

Non-Catalog Model

Frequency Mixer

RAY-6

Level 23 (LO Power +23 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)	0.03		50	MHz
	RF (fL to fU)	0.03		50	MHz
	IF	0		50	MHz
Conversion Loss	mid band		5.4	7.5	dB
	Total Range			8.5	dB
LO-RF Isolation	Low Range	50	60		dB
	Mid Range	30	45		dB
	Upper Range	25	35		dB
LO-IF Isolation	Low Range	45	60		dB
	Mid Range	25	40		dB
	Upper Range	20	30		dB
1 dB Comp. Input Power			+15		dBm

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

Mid Range = [10fL to fU/2]

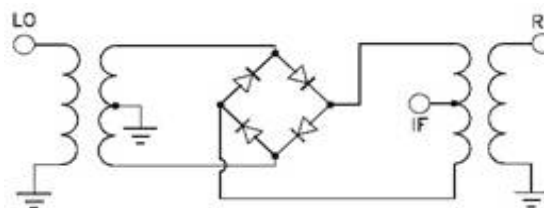
Upper Range = [fU/2 to fU]

MAXIMUM RATINGS	
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	350mW
IF Current	40mA

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

^ - pins must be connected together externally

Electrical Schematics



Frequency Mixer

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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=+14.99dBm (dB)		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
+20	+23	+26	+20	+23	+26	+20	+23	+26	+20	+23	+26			
0.0	10.0	6.00	6.00	5.98	10.1	40.1	34.73	29.55	28.12	10.1	40.1	1.07	0.62	0.28
0.1	10.1	4.80	4.76	4.73	16.0	46.0	34.71	29.28	28.04	16.0	46.0	1.14	0.70	0.31
0.2	10.2	4.59	4.58	4.53	21.9	51.9	30.92	27.93	27.34	21.9	51.9	1.16	0.75	0.34
1.0	11.0	4.54	4.60	4.66	27.8	57.8	28.68	27.03	27.17	27.8	57.8	1.18	0.75	0.32
2.0	12.0	4.74	4.76	4.83	33.7	63.7	27.21	26.45	27.12	33.7	63.7	1.16	0.73	0.32
5.0	15.0	4.74	4.78	4.85	39.6	69.6	25.79	25.48	26.55	39.6	69.6	1.09	0.70	0.33
8.6	18.6	4.84	4.82	4.92	45.5	75.5	25.67	25.76	26.98	45.5	75.5	1.12	0.76	0.37
10.0	20.0	4.78	4.82	4.85	51.4	81.4	24.14	24.58	26.15	51.4	81.4	1.06	0.75	0.40
16.0	46.0	5.37	5.34	5.35	57.3	87.3	25.14	25.26	26.52	57.3	87.3	0.94	0.65	0.36
21.9	51.9	5.39	5.36	5.36	63.2	93.2	24.94	24.86	26.58	63.2	93.2	0.91	0.63	0.32
27.8	57.8	5.45	5.43	5.43	69.1	99.1	23.40	24.01	26.44	69.1	99.1	0.91	0.61	0.31
39.6	69.6	5.45	5.45	5.50	75.0	105.0	23.71	24.45	27.52	75.0	105.0	0.91	0.58	0.29
45.5	75.5	5.44	5.42	5.47	80.9	110.9	23.65	24.35	28.49	80.9	110.9	0.95	0.61	0.27
51.4	81.4	5.48	5.42	5.44	86.8	116.8	23.09	24.00	29.16	86.8	116.8	1.07	0.65	0.32
57.3	87.3	5.56	5.49	5.50	92.7	122.7	21.52	22.84	27.53	92.7	122.7	1.22	0.75	0.35
63.2	93.2	5.56	5.49	5.50	98.6	128.6	20.19	21.87	24.91	98.6	128.6	1.41	0.84	0.40
75.0	105.0	5.68	5.66	5.70	104.5	134.5	18.64	21.10	23.83	104.5	134.5	1.54	0.94	0.48
80.9	110.9	5.72	5.72	5.77	110.4	140.4	17.90	20.21	23.88	110.4	140.4	1.70	1.07	0.53
86.8	116.8	5.72	5.72	5.78	116.3	146.3	18.19	20.61	25.53	116.3	146.3	1.77	1.16	0.62
92.7	122.7	5.78	5.76	5.81	122.2	152.2	18.69	21.27	24.90	122.2	152.2	1.81	1.23	0.70
98.6	128.6	5.86	5.83	5.89	128.0	158.0	18.97	22.21	24.97	128.0	158.0	1.81	1.26	0.72
110.4	140.4	5.99	5.89	5.90	133.9	163.9	19.43	23.72	25.84	133.9	163.9	1.82	1.28	0.73
122.2	152.2	6.04	5.89	5.81	139.8	169.8	20.01	24.80	26.57	139.8	169.8	1.78	1.26	0.73
128.0	158.0	6.06	5.87	5.76	145.7	175.7	22.13	27.22	29.17	145.7	175.7	1.68	1.19	0.72
133.9	163.9	6.07	5.86	5.75	151.6	181.6	25.02	23.00	24.92	151.6	181.6	1.56	1.10	0.70
145.7	175.7	6.19	6.02	5.94	157.5	187.5	23.05	21.03	21.66	157.5	187.5	1.47	1.05	0.67
151.6	181.6	6.23	6.10	6.06	163.4	193.4	21.73	20.08	20.72	163.4	193.4	1.47	1.08	0.65
157.5	187.5	6.26	6.19	6.20	169.3	199.3	21.14	20.09	22.71	169.3	199.3	1.63	1.19	0.62
163.4	193.4	6.30	6.26	6.31	175.2	205.2	20.87	20.86	24.88	175.2	205.2	1.73	1.22	0.66
169.3	199.3	6.33	6.32	6.43	181.1	211.1	20.79	21.98	25.03	181.1	211.1	1.81	1.25	0.72
181.1	211.1	6.58	6.64	6.87	187.0	217.0	21.29	23.41	24.87	187.0	217.0	1.82	1.21	0.79
187.0	217.0	6.84	6.94	7.24	192.9	222.9	21.65	23.57	24.06	192.9	222.9	1.74	1.10	0.89
192.9	222.9	7.12	7.28	7.64	198.8	228.8	21.62	22.64	23.04	198.8	228.8	1.68	1.04	0.91
198.8	228.8	7.35	7.56	7.94	204.7	234.7	21.56	22.16	22.85	204.7	234.7	1.71	1.13	0.82
210.6	240.6	7.72	7.89	8.18	210.6	240.6	21.11	21.51	22.84	210.6	240.6	1.73	1.20	0.80
216.5	246.5	8.04	8.18	8.45	216.5	246.5	20.87	21.57	24.29	216.5	246.5	1.71	1.25	0.88
222.4	252.4	8.48	8.55	8.78	222.4	252.4	20.98	21.84	25.15	222.4	252.4	1.65	1.30	0.98
228.3	258.3	8.96	8.98	9.17	228.3	258.3	21.53	22.08	23.93	228.3	258.3	1.58	1.33	1.05
234.2	264.2	9.45	9.44	9.66	234.2	264.2	22.57	22.48	23.80	234.2	264.2	1.50	1.27	1.06
240.1	270.1	9.96	9.93	10.17	240.1	270.1	22.95	22.50	23.42	240.1	270.1	1.37	1.20	1.04

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Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=25.1MHz (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)=50.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+23			+23			+23
0.5	24.6	5.16	0.5	10.6	5.10	0.5	49.6	5.28
0.9	24.2	5.08	1.5	11.6	5.00	1.5	48.6	5.15
1.2	23.9	5.05	2.5	12.6	4.98	2.5	47.6	5.13
1.6	23.5	5.05	3.5	13.6	4.98	3.5	46.6	5.14
2.0	23.1	5.05	4.6	14.7	5.00	4.6	45.5	5.14
2.4	22.7	5.03	5.6	15.7	5.00	5.6	44.5	5.14
2.7	22.4	5.04	6.6	16.7	5.01	6.6	43.5	5.14
3.1	22.0	5.03	7.6	17.7	5.01	7.6	42.5	5.13
3.5	21.6	5.03	8.6	18.7	5.01	8.6	41.5	5.12
3.8	21.3	5.03	9.6	19.7	5.03	9.6	40.5	5.14
4.2	20.9	5.03	10.6	20.7	5.04	10.6	39.5	5.13
4.6	20.5	5.03	11.6	21.7	5.04	11.6	38.5	5.13
5.0	20.1	5.03	12.7	22.8	5.05	12.7	37.4	5.15
5.3	19.8	5.03	13.7	23.8	5.05	13.7	36.4	5.16
5.7	19.4	5.03	14.7	24.8	5.04	14.7	35.4	5.16
6.1	19.0	5.03	15.7	25.8	5.06	15.7	34.4	5.16
6.4	18.7	5.03	16.7	26.8	5.07	16.7	33.4	5.16
6.8	18.3	5.03	17.7	27.8	5.07	17.7	32.4	5.16
7.2	17.9	5.03	18.7	28.8	5.07	18.7	31.4	5.16
7.6	17.5	5.03	19.7	29.8	5.08	19.7	30.4	5.17
7.9	17.2	5.04	20.8	30.9	5.08	20.8	29.3	5.17
8.3	16.8	5.04	21.8	31.9	5.09	21.8	28.3	5.18
8.7	16.4	5.04	22.8	32.9	5.09	22.8	27.3	5.16
9.1	16.0	5.04	23.8	33.9	5.08	23.8	26.3	5.13
9.4	15.7	5.03	24.8	34.9	5.08	24.8	25.3	5.14
9.8	15.3	5.03	25.8	35.9	5.10	25.8	24.3	5.11
10.2	14.9	5.03	26.8	36.9	5.09	26.8	23.3	5.18
10.5	14.6	5.01	27.8	37.9	5.09	27.8	22.3	5.20
10.9	14.2	5.00	28.9	39.0	5.10	28.9	21.2	5.21
11.3	13.8	4.98	29.9	40.0	5.09	29.9	20.2	5.22
11.7	13.4	4.98	30.9	41.0	5.09	30.9	19.2	5.23
12.0	13.1	4.96	31.9	42.0	5.09	31.9	18.2	5.25
12.4	12.7	5.04	32.9	43.0	5.08	32.9	17.2	5.25
12.8	12.3	5.00	33.9	44.0	5.08	33.9	16.2	5.25
13.1	12.0	4.97	34.9	45.0	5.07	34.9	15.2	5.25
13.5	11.6	4.99	35.9	46.0	5.07	35.9	14.2	5.25
13.9	11.2	5.00	37.0	47.1	5.08	37.0	13.1	5.24
14.3	10.8	5.03	38.0	48.1	5.09	38.0	12.1	5.25
14.6	10.5	5.05	39.0	49.1	5.08	39.0	11.1	5.27
15.0	10.1	5.05	40.0	50.1	5.08	40.0	10.1	5.28

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Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+20	+23	+26	+20	+23	+26
0.0	60.88	56.94	56.57	57.28	56.32	56.05
0.1	59.08	55.89	53.94	56.52	52.80	50.68
0.2	60.44	56.55	53.59	57.32	52.97	50.17
1.0	61.74	57.41	53.98	58.45	53.59	50.84
2.0	62.28	58.18	54.57	59.79	54.59	51.44
5.0	58.99	57.29	54.86	57.30	54.20	52.27
8.6	50.26	50.26	49.44	48.24	46.35	44.99
10.0	46.67	45.31	44.07	46.40	44.58	42.73
51.4	53.73	53.41	55.83	41.68	41.41	40.96
57.3	52.23	52.06	52.93	41.25	40.80	39.93
63.2	53.53	53.20	52.95	40.55	39.87	38.74
69.1	52.09	51.85	51.99	39.95	38.96	37.63
75.0	50.60	50.44	51.35	39.26	38.08	36.62
80.9	48.66	48.49	50.63	38.08	37.13	35.67
86.8	45.80	45.63	48.13	36.85	36.03	34.75
92.7	43.47	43.37	45.17	36.03	34.84	33.59
98.6	42.21	42.13	43.10	35.31	33.82	32.66
104.5	41.44	41.34	41.06	34.47	32.96	31.88
110.4	40.68	40.68	38.97	34.22	32.43	31.29
122.2	39.01	38.97	34.83	33.59	31.26	30.48
128.0	38.48	38.44	34.01	32.94	30.51	29.69
133.9	38.71	38.65	35.98	31.95	29.45	28.21
139.8	39.22	39.21	40.35	30.29	28.07	26.63
145.7	39.31	39.26	41.20	28.54	26.33	24.92
151.6	39.08	39.13	38.09	27.17	24.86	23.39
157.5	38.00	38.06	35.37	25.59	23.27	21.90
163.4	36.84	36.89	33.72	24.10	21.91	20.62
169.3	35.84	35.88	32.60	22.64	20.60	19.43
175.2	34.63	34.68	31.59	21.32	19.49	18.40
181.1	33.54	33.57	30.61	20.43	18.64	17.52
187.0	32.89	32.91	29.93	19.87	18.11	16.89
192.9	32.48	32.52	29.84	19.65	17.83	16.61
198.8	32.01	32.04	29.96	19.54	17.71	16.61
204.7	31.33	31.35	29.90	19.32	17.55	16.53
210.6	30.49	30.53	29.42	19.09	17.31	16.28
216.5	29.29	29.36	28.06	18.77	16.96	15.93
222.4	27.89	27.93	26.20	18.24	16.46	15.45
228.3	26.53	26.58	24.36	17.51	15.88	14.81
234.2	25.08	25.13	22.64	16.58	15.13	14.04
240.1	23.73	23.77	21.16	15.72	14.39	13.30

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+20	+23	+26
10.1	40.1	27.26	26.71	24.64
16.0	46.0	25.34	25.06	23.47
21.9	51.9	24.20	24.02	23.10
27.8	57.8	23.48	23.52	23.09
33.7	63.7	22.99	23.16	23.28
39.6	69.6	22.26	22.74	23.20
45.5	75.5	21.66	22.14	22.57
51.4	81.4	21.03	21.50	21.84
57.3	87.3	20.74	20.96	21.17
63.2	93.2	21.33	21.49	21.59
69.1	99.1	22.58	22.83	22.90
75.0	105.0	24.00	24.42	24.41
80.9	110.9	24.58	25.45	25.98
86.8	116.8	23.01	24.20	25.71
92.7	122.7	21.02	22.01	24.06
98.6	128.6	19.39	20.28	22.46
104.5	134.5	17.89	18.61	20.02
110.4	140.4	16.67	17.27	17.92
116.3	146.3	15.97	16.57	17.02
122.2	152.2	15.63	16.16	16.55
128.0	158.0	15.16	15.68	16.22
133.9	163.9	14.79	15.26	15.82
139.8	169.8	14.61	14.99	15.47
145.7	175.7	14.68	15.02	15.50
151.6	181.6	14.92	15.30	15.72
157.5	187.5	14.89	15.25	15.63
163.4	193.4	14.57	14.86	15.12
169.3	199.3	14.22	14.27	13.94
175.2	205.2	13.83	13.56	12.72
181.1	211.1	13.39	12.72	11.70
187.0	217.0	12.70	11.89	11.02
192.9	222.9	11.80	11.06	10.44
198.8	228.8	11.03	10.47	10.05
204.7	234.7	10.38	9.96	9.61
210.6	240.6	9.75	9.44	9.15
216.5	246.5	9.26	9.01	8.80
222.4	252.4	8.81	8.64	8.47
228.3	258.3	8.30	8.16	8.05
234.2	264.2	7.89	7.79	7.66
240.1	270.1	7.49	7.43	7.23

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Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=50.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+20	+23	+26		+20	+23	+26		+20	+23	+26
5.0	35.0	1.37	1.32	1.28	35.0	1.84	2.47	3.12	0.5	1.64	1.57	1.50
6.2	36.2	1.37	1.32	1.28	36.2	1.83	2.48	3.17	1.5	1.84	1.76	1.68
7.4	37.4	1.37	1.32	1.28	37.4	1.82	2.48	3.21	2.5	1.79	1.71	1.64
10.0	40.0	1.39	1.33	1.29	40.0	1.80	2.43	3.14	3.5	1.77	1.69	1.62
16.0	46.0	1.54	1.47	1.44	16.0	1.69	2.14	2.68	4.6	1.77	1.69	1.62
21.9	51.9	1.54	1.47	1.43	21.9	1.60	1.85	2.35	5.6	1.77	1.69	1.62
27.8	57.8	1.53	1.45	1.41	27.8	1.53	1.84	2.12	6.6	1.77	1.69	1.62
33.7	63.7	1.49	1.42	1.37	33.7	1.49	2.11	2.00	7.6	1.77	1.70	1.62
39.6	69.6	1.46	1.39	1.36	39.6	1.46	2.63	1.95	8.6	1.77	1.69	1.62
45.5	75.5	1.44	1.37	1.35	45.5	1.47	2.99	1.98	9.6	1.78	1.70	1.63
51.4	81.4	1.42	1.35	1.33	51.4	1.51	2.78	2.08	10.6	1.78	1.70	1.62
57.3	87.3	1.39	1.33	1.31	57.3	1.58	2.33	2.23	11.6	1.79	1.70	1.63
63.2	93.2	1.33	1.27	1.26	63.2	1.67	2.04	2.46	12.7	1.79	1.71	1.63
75.0	105.0	1.25	1.23	1.23	75.0	1.88	2.18	3.07	13.7	1.79	1.71	1.64
80.9	110.9	1.25	1.24	1.24	80.9	1.95	2.70	3.30	14.7	1.79	1.71	1.64
86.8	116.8	1.28	1.27	1.29	86.8	1.99	3.19	3.34	15.7	1.79	1.71	1.64
92.7	122.7	1.32	1.32	1.34	92.7	1.97	3.11	3.24	16.7	1.80	1.72	1.65
98.6	128.6	1.36	1.36	1.39	98.6	1.92	2.73	3.04	17.7	1.80	1.72	1.64
104.5	134.5	1.41	1.40	1.41	104.5	1.87	2.43	2.80	18.7	1.80	1.72	1.64
110.4	140.4	1.43	1.41	1.41	110.4	1.81	2.32	2.57	19.7	1.80	1.72	1.65
122.2	152.2	1.41	1.36	1.31	122.2	1.74	2.87	2.28	20.8	1.80	1.72	1.65
128.0	158.0	1.38	1.33	1.27	128.0	1.72	3.43	2.24	21.8	1.80	1.73	1.65
133.9	163.9	1.34	1.28	1.22	133.9	1.73	3.51	2.26	22.8	1.81	1.73	1.65
139.8	169.8	1.30	1.24	1.16	139.8	1.77	3.30	2.32	23.8	1.81	1.73	1.66
145.7	175.7	1.27	1.22	1.12	145.7	1.85	3.08	2.44	24.8	1.81	1.73	1.66
151.6	181.6	1.24	1.19	1.13	151.6	1.96	2.95	2.62	25.8	1.81	1.73	1.66
157.5	187.5	1.21	1.19	1.19	157.5	2.08	2.96	2.85	26.8	1.81	1.73	1.66
163.4	193.4	1.22	1.22	1.25	163.4	2.19	3.13	3.12	27.8	1.81	1.73	1.66
169.3	199.3	1.28	1.28	1.34	169.3	2.27	3.38	3.35	28.9	1.81	1.74	1.67
175.2	205.2	1.37	1.39	1.46	175.2	2.30	3.52	3.41	29.9	1.81	1.73	1.66
181.1	211.1	1.49	1.51	1.59	181.1	2.30	3.58	3.35	30.9	1.82	1.74	1.66
187.0	217.0	1.65	1.67	1.72	187.0	2.29	3.63	3.25	31.9	1.82	1.74	1.67
192.9	222.9	1.79	1.81	1.86	192.9	2.27	3.58	3.15	32.9	1.82	1.74	1.67
198.8	228.8	1.88	1.90	1.94	198.8	2.25	3.34	3.04	33.9	1.82	1.74	1.67
210.6	240.6	2.01	2.00	2.01	210.6	2.22	2.75	2.85	34.9	1.82	1.74	1.67
216.5	246.5	2.10	2.08	2.09	216.5	2.21	2.93	2.79	35.9	1.83	1.75	1.67
222.4	252.4	2.23	2.20	2.20	222.4	2.20	3.21	2.76	37.0	1.83	1.75	1.68
228.3	258.3	2.36	2.35	2.36	228.3	2.21	3.58	2.73	38.0	1.83	1.75	1.68
234.2	264.2	2.51	2.53	2.52	234.2	2.23	3.70	2.70	39.0	1.83	1.75	1.68
240.1	270.1	2.60	2.60	2.63	240.1	2.27	3.26	2.69	40.0	1.83	1.76	1.69

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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	14	31	25	33	17	30	19	40	30	51
1	-	17	+0	27	10	31	16	42	21	37	31	48
2	87	65	57	69	61	69	63	70	50	62	51	69
3	106	60	68	64	70	67	69	61	64	62	59	65
4	>123	86	90	88	85	92	92	84	77	86	79	86
5	>123	78	76	82	71	83	69	88	69	87	70	82
6	>123	90	89	93	87	94	87	112	91	92	91	87
7	>122	91	82	90	82	89	77	88	77	97	78	95
8	>122	101	99	103	103	105	105	104	96	107	99	97
9	>122	95	87	95	87	96	88	97	84	95	85	101
10	>122	107	108	106	112	107	106	109	103	108	101	>119
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 30.1 MHz; .01.00 dBm.
LO IN: 40.01 MHz; +22.9.00 dBm
IF OUT: 9.91 MHz; -5.29 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	24	42	34	47	28	42	32	51	43	67
1	-	18	+0	29	11	34	18	47	24	43	34	57
2	76	74	53	68	56	60	55	58	46	60	51	67
3	88	46	52	47	45	48	40	46	40	50	41	51
4	>123	74	76	95	71	87	71	72	67	77	57	70
5	>122	69	65	70	55	73	53	70	53	62	56	58
6	>123	89	74	85	75	83	81	86	76	79	78	79
7	>122	69	70	74	70	76	69	74	65	71	61	69
8	>123	85	82	84	87	86	82	92	82	85	91	89
9	>123	77	76	82	75	77	76	81	80	91	79	94
10	>123	94	89	94	93	93	95	109	91	103	88	88
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 30.1 MHz; 9.98.00 dBm.
LO IN: 40.01 MHz; +22.9.00 dBm
IF OUT: 9.91 MHz; 4.68 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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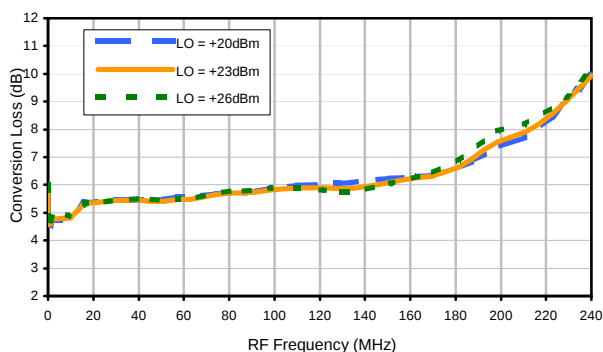


Frequency Mixer

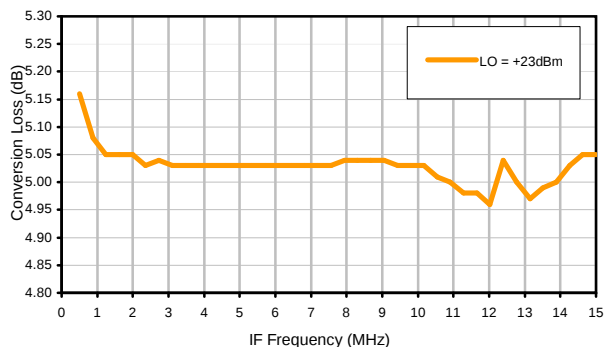
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Typical Performance Curves

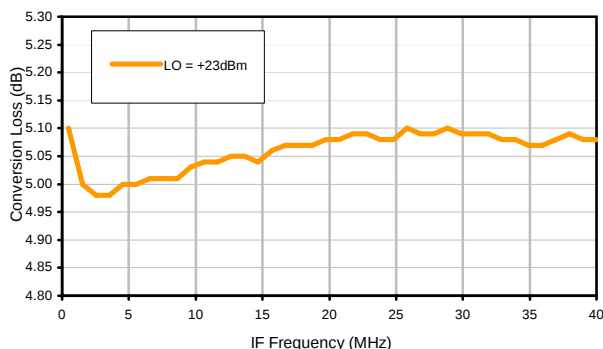
Conversion Loss @ IF=30MHz



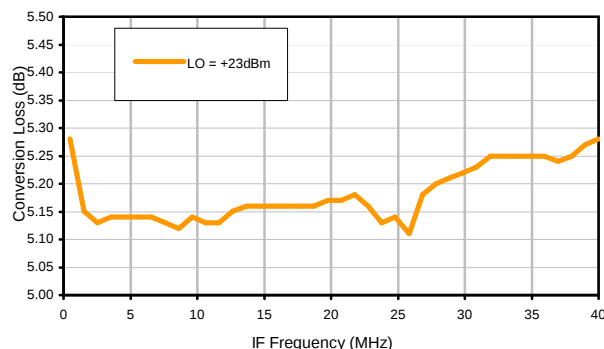
Conversion Loss vs. IF @ RF=25.1MHz



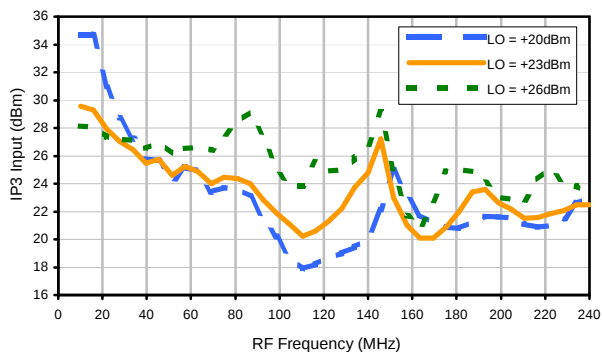
Conversion Loss vs. IF @ RF=10.1MHz



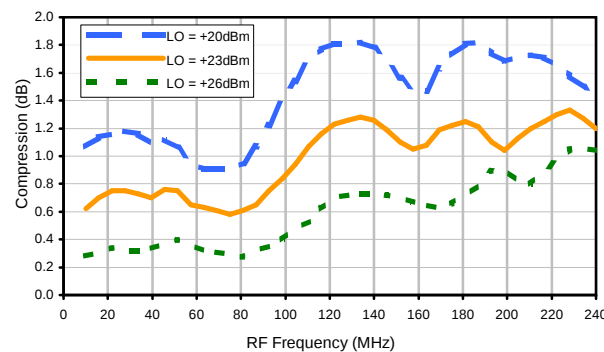
Conversion Loss vs. IF @ RF=50.1MHz



IP3 Input



Compression @ RF IN=+14.99dBm



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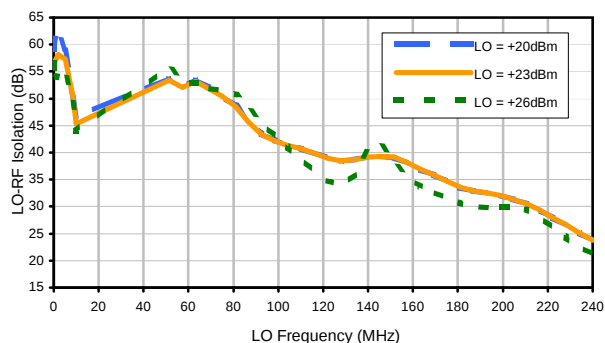


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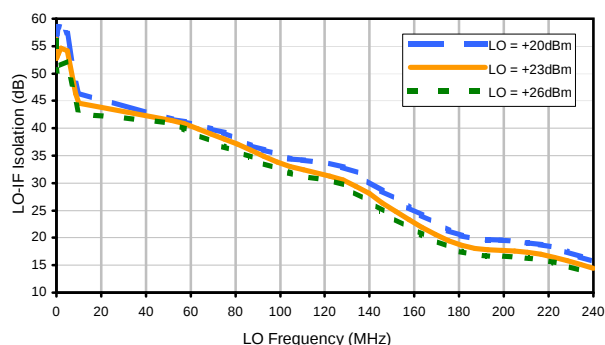


Typical Performance Curves

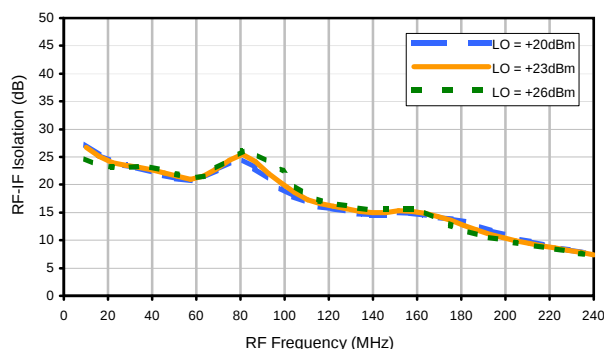
LO-RF Isolation



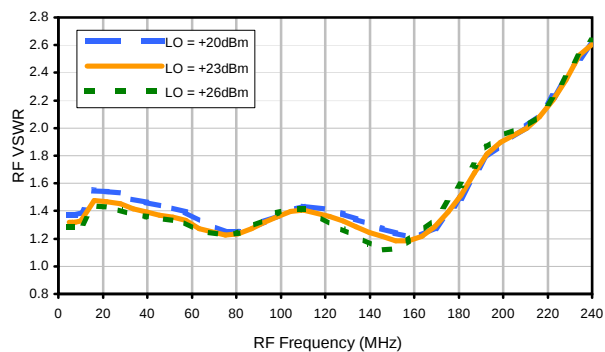
LO-IF Isolation



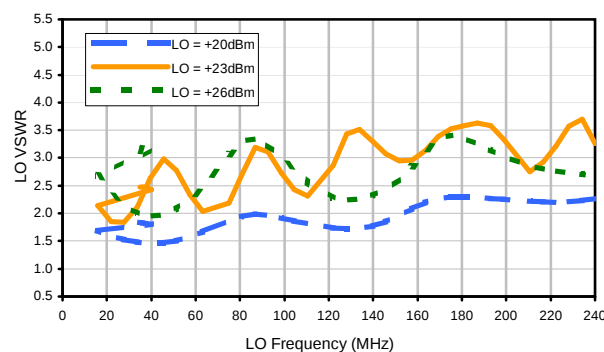
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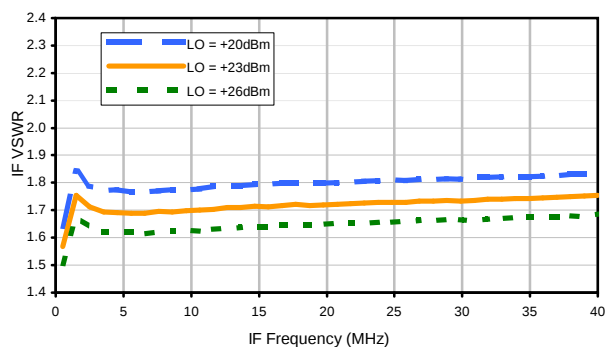
RF VSWR



LO VSWR



IF VSWR



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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	14	31	25	33	17	30	19	40	30	51
1	-	17	+0	27	10	31	16	42	21	37	31	48
2	87	65	57	69	61	69	63	70	50	62	51	69
3	106	60	68	64	70	67	69	61	64	62	59	65
4	>123	86	90	88	85	92	92	84	77	86	79	86
5	>123	78	76	82	71	83	69	88	69	87	70	82
6	>123	90	89	93	87	94	87	112	91	92	91	87
7	>122	91	82	90	82	89	77	88	77	97	78	95
8	>122	101	99	103	103	105	105	104	96	107	99	97
9	>122	95	87	95	87	96	88	97	84	95	85	101
10	>122	107	108	106	112	107	106	109	103	108	101	>119
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 30.1 MHz; .01.00 dBm.
LO IN: 40.01 MHz; +22.9.00 dBm
IF OUT: 9.91 MHz; -5.29 dBm

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0	-	-	24	42	34	47	28	42	32	51	43	67
1	-	18	+0	29	11	34	18	47	24	43	34	57
2	76	74	53	68	56	60	55	58	46	60	51	67
3	88	46	52	47	45	48	40	46	40	50	41	51
4	>123	74	76	95	71	87	71	72	67	77	57	70
5	>122	69	65	70	55	73	53	70	53	62	56	58
6	>123	89	74	85	75	83	81	86	76	79	78	79
7	>122	69	70	74	70	76	69	74	65	71	61	69
8	>123	85	82	84	87	86	82	92	82	85	91	89
9	>123	77	76	82	75	77	76	81	80	91	79	94
10	>123	94	89	94	93	93	95	109	91	103	88	88
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 30.1 MHz; 9.98.00 dBm.
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3. RF Cal represent the Harmonics level of the RF input signal to the mixer.

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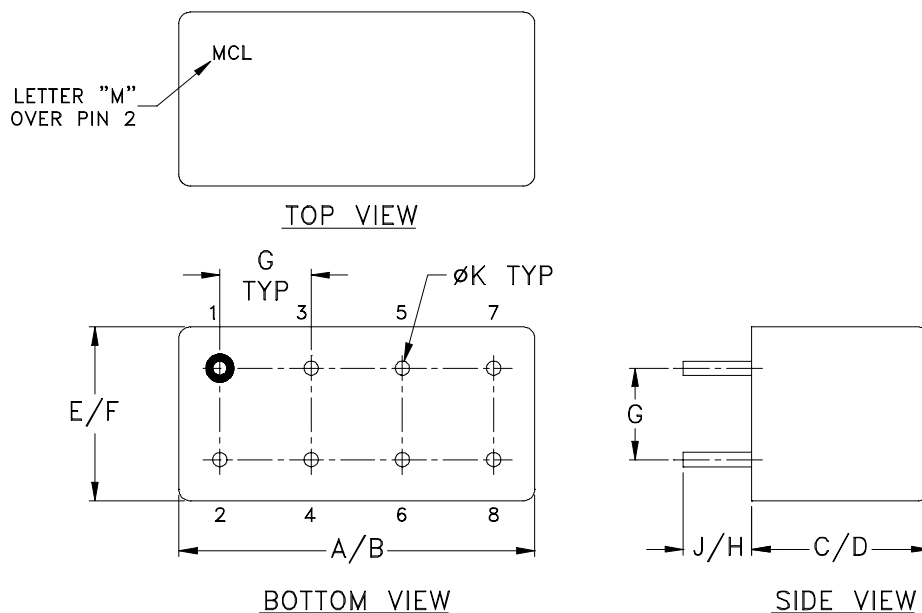
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A01
A04
A05
A06

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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