

Non-Catalog Model

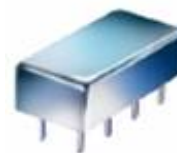
Frequency Mixer

TAK-6R

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 : A04

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency	LO (fL to fU)	0.5		600	MHz
	RF (fL to fU)	0.5		600	MHz
	IF	0		600	MHz
Conversion Loss	mid band		5.4	7.0	dB
	Total Range			8.0	dB
LO-RF Isolation	Low Range	50	55		dB
	Mid Range	30	45		dB
	Upper Range	30	35		dB
LO-IF Isolation	Low Range	40	45		dB
	Mid Range	25	40		dB
	Upper Range	25	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]

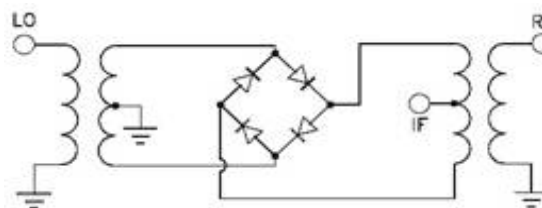
Hermetically sealed

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	1
RF	8
IF	5, 6 ^
GROUND	2, 3, 4, 7

^ - pins must be connected together externally

Electrical Schematics



Frequency Mixer

TAK-6R

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
0.5	30.5	7.80	7.38	7.11	10.1	40.1	26.12	22.19	23.32	10.1	40.1	0.17	0.05	0.02
1.0	31.0	7.13	6.75	6.47	29.9	59.9	18.81	25.80	23.12	29.9	59.9	-0.19	-0.11	0.00
2.0	32.0	6.54	6.13	5.93	49.7	79.7	19.60	21.70	21.81	49.7	79.7	0.25	0.08	0.03
5.0	35.0	5.88	5.55	5.38	69.4	99.4	18.50	21.19	19.84	69.4	99.4	0.24	0.09	0.04
10.0	40.0	5.87	5.53	5.32	89.2	119.2	16.89	20.04	19.41	89.2	119.2	0.19	0.09	0.06
29.9	59.9	5.91	5.52	5.23	109.0	139.0	17.73	18.99	19.76	109.0	139.0	0.09	0.09	0.04
49.7	79.7	6.11	5.52	5.25	128.8	158.8	18.59	26.05	25.99	128.8	158.8	0.27	0.17	0.04
69.4	99.4	6.00	5.42	5.19	148.5	178.5	18.36	19.80	23.94	148.5	178.5	0.24	0.12	0.05
109.0	139.0	6.02	5.46	5.18	168.3	198.3	18.27	19.65	23.04	168.3	198.3	0.22	0.13	0.04
128.8	158.8	5.82	5.36	5.13	188.1	218.1	19.14	24.52	21.47	188.1	218.1	0.32	0.10	0.05
148.5	178.5	5.80	5.33	5.11	207.9	237.9	22.37	22.41	20.09	207.9	237.9	0.35	0.17	0.07
168.3	198.3	5.87	5.36	5.16	227.7	257.7	19.47	21.51	24.39	227.7	257.7	0.36	0.12	0.06
188.1	218.1	5.77	5.33	5.15	247.4	277.4	18.47	21.31	21.25	247.4	277.4	0.35	0.12	0.05
207.9	237.9	5.63	5.28	5.13	267.2	297.2	24.46	19.62	25.13	267.2	297.2	0.37	0.12	0.08
247.4	277.4	5.78	5.36	5.22	287.0	317.0	23.82	21.22	22.67	287.0	317.0	0.31	0.12	0.08
267.2	297.2	5.76	5.39	5.23	306.8	336.8	24.46	18.49	19.98	306.8	336.8	0.29	0.10	0.06
287.0	317.0	5.80	5.46	5.26	326.5	356.5	26.07	21.50	22.57	326.5	356.5	0.35	0.08	0.06
306.8	336.8	5.85	5.47	5.34	346.3	376.3	21.32	19.99	21.65	346.3	376.3	0.37	0.12	0.07
326.5	356.5	5.87	5.59	5.43	366.1	396.1	24.59	25.56	21.80	366.1	396.1	0.37	0.14	0.08
346.3	376.3	5.92	5.61	5.45	385.9	415.9	17.96	25.54	24.91	385.9	415.9	0.41	0.17	0.08
366.1	396.1	6.00	5.64	5.49	405.7	435.7	15.97	17.04	21.17	405.7	435.7	0.40	0.18	0.09
385.9	415.9	6.01	5.69	5.55	425.4	455.4	14.32	15.83	16.10	425.4	455.4	0.51	0.25	0.14
405.7	435.7	6.03	5.78	5.65	445.2	475.2	13.94	14.27	15.63	445.2	475.2	0.54	0.29	0.17
425.4	455.4	6.09	5.85	5.71	465.0	495.0	13.20	13.96	14.75	465.0	495.0	0.61	0.32	0.18
445.2	475.2	6.16	5.91	5.78	484.8	514.8	13.10	13.97	15.14	484.8	514.8	0.56	0.33	0.19
465.0	495.0	6.26	5.97	5.86	504.5	534.5	13.48	14.80	15.84	504.5	534.5	0.59	0.36	0.21
484.8	514.8	6.38	6.05	5.87	524.3	554.3	14.80	17.32	18.02	524.3	554.3	0.65	0.38	0.19
504.5	534.5	6.59	6.18	5.97	544.1	574.1	15.16	18.68	19.52	544.1	574.1	0.65	0.43	0.19
544.1	574.1	6.76	6.28	6.05	583.7	613.7	12.87	21.44	25.91	583.7	613.7	0.55	0.40	0.12
583.7	613.7	7.06	6.49	6.18	603.4	633.4	11.06	18.71	25.25	603.4	633.4	0.58	0.43	0.17
603.4	633.4	7.21	6.67	6.22	643.0	673.0	10.96	11.92	20.95	643.0	673.0	0.53	0.35	0.22
643.0	673.0	7.68	7.16	6.52	662.8	692.8	11.25	12.20	18.19	662.8	692.8	0.51	0.36	0.25
662.8	692.8	7.85	7.29	6.62	702.3	732.3	11.82	12.18	16.05	702.3	732.3	0.39	0.33	0.33
702.3	732.3	8.43	7.68	6.86	722.1	752.1	11.89	12.87	14.61	722.1	752.1	0.23	0.29	0.34
722.1	752.1	8.65	7.94	7.12	761.7	791.7	13.19	15.22	15.37	761.7	791.7	-0.06	0.15	0.28
761.7	791.7	9.40	8.51	7.75	781.4	811.4	13.66	14.97	15.47	781.4	811.4	-0.12	0.09	0.16
781.4	811.4	9.86	8.94	8.35	821.0	851.0	14.83	16.37	17.94	821.0	851.0	-0.09	0.25	0.26
821.0	851.0	10.61	9.58	9.05	840.8	870.8	15.11	15.70	16.16	840.8	870.8	0.09	0.41	0.43
880.3	910.3	11.33	10.42	9.84	880.3	910.3	13.65	16.82	20.83	880.3	910.3	0.35	0.47	0.44
900.1	930.1	11.55	10.73	10.24	900.1	930.1	14.91	21.09	18.82	900.1	930.1	0.43	0.45	0.42

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Frequency Mixer

TAK-6R

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=300.1MHz (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)=600.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+7			+7			+7
290.0	10.1	5.91	10.0	20.1	5.00	590.0	10.1	7.91
282.8	17.3	5.87	24.9	35.0	5.05	575.1	25.0	7.77
275.6	24.5	5.77	39.7	49.8	5.10	560.3	39.8	7.77
268.5	31.6	5.78	54.6	64.7	5.13	545.4	54.7	7.74
261.3	38.8	5.65	69.5	79.6	5.13	530.5	69.6	7.69
254.1	46.0	5.69	84.4	94.5	5.22	515.6	84.5	7.60
246.9	53.2	5.63	99.2	109.3	5.19	500.8	99.3	7.47
239.7	60.4	5.58	114.1	124.2	5.20	485.9	114.2	7.39
232.6	67.5	5.52	129.0	139.1	5.23	471.0	129.1	7.24
225.4	74.7	5.49	143.8	153.9	5.30	456.2	143.9	7.26
218.2	81.9	5.41	158.7	168.8	5.31	441.3	158.8	7.24
211.0	89.1	5.41	173.6	183.7	5.34	426.4	173.7	7.26
203.8	96.3	5.37	188.5	198.6	5.39	411.5	188.6	7.14
196.7	103.4	5.33	203.3	213.4	5.37	396.7	203.4	7.07
189.5	110.6	5.28	218.2	228.3	5.42	381.8	218.3	7.10
182.3	117.8	5.25	233.1	243.2	5.37	366.9	233.2	7.09
175.1	125.0	5.25	247.9	258.0	5.49	352.1	248.0	7.07
167.9	132.2	5.22	262.8	272.9	5.47	337.2	262.9	7.00
160.8	139.3	5.21	277.7	287.8	5.47	322.3	277.8	7.05
153.6	146.5	5.20	292.6	302.7	5.52	307.4	292.7	6.98
146.4	153.7	5.22	307.4	317.5	5.56	292.6	307.5	6.98
139.2	160.9	5.22	322.3	332.4	5.67	277.7	322.4	6.88
132.1	168.0	5.24	337.2	347.3	5.63	262.8	337.3	6.87
124.9	175.2	5.19	352.1	362.2	5.72	247.9	352.2	6.90
117.7	182.4	5.19	366.9	377.0	5.74	233.1	367.0	6.79
110.5	189.6	5.19	381.8	391.9	5.78	218.2	381.9	6.78
103.3	196.8	5.21	396.7	406.8	5.76	203.3	396.8	6.73
96.2	203.9	5.21	411.5	421.6	5.78	188.5	411.6	6.73
89.0	211.1	5.19	426.4	436.5	5.85	173.6	426.5	6.70
81.8	218.3	5.20	441.3	451.4	5.80	158.7	441.4	6.83
74.6	225.5	5.23	456.2	466.3	5.71	143.8	456.3	6.82
67.4	232.7	5.24	471.0	481.1	5.60	129.0	471.1	6.74
60.3	239.8	5.23	485.9	496.0	5.59	114.1	486.0	6.80
53.1	247.0	5.23	500.8	510.9	5.51	99.2	500.9	6.68
45.9	254.2	5.25	515.6	525.7	5.48	84.4	515.7	6.73
38.7	261.4	5.29	530.5	540.6	5.45	69.5	530.6	6.73
31.5	268.6	5.29	545.4	555.5	5.40	54.6	545.5	6.66
24.4	275.7	5.31	560.3	570.4	5.40	39.7	560.4	6.57
17.2	282.9	5.29	575.1	585.2	5.35	24.9	575.2	6.63
10.0	290.1	5.46	590.0	600.1	5.33	10.0	590.1	6.67

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Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+4	+7	+10	+4	+7	+10
0.5	64.00	67.00	70.00	64.00	67.00	70.00
1.0	64.00	67.00	70.00	64.00	67.00	70.00
2.0	64.00	67.00	70.00	64.00	67.00	70.00
5.0	64.00	67.00	70.00	64.00	67.00	70.00
10.0	64.00	67.00	70.00	64.00	67.00	64.95
29.9	57.82	59.72	61.73	68.75	73.58	75.77
49.7	55.90	57.78	59.54	73.83	72.45	71.96
69.4	53.91	55.43	57.33	69.60	69.10	65.07
109.0	50.59	52.35	54.40	59.87	57.74	58.20
128.8	49.23	51.73	53.94	55.13	54.31	56.75
148.5	48.27	50.60	52.55	52.25	52.23	55.42
168.3	47.36	49.85	51.82	49.90	50.89	53.71
188.1	46.58	49.16	51.37	47.98	50.40	53.52
207.9	45.78	47.54	49.35	46.22	48.77	51.68
247.4	45.89	48.02	49.36	44.88	47.71	50.55
267.2	46.02	48.55	49.96	44.44	46.55	48.41
287.0	45.74	49.39	51.31	42.69	45.06	47.27
306.8	43.99	47.23	50.23	41.67	43.50	45.04
326.5	42.73	45.09	47.22	42.01	43.49	43.35
346.3	41.65	43.69	45.51	41.76	43.14	42.76
366.1	40.15	42.34	44.30	41.45	43.73	41.96
385.9	39.41	41.36	43.44	40.28	45.71	43.60
405.7	39.64	42.07	44.95	38.89	43.73	43.11
425.4	39.92	42.29	44.96	38.54	42.24	41.22
445.2	40.15	42.90	46.49	38.17	40.81	40.89
465.0	40.64	43.28	45.89	38.77	40.67	40.62
484.8	40.93	43.78	47.04	39.67	40.37	39.54
504.5	42.22	45.04	47.02	39.81	39.94	38.41
544.1	42.84	45.95	46.54	39.27	38.71	36.33
583.7	40.82	43.58	43.12	37.80	36.68	33.42
603.4	39.60	42.47	42.25	36.11	34.60	31.15
643.0	37.57	40.25	40.63	34.08	30.79	27.97
662.8	37.41	39.93	41.61	33.20	29.99	27.39
702.3	37.30	40.01	42.93	31.45	28.37	25.35
722.1	37.19	39.53	41.83	29.99	27.27	24.41
761.7	37.43	41.03	44.97	26.99	25.21	22.98
781.4	37.36	42.31	48.46	25.40	23.98	21.96
821.0	37.43	47.72	43.45	22.32	21.93	20.40
880.3	33.98	39.15	34.39	18.20	19.00	18.14
900.1	32.31	36.06	32.29	16.86	17.98	17.24

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+4	+7	+10
10.1	40.1	36.58	33.60	33.99
29.9	59.9	32.80	31.80	31.01
49.7	79.7	30.54	29.62	29.27
69.4	99.4	28.20	27.56	27.81
89.2	119.2	26.68	26.55	26.56
109.0	139.0	25.30	25.28	25.55
128.8	158.8	24.60	24.75	24.85
148.5	178.5	23.96	23.95	24.29
168.3	198.3	23.59	23.81	23.99
188.1	218.1	23.25	23.67	24.07
207.9	237.9	22.94	23.56	24.02
227.7	257.7	22.72	23.33	24.09
247.4	277.4	22.68	23.02	23.72
267.2	297.2	22.91	23.11	23.62
287.0	317.0	23.31	23.37	23.84
306.8	336.8	23.84	23.84	24.29
326.5	356.5	24.48	24.64	25.09
346.3	376.3	24.53	24.91	25.50
366.1	396.1	24.18	24.95	26.02
385.9	415.9	23.31	24.14	25.56
405.7	435.7	22.28	22.85	23.86
425.4	455.4	21.31	21.71	22.47
445.2	475.2	20.22	20.38	20.87
465.0	495.0	19.59	19.66	20.02
484.8	514.8	19.03	19.04	19.37
504.5	534.5	18.44	18.46	18.74
524.3	554.3	18.31	18.26	18.51
544.1	574.1	17.97	17.85	18.07
583.7	613.7	17.82	17.52	17.64
603.4	633.4	17.75	17.33	17.37
643.0	673.0	17.88	17.56	17.34
662.8	692.8	17.89	17.68	17.67
702.3	732.3	17.71	17.64	17.87
722.1	752.1	17.63	17.63	17.80
761.7	791.7	17.22	17.46	17.45
781.4	811.4	16.97	17.23	17.16
821.0	851.0	16.23	16.66	16.17
840.8	870.8	15.84	16.11	15.43
880.3	910.3	14.71	14.48	13.65
900.1	930.1	13.96	13.59	12.75

Frequency Mixer

TAK-6R

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=600.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+4	+7	+10		+4	+7	+10		+4	+7	+10
5.0	35.0	1.19	1.26	1.30	5.0	1.88	2.80	4.21	5.0	1.49	1.31	1.21
10.0	40.0	1.10	1.18	1.24	10.0	1.84	2.76	3.86	10.0	1.50	1.32	1.21
29.9	59.9	1.59	1.38	1.21	29.9	1.09	1.55	2.41	25.1	2.72	2.09	1.78
49.7	79.7	1.60	1.36	1.21	49.7	1.08	1.53	2.36	40.3	2.58	2.04	1.75
69.4	99.4	1.49	1.30	1.16	69.4	1.08	1.46	2.19	55.4	2.45	1.95	1.70
89.2	119.2	1.55	1.31	1.16	89.2	1.09	1.46	2.22	70.5	2.49	1.97	1.71
109.0	139.0	1.51	1.27	1.12	109.0	1.10	1.46	2.19	85.6	2.56	2.03	1.78
128.8	158.8	1.39	1.20	1.10	128.8	1.11	1.49	2.27	100.8	2.68	2.11	1.86
148.5	178.5	1.39	1.19	1.09	148.5	1.13	1.50	2.26	115.9	2.72	2.15	1.89
168.3	198.3	1.38	1.17	1.08	168.3	1.13	1.48	2.17	131.0	2.64	2.11	1.88
188.1	218.1	1.32	1.13	1.08	188.1	1.15	1.48	2.20	146.2	2.63	2.10	1.87
207.9	237.9	1.28	1.10	1.10	207.9	1.19	1.49	2.21	161.3	2.73	2.18	1.95
227.7	257.7	1.27	1.11	1.10	227.7	1.20	1.54	2.27	176.4	2.75	2.21	2.01
247.4	277.4	1.23	1.09	1.11	247.4	1.19	1.53	2.24	191.5	2.78	2.23	2.04
267.2	297.2	1.20	1.09	1.14	267.2	1.24	1.54	2.22	206.7	2.79	2.25	2.06
287.0	317.0	1.18	1.12	1.18	287.0	1.27	1.56	2.20	221.8	2.86	2.31	2.11
306.8	336.8	1.15	1.14	1.21	306.8	1.28	1.56	2.23	236.9	2.94	2.37	2.16
326.5	356.5	1.14	1.17	1.24	326.5	1.32	1.62	2.29	252.1	2.92	2.38	2.18
346.3	376.3	1.14	1.22	1.29	346.3	1.36	1.64	2.28	267.2	2.87	2.34	2.15
366.1	396.1	1.14	1.24	1.33	366.1	1.40	1.68	2.34	282.3	2.92	2.34	2.15
385.9	415.9	1.14	1.27	1.40	385.9	1.43	1.65	2.25	297.4	3.00	2.42	2.23
405.7	435.7	1.14	1.27	1.41	405.7	1.46	1.70	2.29	312.6	3.00	2.44	2.28
425.4	455.4	1.14	1.25	1.36	425.4	1.47	1.74	2.32	327.7	2.97	2.42	2.26
445.2	475.2	1.14	1.23	1.31	445.2	1.49	1.75	2.33	342.8	3.00	2.43	2.26
465.0	495.0	1.13	1.18	1.25	465.0	1.51	1.79	2.39	357.9	3.04	2.46	2.28
484.8	514.8	1.15	1.16	1.20	484.8	1.53	1.75	2.31	373.1	3.09	2.49	2.30
504.5	534.5	1.18	1.15	1.19	504.5	1.55	1.77	2.33	388.2	3.03	2.46	2.29
524.3	554.3	1.23	1.18	1.21	524.3	1.57	1.79	2.33	403.3	2.99	2.42	2.25
544.1	574.1	1.28	1.21	1.23	544.1	1.59	1.78	2.29	418.5	3.08	2.46	2.27
583.7	613.7	1.44	1.35	1.37	583.7	1.63	1.79	2.23	433.6	3.18	2.54	2.33
603.4	633.4	1.53	1.43	1.45	603.4	1.64	1.82	2.25	448.7	3.20	2.56	2.34
643.0	673.0	1.79	1.67	1.67	643.0	1.64	1.89	2.31	463.8	3.16	2.50	2.27
662.8	692.8	1.93	1.80	1.79	662.8	1.62	1.85	2.28	479.0	3.13	2.46	2.22
702.3	732.3	2.27	2.12	2.05	702.3	1.60	1.85	2.30	494.1	3.14	2.46	2.20
722.1	752.1	2.47	2.31	2.21	722.1	1.59	1.83	2.27	509.2	3.18	2.48	2.22
761.7	791.7	2.98	2.73	2.57	761.7	1.57	1.79	2.20	524.4	3.18	2.48	2.22
781.4	811.4	3.28	2.98	2.81	781.4	1.55	1.79	2.20	539.5	3.19	2.47	2.18
821.0	851.0	3.84	3.43	3.26	821.0	1.50	1.75	2.15	554.6	3.31	2.52	2.18
840.8	870.8	4.04	3.58	3.41	840.8	1.47	1.70	2.08	569.7	3.37	2.56	2.18
880.3	910.3	4.26	3.83	3.68	880.3	1.41	1.67	2.03	584.9	3.33	2.52	2.14
900.1	930.1	4.35	3.96	3.82	900.1	1.39	1.66	2.00	600.0	3.33	2.62	2.31

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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	17	28	9	30	21	39	26	40	33	70
1	-	20	+0	29	12	39	23	43	33	56	41	61
2	>100	61	64	60	63	59	56	70	60	72	62	74
3	>100	79	66	78	68	79	64	78	64	78	68	>81
4	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
5	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
6	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
7	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
8	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
9	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
10	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; -14.00 dBm.
LO IN: 330.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -19.49 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	27	42	20	42	32	52	39	52	47	81
1	-	21	+0	29	12	39	23	45	36	56	46	66
2	>100	54	59	54	58	52	49	61	53	65	56	65
3	>100	58	49	59	50	58	47	69	52	64	52	70
4	>100	79	77	76	76	72	74	71	70	>91	73	85
5	>100	80	81	77	67	75	62	74	61	73	67	81
6	>100	>91	88	>91	84	>91	83	89	83	89	85	>91
7	>100	>91	>91	>91	88	84	88	85	82	85	79	86
8	>100	>91	>91	>91	>91	>91	>91	>91	88	90	>91	>91
9	>100	>91	>91	>91	>91	>91	>91	>91	>91	90	>91	>91
10	>100	>91	>91	>91	>91	>91	>91	>91	>91	>91	88	>91
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; -4.00 dBm.
LO IN: 330.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -9.4 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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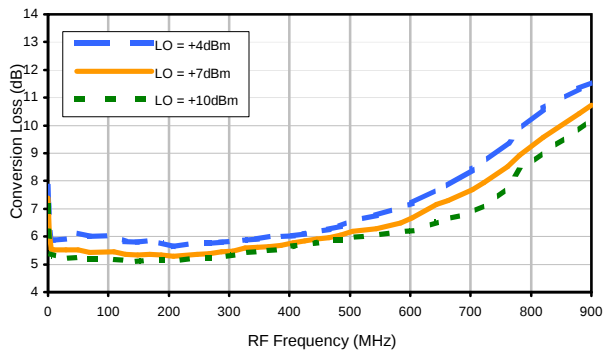


Frequency Mixer

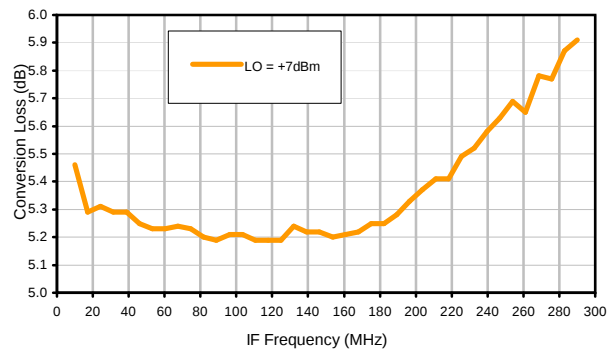
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Typical Performance Curves

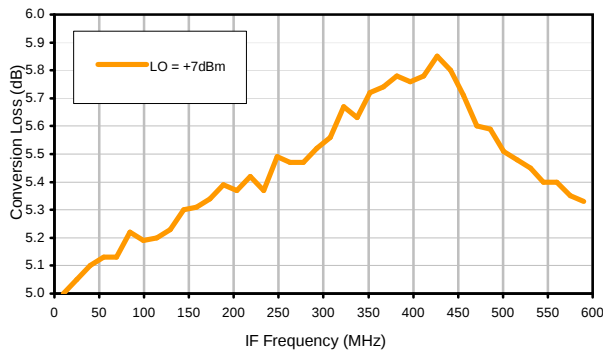
Conversion Loss @ IF=30MHz



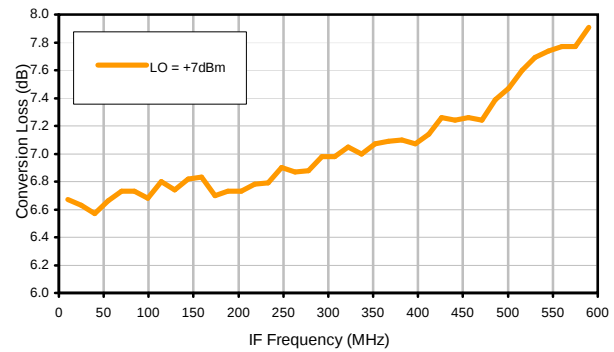
Conversion Loss vs. IF @ RF=300.1MHz



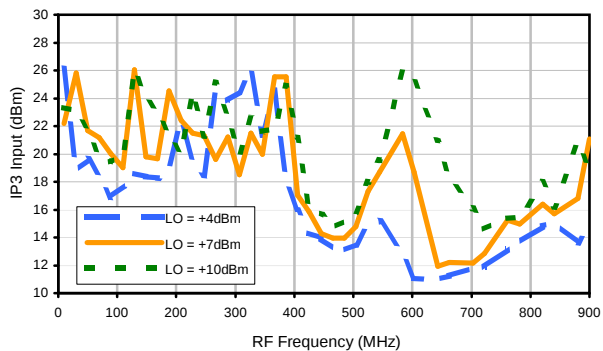
Conversion Loss vs. IF @ RF=10.1MHz



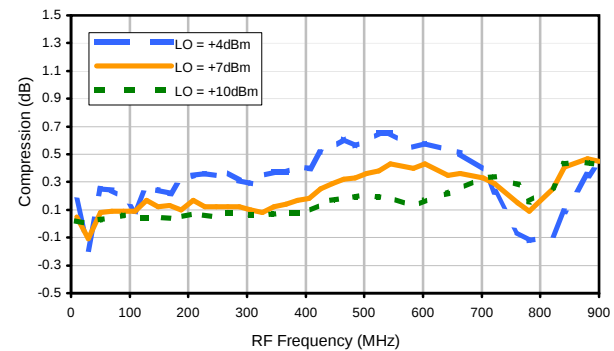
Conversion Loss vs. IF @ RF=600.1MHz



IP3 Input



Compression @ RF IN=+1dBm



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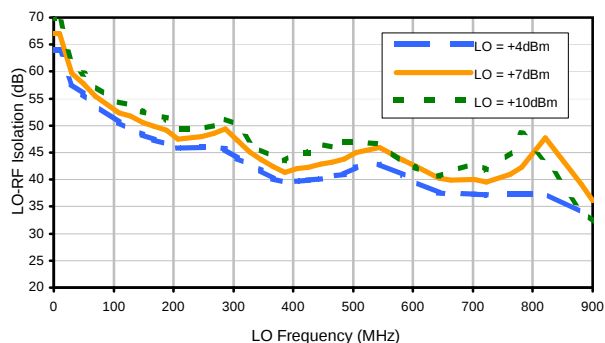


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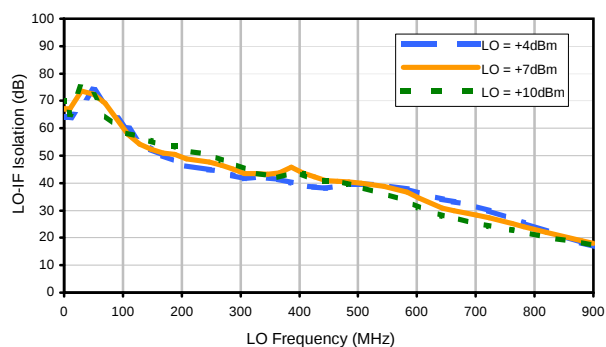


Typical Performance Curves

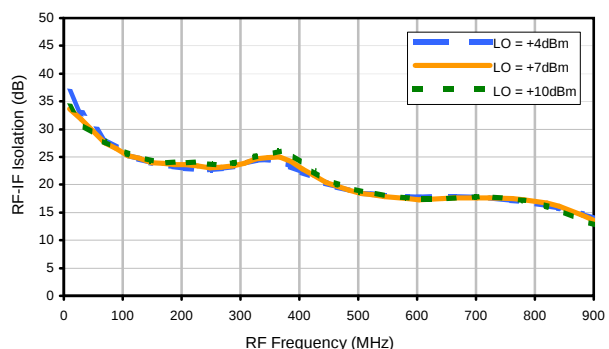
LO-RF Isolation



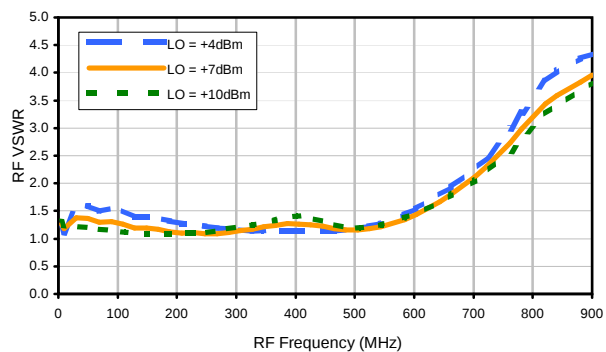
LO-IF Isolation



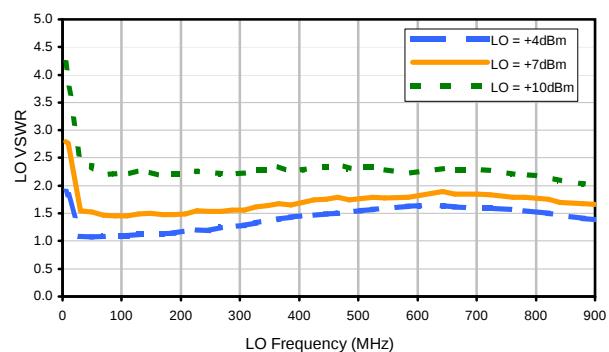
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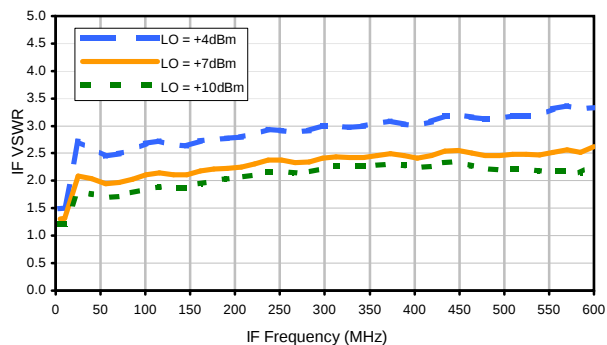
RF VSWR



LO VSWR



IF VSWR



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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	17	28	9	30	21	39	26	40	33	70
1	-	20	+0	29	12	39	23	43	33	56	41	61
2	>100	61	64	60	63	59	56	70	60	72	62	74
3	>100	79	66	78	68	79	64	78	64	78	68	>81
4	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
5	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
6	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
7	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
8	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
9	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
10	>100	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81	>81
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; -14.00 dBm.
LO IN: 330.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -19.49 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	27	42	20	42	32	52	39	52	47	81
1	-	21	+0	29	12	39	23	45	36	56	46	66
2	>100	54	59	54	58	52	49	61	53	65	56	65
3	>100	58	49	59	50	58	47	69	52	64	52	70
4	>100	79	77	76	76	72	74	71	70	>91	73	85
5	>100	80	81	77	67	75	62	74	61	73	67	81
6	>100	>91	88	>91	84	>91	83	89	83	89	85	>91
7	>100	>91	>91	>91	88	84	88	85	82	85	79	86
8	>100	>91	>91	>91	>91	>91	>91	>91	88	90	>91	>91
9	>100	>91	>91	>91	>91	>91	>91	>91	>91	90	>91	>91
10	>100	>91	>91	>91	>91	>91	>91	>91	>91	>91	88	>91
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

LO HARMONICS ORDER

Test conditions: RF IN: 300.1 MHz; -4.00 dBm.
LO IN: 330.01 MHz; +7.00 dBm
IF OUT: 29.91 MHz; -9.4 dBm

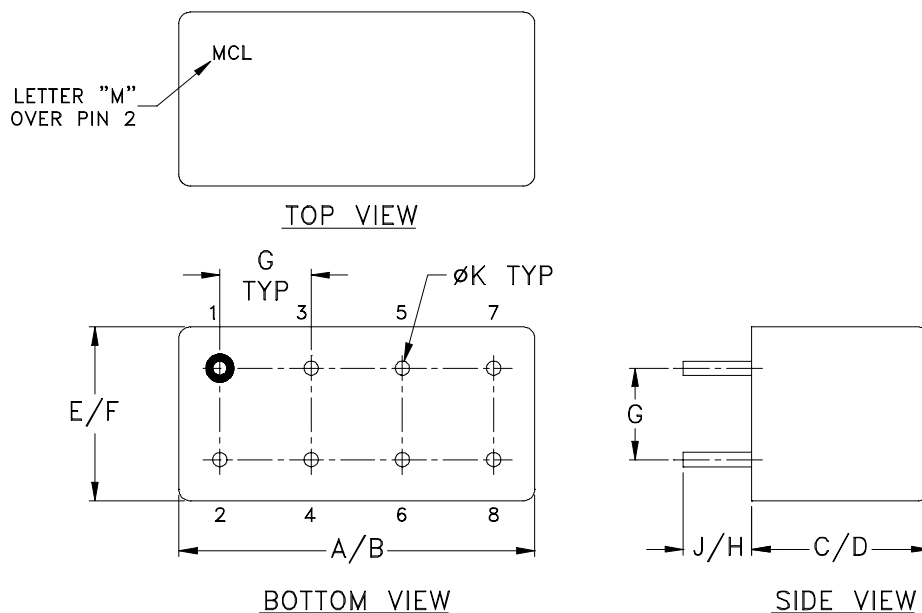
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2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
3. RF Cal represent the Harmonics level of the RF input signal to the mixer.

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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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