

Non-Catalog Model

Frequency Mixer

SAY-2

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)	0.1		1000	MHz
	RF (fL to fU)	0.1		1000	MHz
	IF	0.01		500	MHz
Conversion Loss	mid band		5.4	7.5	dB
	Total Range			9.5	dB
LO-RF Isolation	Low Range	20	40		dB
	Mid Range	30	40		dB
	Upper Range	25	30		dB
LO-IF Isolation	Low Range	23	37		dB
	Mid Range	25	40		dB
	Upper Range	15	25		dB
1 dB Comp. Input Power			+20		dBm

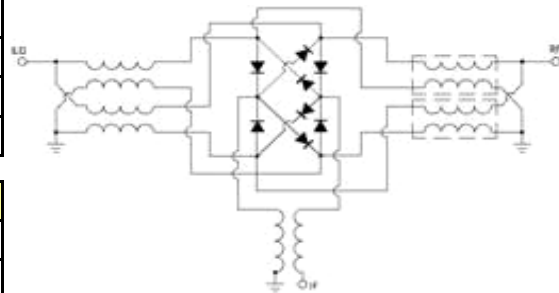
Notes: Low Range = [fL to 10fL] Mid Range = [10fL to fU/2] Upper Range = [fU/2 to fU]
mid band = [2fL to fU/2]

IF response from 0.01 to 0.1 MHz falls off 3 dB.
Hermetically sealed.

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
GROUND	2, 5, 6, 7

Electrical Schematics



Frequency Mixer

SAY-2

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=+19.97dBm (dB)		
		@LO (dBm)					@LO (dBm)					@LO (dBm)		
		+20	+23	+26			+20	+23	+26			+20	+23	+26
0.1	30.1	6.43	6.00	5.73	10.1	40.1	33.31	33.10	33.74	10.1	40.1	1.11	0.61	0.35
0.5	30.5	6.48	6.04	5.80	20.1	50.1	36.00	36.71	37.28	20.1	50.1	1.33	0.81	0.51
5.0	35.0	6.24	5.85	5.72	30.1	60.1	36.57	37.08	37.49	30.1	60.1	1.47	0.89	0.54
10.1	40.1	5.68	5.34	5.15	40.1	70.1	36.00	36.81	37.13	40.1	70.1	1.41	0.84	0.49
20.1	50.1	5.55	5.23	5.06	50.1	80.1	35.21	35.30	36.22	50.1	80.1	1.38	0.75	0.41
30.1	60.1	5.63	5.27	5.07	70.1	100.1	32.52	34.59	33.85	70.1	100.1	1.00	0.50	0.23
40.1	70.1	5.63	5.26	5.08	90.1	120.1	31.27	34.02	34.06	90.1	120.1	0.90	0.50	0.26
50.1	80.1	5.65	5.27	5.10	110.1	140.1	36.06	35.55	35.09	110.1	140.1	1.17	0.70	0.40
90.1	120.1	5.98	5.55	5.29	130.1	160.1	31.32	33.75	34.67	130.1	160.1	1.26	0.82	0.49
110.1	140.1	5.77	5.41	5.19	150.1	180.1	29.28	32.94	35.72	150.1	180.1	1.23	0.79	0.45
130.1	160.1	5.92	5.49	5.22	170.1	200.1	31.24	32.06	33.30	170.1	200.1	0.97	0.51	0.23
150.1	180.1	6.18	5.59	5.28	190.1	220.1	28.59	31.22	33.00	190.1	220.1	0.79	0.50	0.30
170.1	200.1	6.18	5.62	5.34	220.1	250.1	30.75	33.37	32.70	220.1	250.1	1.25	0.80	0.49
190.1	220.1	6.34	5.80	5.45	250.1	280.1	30.43	33.09	33.54	250.1	280.1	1.08	0.60	0.32
220.1	250.1	6.17	5.62	5.32	280.1	310.1	30.29	31.67	34.85	280.1	310.1	0.79	0.47	0.22
250.1	280.1	6.54	5.85	5.52	310.1	340.1	31.38	32.14	35.28	310.1	340.1	1.13	0.68	0.38
280.1	310.1	6.36	5.82	5.57	340.1	370.1	31.97	33.61	38.21	340.1	370.1	1.17	0.59	0.28
310.1	340.1	6.24	5.73	5.50	370.1	400.1	32.38	35.02	34.97	370.1	400.1	0.66	0.29	0.11
340.1	370.1	6.67	5.95	5.70	400.1	430.1	34.04	37.00	35.18	400.1	430.1	0.97	0.47	0.24
400.1	430.1	6.29	5.85	5.68	450.1	480.1	34.60	39.20	34.81	450.1	480.1	0.66	0.24	0.09
450.1	480.1	7.22	6.34	6.09	500.1	530.1	32.91	41.89	34.49	500.1	530.1	0.56	0.34	0.16
500.1	530.1	7.12	6.34	6.07	550.1	580.1	36.38	38.44	35.97	550.1	580.1	0.25	0.10	-0.01
550.1	580.1	8.03	6.82	6.45	600.1	630.1	33.19	40.26	37.01	600.1	630.1	0.44	0.24	0.11
600.1	630.1	7.63	6.64	6.31	650.1	680.1	30.24	40.03	32.38	650.1	680.1	0.10	0.04	-0.01
650.1	680.1	8.72	7.21	6.77	700.1	730.1	32.97	34.62	34.37	700.1	730.1	0.71	0.33	0.16
700.1	730.1	7.86	6.76	6.46	800.1	830.1	31.23	34.49	34.99	800.1	830.1	0.88	0.40	0.19
800.1	830.1	7.92	6.90	6.60	900.1	930.1	29.42	34.72	33.87	900.1	930.1	0.96	0.41	0.20
900.1	930.1	8.05	7.11	6.78	1000.1	1030.1	30.71	32.23	34.67	1000.1	1030.1	1.05	0.42	0.19
1000.1	1030.1	8.47	7.47	7.08	1100.1	1130.1	29.36	31.99	35.65	1100.1	1130.1	1.17	0.48	0.21
1100.1	1130.1	8.27	7.44	7.10	1200.1	1230.1	30.16	31.02	36.89	1200.1	1230.1	1.32	0.56	0.24
1200.1	1230.1	8.12	7.42	7.13	1300.1	1330.1	29.65	33.16	35.33	1300.1	1330.1	1.35	0.64	0.28
1300.1	1330.1	8.20	7.52	7.24	1400.1	1430.1	28.06	30.05	36.69	1400.1	1430.1	1.34	0.72	0.33
1400.1	1430.1	8.35	7.65	7.37	1500.1	1530.1	27.29	28.95	34.95	1500.1	1530.1	1.32	0.68	0.30
1500.1	1530.1	8.45	7.77	7.50	1600.1	1630.1	27.77	30.22	39.74	1600.1	1630.1	1.17	0.59	0.28
1600.1	1630.1	8.65	7.93	7.63	1700.1	1730.1	26.29	30.73	40.04	1700.1	1730.1	1.15	0.54	0.28
1800.1	1830.1	9.41	8.62	8.33	1800.1	1830.1	25.50	29.67	44.34	1800.1	1830.1	1.11	0.45	0.22
1900.1	1930.1	9.87	9.02	8.68	1900.1	1930.1	25.50	34.18	32.30	1900.1	1930.1	1.07	0.56	0.35
2000.1	2030.1	10.61	9.65	9.16	2000.1	2030.1	28.67	35.28	30.97	2000.1	2030.1	0.93	0.53	0.43
2100.1	2130.1	11.23	10.18	9.73	2100.1	2130.1	31.88	32.25	31.73	2100.1	2130.1	0.91	0.61	0.41
2200.1	2230.1	11.08	10.19	9.74	2200.1	2230.1	27.39	31.02	33.06	2200.1	2230.1	1.35	0.85	0.49

REV. X2

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IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant

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The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=500.1MHz (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)=1000.1MHz (dB)
		@LO (dBm)			@LO (dBm)			@LO (dBm)
		+23			+23			+23
0.5	499.6	6.48	0.5	10.6	5.37	0.5	999.6	7.43
0.8	499.4	6.46	0.8	10.9	5.35	0.8	999.4	7.41
1.0	499.1	6.45	1.0	11.1	5.34	1.0	999.1	7.41
2.0	498.1	6.39	2.0	12.1	5.29	2.0	998.1	7.35
3.0	497.1	6.36	3.0	13.1	5.28	3.0	997.1	7.34
4.0	496.1	6.36	4.0	14.1	5.27	4.0	996.1	7.33
5.0	495.1	6.34	5.0	15.1	5.28	5.0	995.1	7.34
6.0	494.1	6.33	6.0	16.1	5.29	6.0	994.1	7.33
8.0	492.1	6.30	8.0	18.1	5.30	8.0	992.1	7.33
10.0	490.1	6.32	10.0	20.1	5.30	10.0	990.1	7.34
15.0	485.1	6.30	15.0	25.1	5.33	15.0	985.1	7.35
20.0	480.1	6.33	20.0	30.1	5.37	20.0	980.1	7.35
25.0	475.1	6.40	25.0	35.1	5.38	25.0	975.1	7.35
30.0	470.1	6.45	30.0	40.1	5.33	30.0	970.1	7.36
35.0	465.1	6.48	35.0	45.1	5.25	35.0	965.1	7.38
40.0	460.1	6.46	40.0	50.1	5.28	40.0	960.1	7.40
50.0	450.1	6.40	50.0	60.1	5.39	50.0	950.1	7.35
60.0	440.1	6.41	65.0	75.1	5.37	65.0	935.1	7.20
70.0	430.1	6.39	80.0	90.1	5.38	80.0	920.1	7.07
90.0	410.1	6.45	100.0	110.1	5.33	100.0	900.1	7.08
110.0	390.1	6.45	120.0	130.1	5.45	120.0	880.1	7.05
130.0	370.1	6.63	140.0	150.1	5.37	140.0	860.1	7.09
150.0	350.1	6.55	160.0	170.1	5.32	160.0	840.1	6.97
170.0	330.1	6.55	180.0	190.1	5.36	180.0	820.1	6.87
190.0	310.1	6.67	200.0	210.1	5.30	200.0	800.1	6.87
210.0	290.1	6.59	220.0	230.1	5.22	220.0	780.1	6.89
230.0	270.1	6.78	240.0	250.1	5.27	240.0	760.1	6.97
250.0	250.1	7.04	260.0	270.1	5.21	260.0	740.1	6.90
270.0	230.1	6.90	280.0	290.1	5.13	280.0	720.1	6.85
290.0	210.1	6.96	300.0	310.1	5.19	300.0	700.1	6.93
310.0	190.1	7.14	320.0	330.1	5.12	320.0	680.1	7.09
330.0	170.1	6.95	340.0	350.1	5.17	340.0	660.1	7.28
350.0	150.1	7.09	360.0	370.1	5.24	360.0	640.1	7.16
370.0	130.1	7.13	380.0	390.1	5.17	380.0	620.1	7.27
390.0	110.1	6.87	400.0	410.1	5.20	400.0	600.1	7.24
410.0	90.1	6.94	420.0	430.1	5.17	420.0	580.1	7.35
430.0	70.1	6.76	440.0	450.1	5.25	440.0	560.1	7.47
450.0	50.1	6.68	460.0	470.1	5.33	460.0	540.1	7.31
470.0	30.1	6.64	480.0	490.1	5.30	480.0	520.1	7.26
490.0	10.1	6.47	500.0	510.1	5.33	500.0	500.1	7.33

Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+20	+23	+26	+20	+23	+26
0.1	22.68	24.85	27.10	22.66	23.85	24.69
0.5	33.97	36.68	39.29	33.35	35.77	37.61
5.0	39.61	41.65	44.65	39.03	42.30	45.57
10.1	58.28	60.49	65.55	45.44	49.07	50.88
20.1	60.03	62.70	67.35	45.64	48.55	50.34
30.1	60.90	64.43	68.90	45.10	47.90	49.61
40.1	62.91	65.76	67.59	45.02	47.58	49.15
50.1	64.27	68.47	68.34	45.32	47.81	48.99
90.1	67.38	73.04	64.42	45.76	47.17	46.47
110.1	71.69	69.04	63.26	46.50	47.05	45.86
130.1	72.29	67.30	62.51	46.30	46.67	45.68
150.1	67.89	65.49	61.84	47.94	47.18	45.19
170.1	67.97	64.45	60.08	48.81	46.74	43.79
190.1	65.33	64.83	59.38	49.09	46.12	42.75
220.1	62.90	63.14	61.17	50.67	46.03	42.70
250.1	62.37	62.33	60.95	54.14	45.83	41.84
280.1	64.31	60.63	57.99	66.82	45.31	40.16
310.1	74.75	60.72	59.64	56.92	44.37	40.18
340.1	56.36	58.46	66.02	50.61	44.93	40.31
400.1	52.22	56.12	71.55	44.62	42.97	38.81
450.1	44.76	47.61	54.40	41.68	43.68	38.80
500.1	40.90	43.80	48.71	40.64	42.67	38.85
550.1	38.78	41.48	45.67	36.45	42.23	40.28
600.1	37.07	40.17	43.81	35.03	39.59	40.12
650.1	35.00	38.48	42.37	31.90	36.34	38.93
700.1	32.70	36.93	41.38	30.97	34.82	37.98
800.1	31.35	35.86	39.60	30.07	33.15	35.94
900.1	31.52	36.31	40.23	29.35	32.34	34.84
1000.1	37.84	39.75	39.15	34.06	38.54	43.41
1100.1	33.71	36.99	39.54	26.80	28.65	30.89
1200.1	32.58	36.88	40.72	25.56	27.13	29.24
1300.1	32.26	36.41	39.98	26.28	27.65	29.64
1400.1	30.93	34.54	37.31	27.79	28.91	30.86
1500.1	29.99	33.04	35.11	29.21	30.31	32.24
1600.1	29.03	31.43	32.93	30.06	31.18	33.18
1800.1	28.59	30.89	32.61	34.56	36.29	39.12
1900.1	29.88	33.63	37.28	38.94	41.34	36.60
2000.1	31.80	38.40	43.92	49.83	38.21	32.19
2100.1	28.07	31.60	33.74	39.12	32.54	28.70
2200.1	23.27	26.48	29.41	35.49	30.59	27.57

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+20	+23	+26
10.1	40.1	43.60	44.48	48.65
20.1	50.1	43.03	44.52	49.16
30.1	60.1	42.12	43.60	45.67
40.1	70.1	42.52	43.44	43.94
50.1	80.1	42.74	43.70	43.47
70.1	100.1	43.22	44.01	43.79
90.1	120.1	42.67	44.15	45.54
110.1	140.1	44.48	46.12	53.44
130.1	160.1	44.78	45.96	47.66
150.1	180.1	43.12	44.90	46.32
170.1	200.1	44.35	46.27	48.65
190.1	220.1	45.08	46.42	53.16
220.1	250.1	47.11	47.92	49.11
250.1	280.1	48.24	52.05	50.63
280.1	310.1	49.96	55.45	52.40
310.1	340.1	48.88	54.14	51.73
340.1	370.1	50.15	53.57	52.31
370.1	400.1	51.13	53.31	52.61
400.1	430.1	52.50	56.75	54.63
450.1	480.1	51.50	57.31	55.76
500.1	530.1	47.37	50.37	47.80
550.1	580.1	43.74	46.33	45.17
600.1	630.1	37.94	40.99	41.38
650.1	680.1	37.18	41.40	41.65
700.1	730.1	37.53	39.95	39.80
800.1	830.1	33.84	38.66	40.09
900.1	930.1	32.22	37.72	40.76
1000.1	1030.1	40.91	41.17	39.87
1100.1	1130.1	33.17	36.30	35.21
1200.1	1230.1	33.32	35.28	33.81
1300.1	1330.1	35.80	36.20	34.72
1400.1	1430.1	41.91	38.87	36.13
1500.1	1530.1	49.37	40.31	37.36
1600.1	1630.1	59.38	40.17	37.15
1700.1	1730.1	42.86	38.58	36.95
1800.1	1830.1	38.27	36.92	36.38
1900.1	1930.1	37.58	36.71	36.67
2000.1	2030.1	35.47	34.77	34.74
2100.1	2130.1	31.98	32.44	32.62
2200.1	2230.1	33.58	33.58	33.50

Frequency Mixer

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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=1000.1MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+20	+23	+26		+20	+23	+26		+20	+23	+26
5.0	35.0	1.57	1.20	1.17	5.0	1.43	1.25	2.31	0.5	1.32	1.19	1.18
10.0	40.0	1.58	1.21	1.17	10.0	1.41	1.28	2.24	0.8	1.37	1.17	1.05
20.1	50.1	1.66	1.47	1.35	20.1	1.27	1.25	2.07	1.0	1.47	1.24	1.10
30.1	60.1	1.78	1.54	1.38	50.1	1.23	1.20	1.76	2.0	1.59	1.34	1.19
40.1	70.1	1.74	1.51	1.37	100.1	1.34	1.25	2.01	3.0	1.58	1.33	1.18
50.1	80.1	1.73	1.51	1.38	140.1	1.33	1.21	1.89	4.0	1.56	1.32	1.17
90.1	120.1	1.83	1.59	1.43	180.1	1.42	1.26	2.34	5.0	1.55	1.30	1.16
110.1	140.1	1.78	1.57	1.42	220.1	1.34	1.21	1.71	6.0	1.53	1.29	1.15
130.1	160.1	1.95	1.67	1.49	260.1	1.46	1.24	1.85	8.0	1.52	1.28	1.14
150.1	180.1	2.01	1.67	1.48	300.1	1.51	1.21	1.91	10.0	1.52	1.28	1.14
170.1	200.1	1.95	1.65	1.49	350.1	1.52	1.20	2.12	15.0	1.52	1.28	1.14
190.1	220.1	2.05	1.76	1.56	400.1	1.47	1.18	1.66	20.0	1.52	1.28	1.14
220.1	250.1	2.12	1.79	1.60	500.1	1.49	1.12	1.57	25.0	1.52	1.28	1.14
250.1	280.1	2.18	1.81	1.63	600.1	1.57	1.10	1.62	30.0	1.53	1.29	1.14
280.1	310.1	2.11	1.82	1.67	700.1	1.58	1.12	1.41	35.0	1.53	1.29	1.15
310.1	340.1	2.20	1.90	1.74	800.1	1.79	1.19	1.44	40.0	1.53	1.29	1.15
340.1	370.1	2.37	1.97	1.80	900.1	1.99	1.25	1.44	50.0	1.54	1.30	1.15
370.1	400.1	2.29	1.98	1.84	1000.1	2.18	1.33	1.32	65.0	1.55	1.30	1.15
400.1	430.1	2.39	2.08	1.93	1100.1	2.74	1.47	1.31	80.0	1.55	1.31	1.16
450.1	480.1	2.78	2.29	2.08	1200.1	2.94	1.57	1.16	100.0	1.56	1.31	1.16
500.1	530.1	2.99	2.52	2.27	1300.1	3.65	1.77	1.07	120.0	1.58	1.32	1.17
550.1	580.1	3.34	2.69	2.42	1400.1	3.77	1.90	1.19	140.0	1.58	1.33	1.17
600.1	630.1	3.54	2.88	2.58	1500.1	3.61	1.96	1.37	160.0	1.60	1.34	1.18
650.1	680.1	4.03	3.16	2.77	1600.1	3.62	2.06	1.57	180.0	1.61	1.35	1.19
700.1	730.1	3.90	3.10	2.75	1700.1	3.29	2.04	1.74	200.0	1.62	1.35	1.19
800.1	830.1	3.94	3.14	2.79	1800.1	3.11	2.15	2.14	220.0	1.64	1.37	1.20
900.1	930.1	3.30	2.82	2.61	1900.1	2.66	2.12	2.39	240.0	1.65	1.37	1.20
1000.1	1030.1	2.63	2.35	2.25	2000.1	2.59	2.27	2.65	260.0	1.65	1.37	1.20
1100.1	1130.1	1.96	1.89	1.89	2100.1	2.25	2.22	2.69	280.0	1.67	1.38	1.21
1200.1	1230.1	1.44	1.50	1.57	2250.1	1.76	2.00	2.70	300.0	1.68	1.39	1.21
1300.1	1330.1	1.13	1.25	1.34	2400.1	1.49	1.99	3.18	320.0	1.67	1.38	1.21
1400.1	1430.1	1.10	1.07	1.15	2550.1	1.26	1.78	2.83	340.0	1.68	1.39	1.21
1500.1	1530.1	1.18	1.08	1.10	2700.1	1.09	1.43	1.90	360.0	1.67	1.38	1.21
1600.1	1630.1	1.07	1.07	1.14	2850.1	1.15	1.29	1.71	380.0	1.66	1.38	1.20
1700.1	1730.1	1.25	1.24	1.27	3000.1	1.36	1.15	1.59	400.0	1.66	1.38	1.20
1800.1	1830.1	1.79	1.69	1.65	3200.1	1.70	1.12	1.27	420.0	1.65	1.37	1.20
1900.1	1930.1	2.67	2.44	2.33	3400.1	1.84	1.38	1.31	440.0	1.63	1.36	1.19
2000.1	2030.1	3.88	3.45	3.19	3600.1	2.00	1.72	1.89	460.0	1.62	1.35	1.19
2100.1	2130.1	4.01	3.67	3.48	3800.1	2.21	2.13	2.54	480.0	1.61	1.34	1.18
2200.1	2230.1	3.09	3.03	3.00	4000.1	2.17	2.22	2.67	500.0	1.59	1.33	1.17

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Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	29	36	35	41	38	46	50	59	60	58
1	-	32	+0	42	16	39	29	40	35	51	51	55
2	73	48	48	48	65	52	49	50	42	51	45	53
3	86	52	46	53	81	50	42	46	41	46	48	52
4	112	64	64	66	70	71	67	61	63	61	53	73
5	>119	61	58	64	58	64	55	66	54	67	55	60
6	>119	70	62	67	65	63	70	64	76	66	74	65
7	>119	70	63	65	69	68	74	67	73	64	80	64
8	>120	74	73	73	71	73	72	72	74	70	77	74
9	>119	77	81	74	78	71	84	74	85	78	91	78
10	>121	84	85	82	82	79	89	81	87	80	84	77
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 500.1 MHz; 15.01.00 dBm.
LO IN: 530.01 MHz; +23.00 dBm
IF OUT: 29.91 MHz; 8.8 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	19	25	22	27	27	28	31	29	33	34
1	-	33	+0	39	17	33	32	33	31	35	38	41
2	84	60	53	67	59	53	61	53	48	58	50	67
3	101	92	63	66	59	69	51	68	52	63	59	73
4	>123	87	71	79	71	73	74	73	89	75	80	88
5	>123	81	80	85	81	88	80	82	80	80	79	83
6	>123	91	97	92	102	101	89	105	86	95	89	90
7	>121	110	99	100	93	95	93	95	98	97	98	107
8	>121	>117	110	108	110	106	111	108	105	114	103	105
9	>121	>120	>121	>120	111	114	109	110	110	112	115	115
10	>121	>120	>122	>119	>121	>121	>122	>122	>122	>122	>120	>120
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 500.1 MHz; 4.94.00 dBm.
LO IN: 530.01 MHz; +23.00 dBm
IF OUT: 29.91 MHz; -1.21 dBm

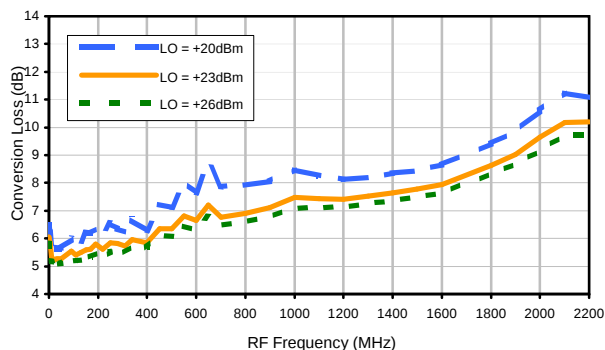
- Notes: 1. All Harmonics are in (dBc) relative to IF OUTPUT.
2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
3. RF Cal represent the Harmonics level of the RF input signal to the mixer.

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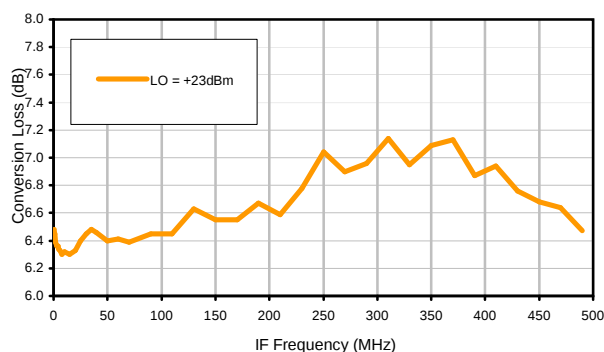


Typical Performance Curves

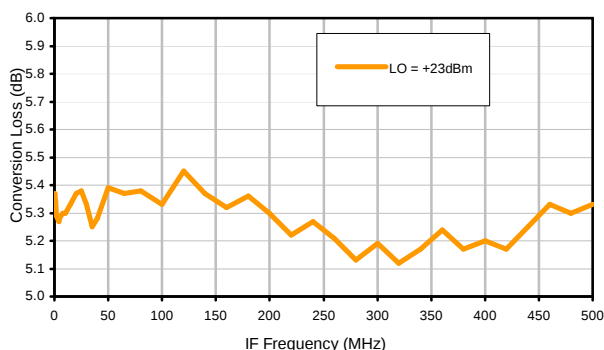
Conversion Loss @ IF=30MHz



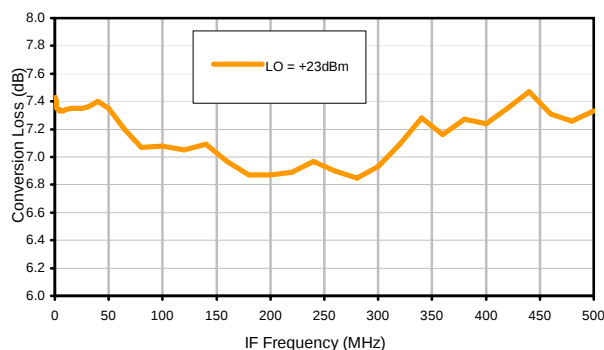
Conversion Loss vs. IF @ RF=500.1MHz



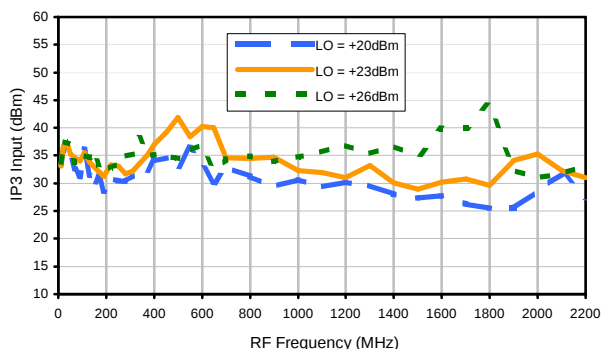
Conversion Loss vs. IF @ RF=10.1MHz



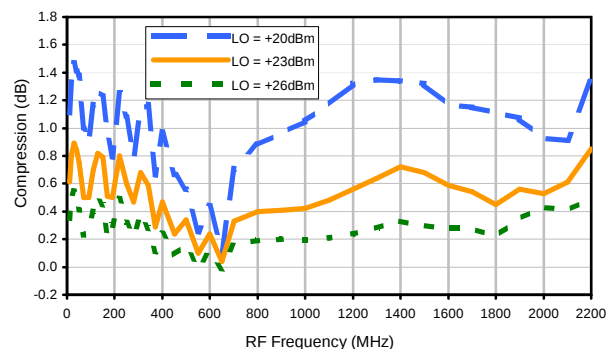
Conversion Loss vs. IF @ RF=1000.1MHz



IP3 Input

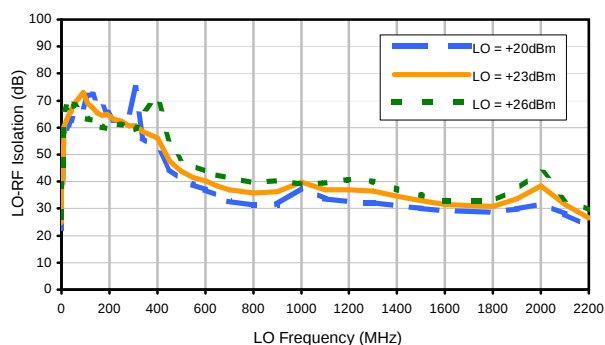


Compression @ RF IN=+19.97dBm

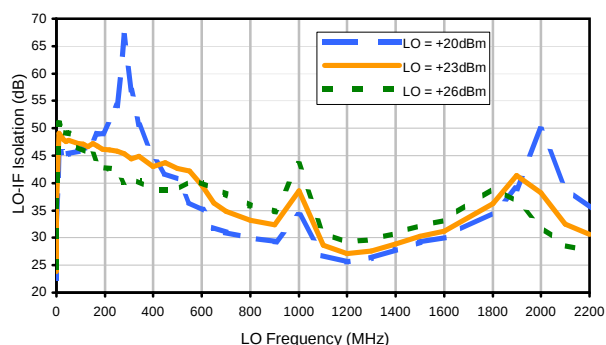


Typical Performance Curves

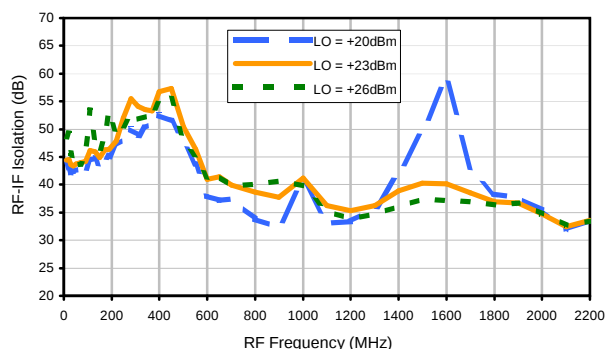
LO-RF Isolation



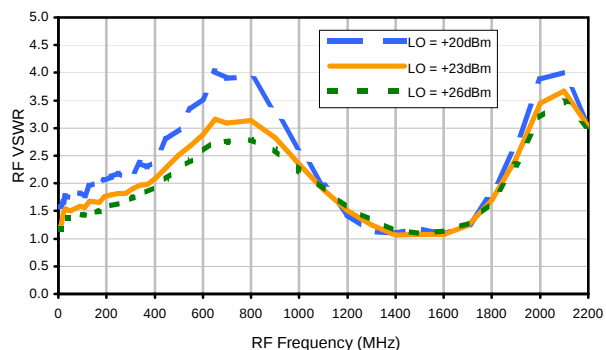
LO-IF Isolation



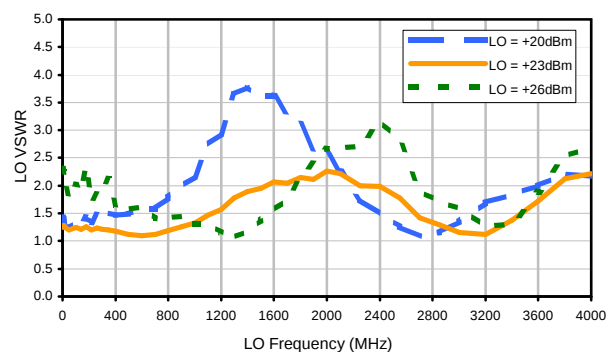
RF-IF Isolation



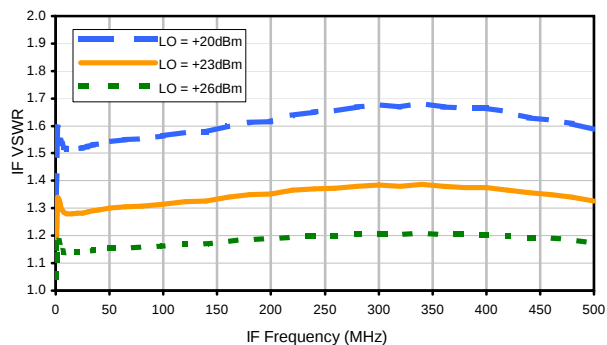
RF VSWR



LO VSWR



IF VSWR



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7	>119	70	63	65	69	68	74	67	73	64	80	64
8	>120	74	73	73	71	73	72	72	74	70	77	74
9	>119	77	81	74	78	71	84	74	85	78	91	78
10	>121	84	85	82	82	79	89	81	87	80	84	77
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1	-	33	+0	39	17	33	32	33	31	35	38	41
2	84	60	53	67	59	53	61	53	48	58	50	67
3	101	92	63	66	59	69	51	68	52	63	59	73
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5	>123	81	80	85	81	88	80	82	80	80	79	83
6	>123	91	97	92	102	101	89	105	86	95	89	90
7	>121	110	99	100	93	95	93	95	98	97	98	107
8	>121	>117	110	108	110	106	111	108	105	114	103	105
9	>121	>120	>121	>120	111	114	109	110	110	112	115	115
10	>121	>120	>122	>119	>121	>121	>122	>122	>122	>122	>120	>120
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions: RF IN: 500.1 MHz; 4.94.00 dBm.
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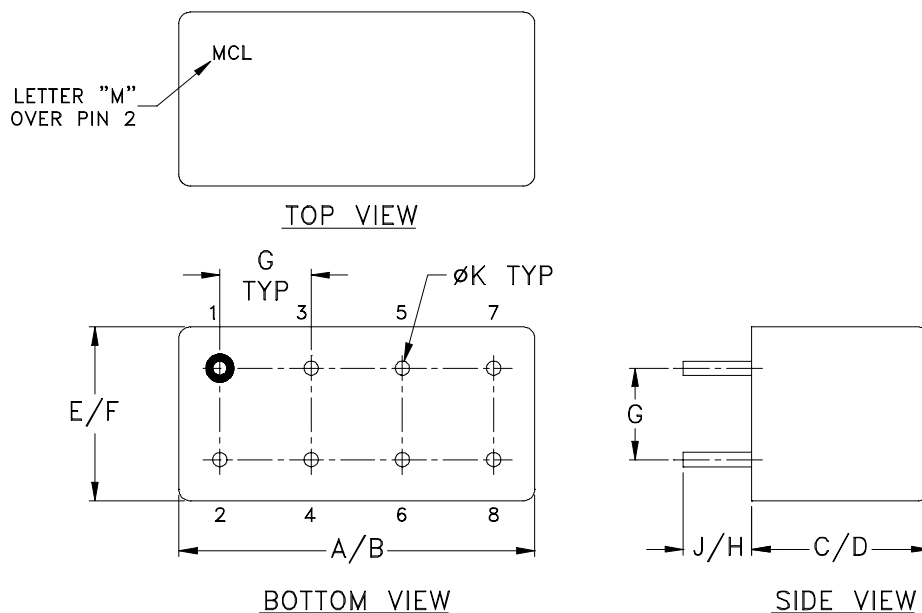
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A01
A04
A05
A06

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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