MHz (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)=500.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+7			+7			+7
240.0	10.1	5.85	10.0	20.1	5.58	490.0	10.1	6.62
234.1	16.0	5.83	22.3	32.4	5.65	477.7	22.4	6.54
228.2	21.9	5.80	34.6	44.7	5.63	465.4	34.7	6.45
222.3	27.8	5.78	46.9	57.0	5.65	453.1	47.0	6.35
216.4	33.7	5.76	59.2	69.3	5.65	440.8	59.3	6.28
210.5	39.6	5.73	71.5	81.6	5.64	428.5	71.6	6.23
204.6	45.5	5.71	83.8	93.9	5.65	416.2	83.9	6.22
198.7	51.4	5.70	96.2	106.3	5.68	403.8	96.3	6.23
192.8	57.3	5.69	108.5	118.6	5.72	391.5	108.6	6.26
186.9	63.2	5.67	120.8	130.9	5.75	379.2	120.9	6.24
181.0	69.1	5.65	133.1	143.2	5.76	366.9	133.2	6.23
175.1	75.0	5.63	145.4	155.5	5.77	354.6	145.5	6.23
169.2	80.9	5.62	157.7	167.8	5.75	342.3	157.8	6.20
163.3	86.8	5.62	170.0	180.1	5.75	330.0	170.1	6.21
157.4	92.7	5.62	182.3	192.4	5.78	317.7	182.4	6.22
151.5	98.6	5.61	194.6	204.7	5.82	305.4	194.7	6.24
145.6	104.5	5.61	206.9	217.0	5.87	293.1	207.0	6.26
139.7	110.4	5.62	219.2	229.3	5.89	280.8	219.3	6.28
133.8	116.3	5.62	231.5	241.6	5.90	268.5	231.6	6.29
127.9	122.2	5.62	243.8	253.9	5.91	256.2	243.9	6.26
122.1	128.0	5.63	256.2	266.3	5.92	243.8	256.3	6.27
116.2	133.9	5.65	268.5	278.6	5.91	231.5	268.6	6.28
110.3	139.8	5.66	280.8	290.9	5.90	219.2	280.9	6.33
104.4	145.7	5.67	293.1	303.2	5.93	206.9	293.2	6.37
98.5	151.6	5.68	305.4	315.5	5.99	194.6	305.5	6.41
92.6	157.5	5.67	317.7	327.8	6.02	182.3	317.8	6.44
86.7	163.4	5.66	330.0	340.1	6.03	170.0	330.1	6.45
80.8	169.3	5.66	342.3	352.4	6.04	157.7	342.4	6.43
74.9	175.2	5.67	354.6	364.7	6.06	145.4	354.7	6.42
69.0	181.1	5.68	366.9	377.0	6.10	133.1	367.0	6.42
63.1	187.0	5.68	379.2	389.3	6.16	120.8	379.3	6.45
57.2	192.9	5.68	391.5	401.6	6.27	108.5	391.6	6.50
51.3	198.8	5.68	403.8	413.9	6.38	96.2	403.9	6.49
45.4	204.7	5.68	416.2	426.3	6.46	83.8	416.3	6.50
39.5	210.6	5.68	428.5	438.6	6.51	71.5	428.6	6.51
33.6	216.5	5.68	440.8	450.9	6.52	59.2	440.9	6.53
27.7	222.4	5.69	453.1	463.2	6.51	46.9	453.2	6.54
21.8	228.3	5.70	465.4	475.5	6.47	34.6	465.5	6.54
15.9	234.2	5.70	477.7	487.8	6.44	22.3	477.8	6.60
10.0	240.1	5.70	490.0	500.1	6.37	10.0	490.1	6.59

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+4	+7	+10	+4	+7	+10
5.0	84.38	86.28	88.18	59.18	60.08	60.09
10.0	80.85	82.65	83.15	53.94	55.47	56.58
30.3	69.26	71.10	72.56	50.95	53.02	54.92
50.5	64.52	66.35	68.76	46.99	49.35	51.52
70.7	61.39	63.86	66.88	44.80	47.28	49.31
90.9	59.37	62.43	66.07	43.33	45.73	47.71
111.1	57.61	60.73	64.15	41.93	44.20	46.15
131.3	56.01	58.90	62.26	40.63	42.80	44.73
151.5	54.79	57.57	61.03	39.37	41.45	43.43
171.7	54.12	56.94	60.21	38.39	40.56	42.62
191.9	53.42	56.40	59.99	37.43	39.56	41.46
212.1	52.65	55.54	58.88	36.52	38.51	40.46
232.3	52.01	54.66	57.64	35.73	37.81	39.66
252.5	51.49	54.41	57.55	34.85	36.88	38.99
272.8	50.65	53.18	56.01	34.36	36.22	37.82
293.0	49.98	52.71	56.15	33.95	36.12	37.86
313.2	49.53	52.36	55.41	33.07	35.22	37.44
333.4	48.90	51.81	55.13	32.91	34.55	36.33
353.6	48.12	50.27	52.54	32.88	34.35	35.66
373.8	47.87	49.62	51.52	33.14	34.64	35.67
394.0	48.22	49.92	51.76	33.01	34.81	35.80
434.4	46.85	48.83	50.07	31.56	33.33	34.83
454.6	45.61	47.14	48.24	31.41	32.74	34.15
495.0	44.46	45.75	46.77	31.64	32.46	33.17
515.2	43.48	44.68	46.03	32.32	33.25	33.91
555.6	43.17	45.28	47.47	33.16	34.24	34.81
575.8	44.03	46.40	48.78	32.53	33.18	33.39
616.2	42.54	44.42	46.21	31.04	30.67	30.13
636.4	41.63	43.45	45.18	30.88	29.76	28.71
676.8	41.16	42.97	44.47	30.43	28.34	26.16
697.0	40.65	42.29	43.41	30.18	28.28	25.64
757.7	39.63	40.99	41.54	28.88	27.58	24.98
798.1	37.83	38.74	39.35	27.31	26.95	25.24
818.3	36.88	37.55	38.32	26.31	26.32	25.14
858.7	34.94	35.33	36.06	23.99	23.88	22.46
878.9	33.94	34.32	35.03	22.73	22.23	20.64
919.3	32.41	32.79	33.34	20.19	19.32	18.01
939.5	31.73	32.09	32.57	18.89	18.00	16.90
979.9	30.50	30.83	31.27	16.56	15.84	14.98
1000.1	29.97	30.27	30.69	15.78	15.19	14.44

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+4	+7	+10
10.1	40.1	56.97	49.74	47.28
30.3	60.3	62.27	52.06	48.88
50.5	80.5	64.09	54.67	51.01
70.7	100.7	66.26	57.63	53.00
90.9	120.9	68.87	60.23	54.80
111.1	141.1	64.89	63.54	57.47
131.3	161.3	64.84	62.44	58.46
151.5	181.5	64.43	59.57	55.03
171.7	201.7	61.58	59.03	56.00
191.9	221.9	57.25	56.31	55.85
212.1	242.1	55.09	52.65	50.78
232.3	262.3	55.00	52.51	50.95
252.5	282.5	55.37	52.99	51.38
272.8	302.8	56.14	54.39	53.14
293.0	323.0	55.31	56.08	55.96
313.2	343.2	52.21	52.50	52.97
333.4	363.4	48.50	47.96	47.45
353.6	383.6	45.55	44.26	43.13
373.8	403.8	43.14	41.76	40.83
394.0	424.0	42.04	40.60	39.65
434.4	464.4	40.96	39.33	38.37
454.6	484.6	41.33	39.39	38.08
495.0	525.0	44.00	41.92	40.37
515.2	545.2	44.37	42.44	41.23
555.6	585.6	44.99	43.86	43.36
575.8	605.8	46.52	44.61	43.66
616.2	646.2	51.67	51.99	48.11
636.4	666.4	49.32	59.93	64.36
676.8	706.8	40.24	42.06	41.90
697.0	727.0	36.81	37.89	37.36
737.4	767.4	31.75	32.08	31.30
757.7	787.7	30.04	30.50	30.24
798.1	828.1	27.67	28.21	28.54
818.3	848.3	26.85	27.28	27.29
858.7	888.7	25.37	25.41	24.95
878.9	908.9	24.63	24.32	23.88
919.3	949.3	22.96	22.45	22.12
939.5	969.5	22.13	21.66	21.43
979.9	1009.9	20.93	20.51	20.16
1000.1	1030.1	20.46	19.96	19.57

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=500.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+4	+7	+10		+4	+7	+10		+4	+7	+10
5.0	35.0	1.20	1.20	1.21	5.0	1.76	2.81	4.41	5.0	1.50	1.38	1.30
10.1	40.1	1.15	1.08	1.06	10.1	1.89	2.77	3.92	10.0	2.23	2.04	1.88
30.3	60.3	1.04	1.05	1.11	30.3	1.86	2.71	3.82	22.6	2.24	2.06	1.89
50.5	80.5	1.02	1.06	1.11	50.5	1.81	2.60	3.62	35.1	2.25	2.07	1.90
70.7	100.7	1.01	1.09	1.14	70.7	1.83	2.63	3.67	47.7	2.26	2.08	1.91
90.9	120.9	1.03	1.10	1.16	90.9	1.90	2.77	3.86	60.3	2.26	2.08	1.92
111.1	141.1	1.05	1.12	1.17	111.1	1.89	2.73	3.81	72.8	2.26	2.08	1.91
131.3	161.3	1.07	1.15	1.20	131.3	1.84	2.62	3.61	85.4	2.25	2.07	1.90
151.5	181.5	1.08	1.15	1.20	151.5	1.85	2.62	3.60	97.9	2.25	2.07	1.90
171.7	201.7	1.10	1.17	1.22	171.7	1.93	2.76	3.79	110.5	2.26	2.08	1.92
191.9	221.9	1.12	1.19	1.24	191.9	1.99	2.85	3.90	123.1	2.26	2.08	1.92
212.1	242.1	1.15	1.23	1.29	212.1	1.97	2.78	3.79	135.6	2.25	2.08	1.92
232.3	262.3	1.17	1.25	1.31	232.3	1.96	2.74	3.70	148.2	2.25	2.08	1.92
252.5	282.5	1.19	1.27	1.32	252.5	2.03	2.84	3.84	160.8	2.25	2.08	1.93
272.8	302.8	1.23	1.32	1.38	272.8	2.14	3.01	4.07	173.3	2.25	2.08	1.93
293.0	323.0	1.23	1.31	1.38	293.0	2.18	3.04	4.08	185.9	2.26	2.10	1.94
313.2	343.2	1.25	1.31	1.37	313.2	2.17	2.99	3.98	198.5	2.28	2.12	1.97
333.4	363.4	1.31	1.38	1.43	333.4	2.19	3.00	3.99	211.0	2.29	2.13	1.98
353.6	383.6	1.38	1.48	1.54	353.6	2.28	3.13	4.14	223.6	2.28	2.13	1.98
373.8	403.8	1.46	1.58	1.66	373.8	2.39	3.26	4.29	236.2	2.27	2.12	1.98
394.0	424.0	1.46	1.59	1.69	394.0	2.44	3.29	4.30	248.7	2.28	2.13	1.99
434.4	464.4	1.51	1.61	1.70	434.4	2.47	3.31	4.29	261.3	2.29	2.14	2.00
454.6	484.6	1.56	1.64	1.71	454.6	2.59	3.47	4.47	273.8	2.30	2.15	2.02
495.0	525.0	1.57	1.66	1.72	495.0	2.71	3.57	4.57	286.4	2.33	2.18	2.05
515.2	545.2	1.58	1.66	1.72	515.2	2.69	3.50	4.45	299.0	2.33	2.19	2.06
555.6	585.6	1.52	1.59	1.63	555.6	2.86	3.67	4.64	311.5	2.32	2.18	2.05
575.8	605.8	1.44	1.52	1.57	575.8	2.99	3.82	4.78	324.1	2.29	2.16	2.04
616.2	646.2	1.35	1.43	1.50	616.2	3.12	3.90	4.79	336.7	2.28	2.15	2.04
636.4	666.4	1.36	1.43	1.51	636.4	3.20	3.99	4.87	349.2	2.29	2.16	2.04
676.8	706.8	1.52	1.55	1.62	676.8	3.45	4.30	5.19	361.8	2.31	2.18	2.07
697.0	727.0	1.68	1.69	1.74	697.0	3.49	4.33	5.22	374.4	2.33	2.21	2.10
737.4	767.4	2.17	2.15	2.18	737.4	3.56	4.38	5.25	386.9	2.36	2.23	2.12
757.7	787.7	2.46	2.42	2.42	757.7	3.67	4.50	5.38	399.5	2.36	2.23	2.13
798.1	828.1	3.07	2.98	2.97	798.1	3.75	4.53	5.39	412.1	2.35	2.23	2.12
818.3	848.3	3.38	3.29	3.28	818.3	3.75	4.50	5.34	424.6	2.34	2.22	2.11
858.7	888.7	3.75	3.66	3.62	858.7	3.84	4.56	5.39	437.2	2.34	2.22	2.11
878.9	908.9	3.90	3.81	3.76	878.9	3.87	4.56	5.34	449.7	2.36	2.23	2.13
919.3	949.3	4.29	4.20	4.12	919.3	3.79	4.38	5.09	462.3	2.38	2.25	2.15
939.5	969.5	4.38	4.31	4.23	939.5	3.80	4.38	5.09	474.9	2.40	2.27	2.16
979.9	1009.9	4.68	4.63	4.57	979.9	3.95	4.51	5.17	487.4	2.41	2.28	2.18
1000.1	1030.1	4.82	4.80	4.77	1000.1	4.01	4.54	5.16	500.0	2.44	2.43	2.41

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	9	34	14	35	17	59	24	47	25	41
1	-	48	+0	52	12	40	14	35	36	48	45	48
2	>100	70	53	67	53	68	51	78	54	>80	59	73
3	>100	76	60	73	63	75	57	77	60	75	77	>80
4	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
5	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
6	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
7	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
8	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
9	>100	>80	>80	>80	>80	>80	>80	>80	>80	67	>80	>80
10	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	71	>80
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 250.1 MHz; -14.00 dBm.
LO IN: 280.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -19.88 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	20	46	26	45	29	75	36	59	39	55
1	-	46	+0	53	12	40	16	39	37	56	45	57
2	93	67	45	64	44	66	43	86	46	73	52	72
3	>100	60	42	67	47	68	40	62	38	56	60	64
4	>100	82	83	85	66	82	61	81	58	79	66	88
5	>100	78	63	69	61	71	57	71	56	71	59	79
6	>100	89	72	87	81	86	82	85	75	84	68	>90
7	>100	>90	76	>90	71	82	75	80	73	83	68	80
8	>100	>90	>90	>90	79	>90	80	>90	>90	>90	>90	90
9	>100	>90	>90	>90	84	>90	80	>90	83	70	87	>90
10	>100	>90	>90	>90	>90	>90	>90	>90	>90	>90	75	>90
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 250.1 MHz; -4.00 dBm.
LO IN: 280.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -9.97 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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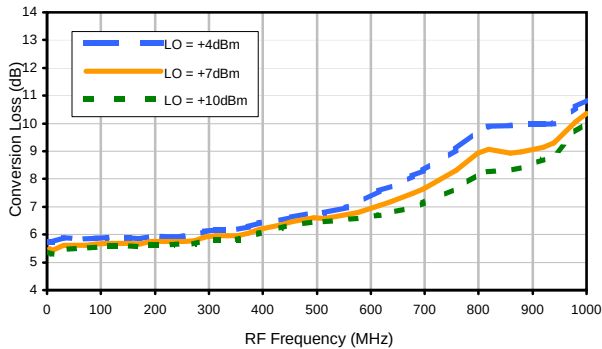
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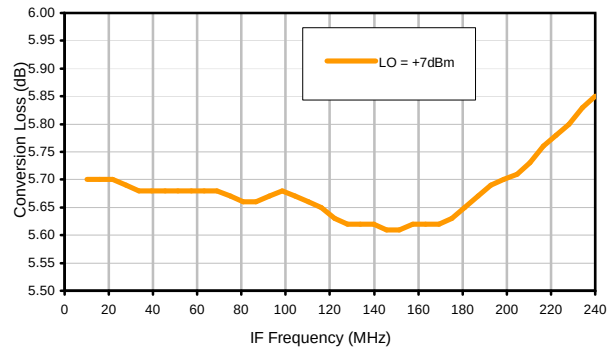


Typical Performance Curves

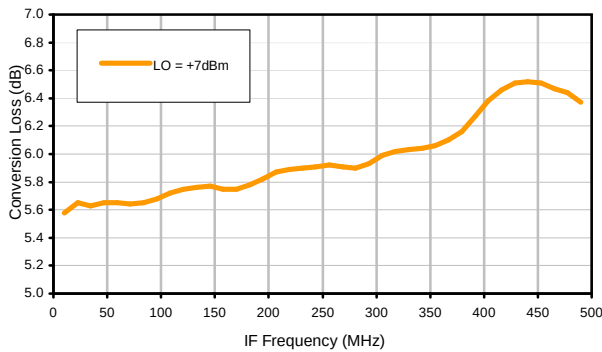
Conversion Loss @ IF=30MHz



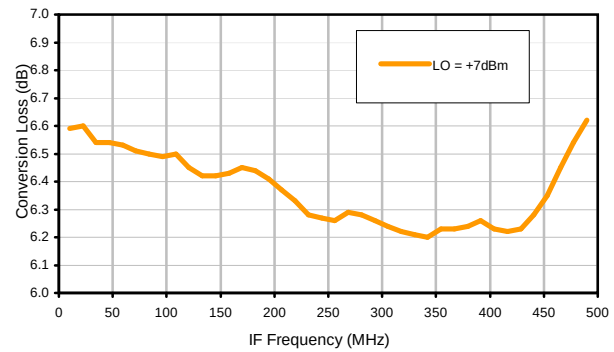
Conversion Loss vs. IF @ RF=250.1MHz



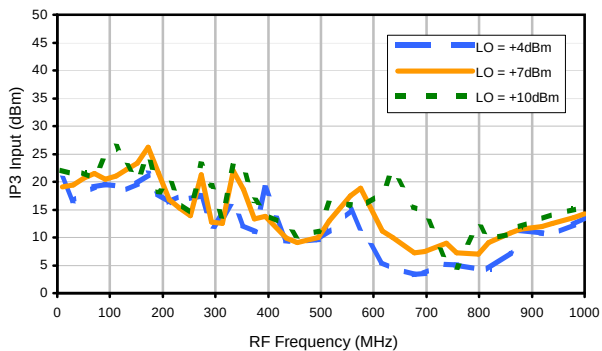
Conversion Loss vs. IF @ RF=10.1MHz



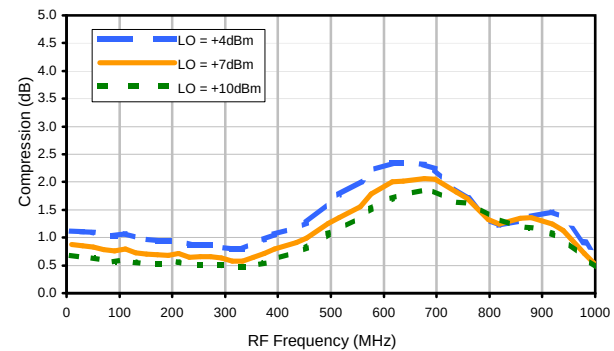
Conversion Loss vs. IF @ RF=500.1MHz



IP3 Input

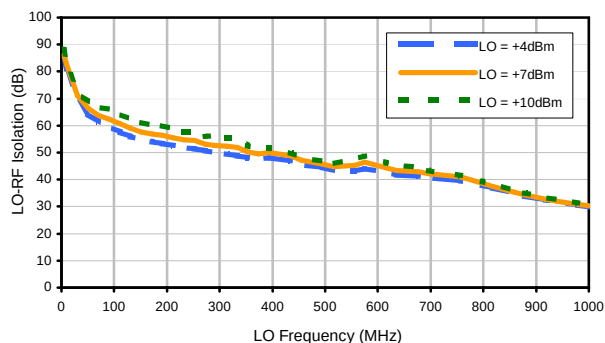


Compression @ RF IN=+1dBm

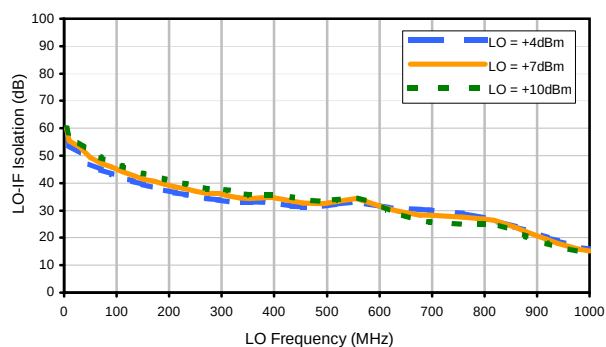


Typical Performance Curves

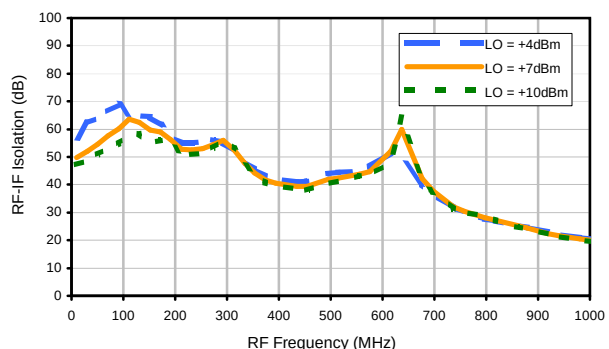
LO-RF Isolation



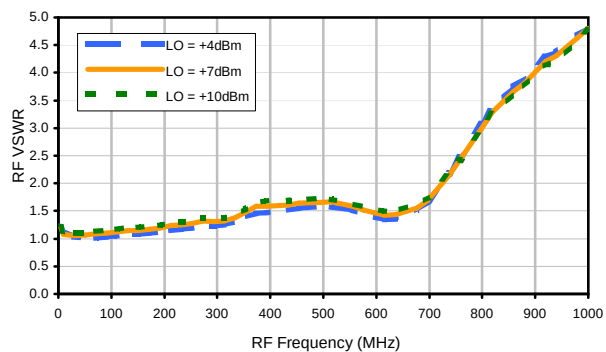
LO-IF Isolation



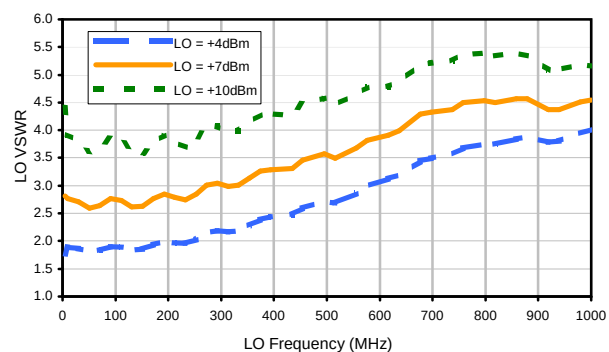
RF-IF Isolation



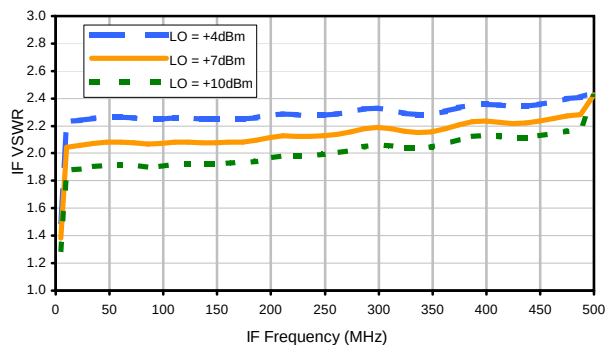
RF VSWR



LO VSWR



IF VSWR



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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	9	34	14	35	17	59	24	47	25	41
1	-	48	+0	52	12	40	14	35	36	48	45	48
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3	>100	76	60	73	63	75	57	77	60	75	77	>80
4	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
5	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
6	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
7	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
8	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80
9	>100	>80	>80	>80	>80	>80	>80	>80	>80	67	>80	>80
10	>100	>80	>80	>80	>80	>80	>80	>80	>80	>80	71	>80
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 250.1 MHz; -14.00 dBm.
LO IN: 280.01 MHz; +7.00 dBm
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RF HARMONICS ORDER

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1	-	46	+0	53	12	40	16	39	37	56	45	57
2	93	67	45	64	44	66	43	86	46	73	52	72
3	>100	60	42	67	47	68	40	62	38	56	60	64
4	>100	82	83	85	66	82	61	81	58	79	66	88
5	>100	78	63	69	61	71	57	71	56	71	59	79
6	>100	89	72	87	81	86	82	85	75	84	68	>90
7	>100	>90	76	>90	71	82	75	80	73	83	68	80
8	>100	>90	>90	>90	79	>90	80	>90	>90	>90	>90	90
9	>100	>90	>90	>90	84	>90	80	>90	83	70	87	>90
10	>100	>90	>90	>90	>90	>90	>90	>90	>90	>90	75	>90
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 250.1 MHz; -4.00 dBm.
LO IN: 280.01 MHz; +7.00 dBm
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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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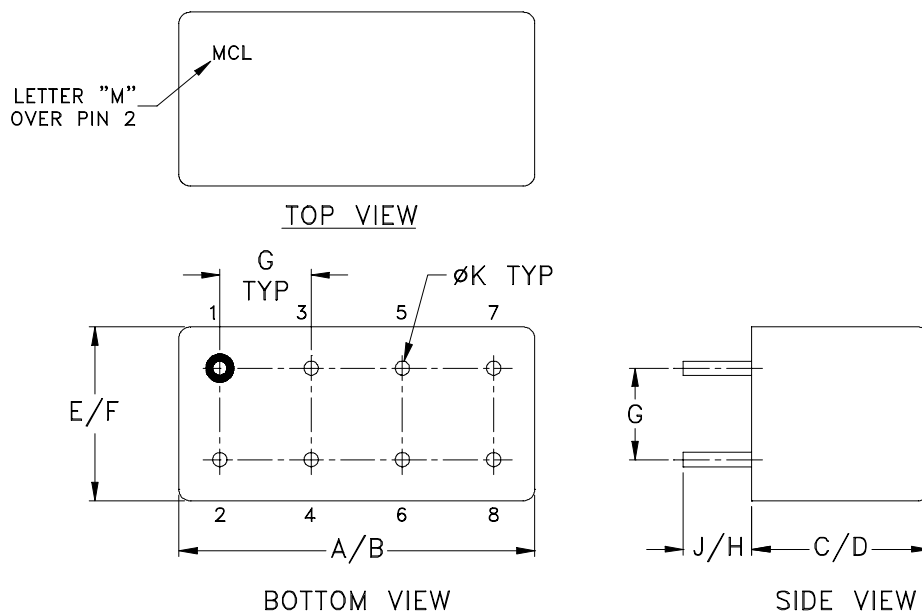
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A01
A04
A05
A06

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. $\pm .03$; 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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