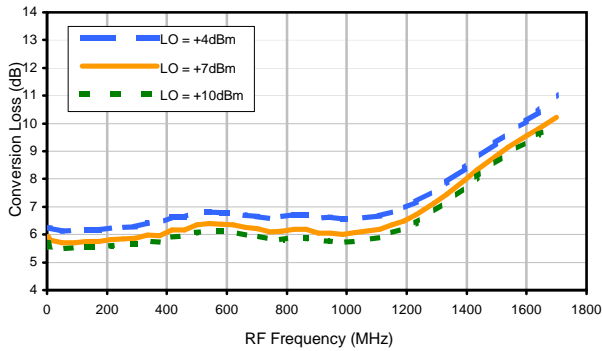


Frequency Mixer

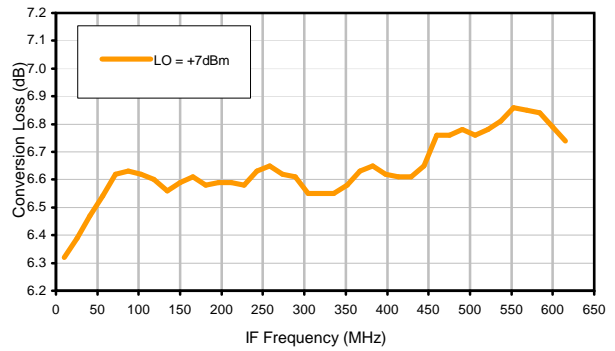
SAM-4

Typical Performance Curves

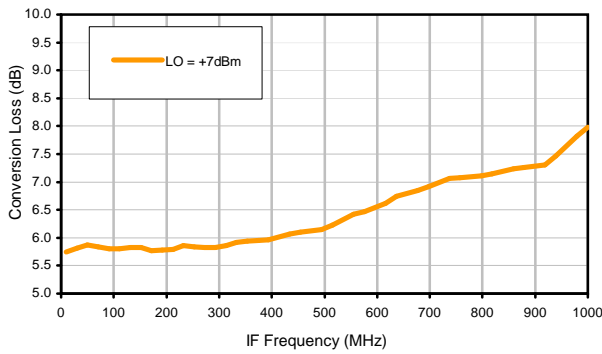
Conversion Loss @ IF=30MHz



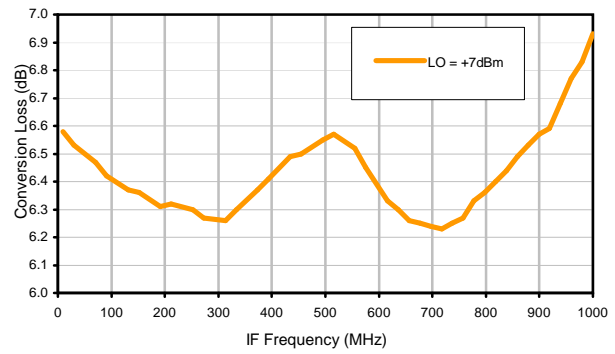
Conversion Loss vs. IF @ RF=625.1MHz



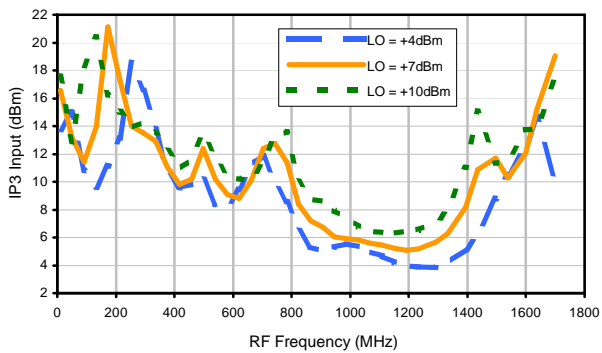
Conversion Loss vs. IF @ RF=10.1MHz



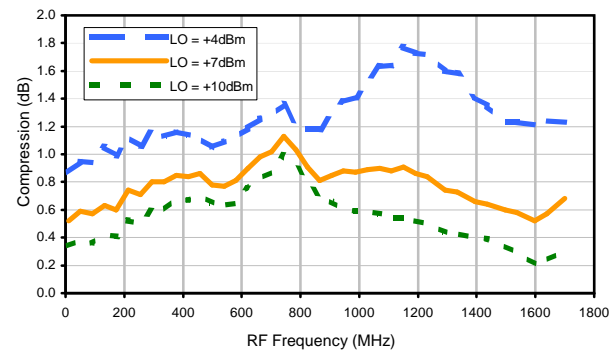
Conversion Loss vs. IF @ RF=1250.1MHz



IP3 Input



Compression @ RF IN=+1dBm



REV. X2
SAM-4
100818
Page 1 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0006 (718) 934-4500 Fax (718) 332-4661

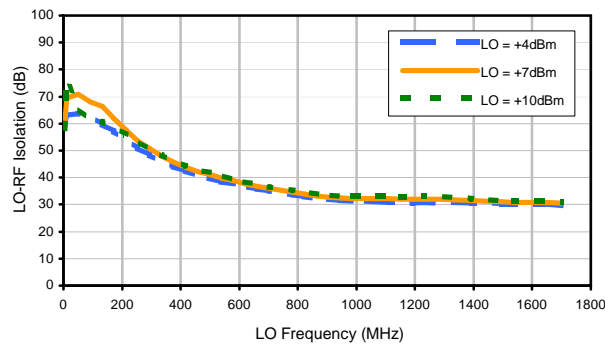


The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see

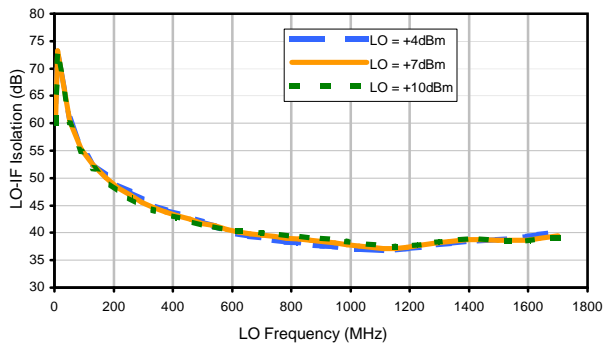


Typical Performance Curves

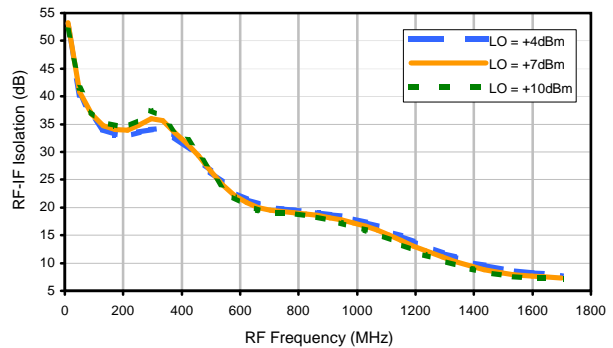
LO-RF Isolation



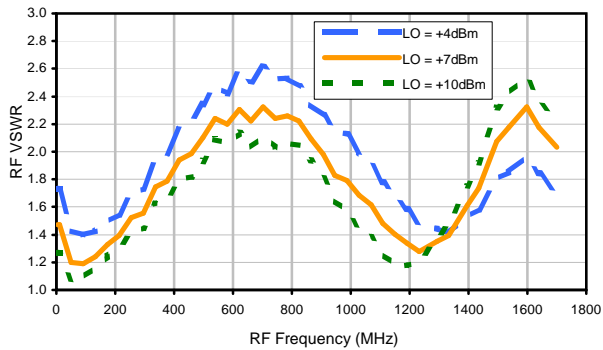
LO-IF Isolation



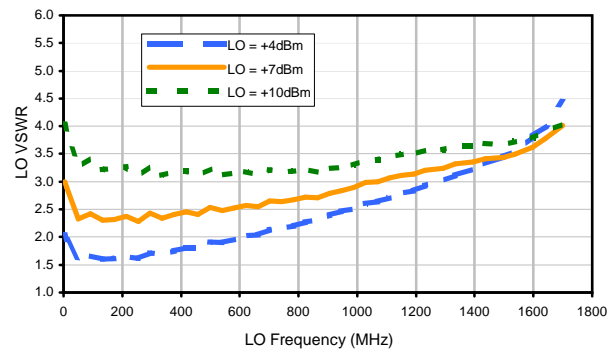
RF-IF Isolation



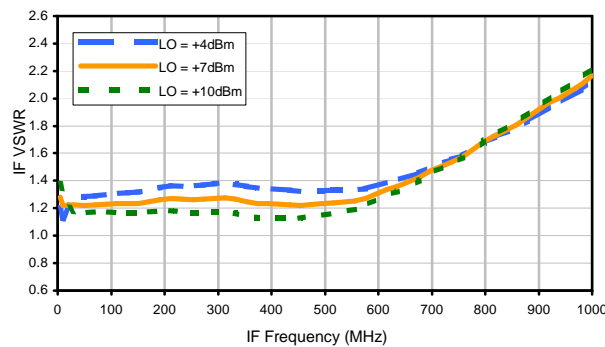
RF VSWR



LO VSWR



IF VSWR



Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	10	25	41	39	26	39	29	65	45	67
1	-	14	+0	29	11	32	44	32	50	51	64	65
2	>100	74	60	75	56	64	67	>79	62	75	69	>79
3	>100	66	60	62	58	60	56	79	73	70	75	>79
4	>100	>79	>79	>79	>79	77	>79	>79	>79	>79	>79	>79
5	>100	>79	>79	>79	>79	>79	76	>79	>79	>79	>79	>79
6	>100	>79	>79	>79	>79	>79	>79	78	>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: 620.1 MHz; -14.00 dBm.
 LO IN: 650.01 MHz; +7.00 dBm
 IF OUT: 29.91 MHz; -20.74 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	20	36	62	50	37	52	42	67	56	68
1	-	14	+0	31	12	34	43	37	59	55	67	65
2	90	58	54	60	48	59	62	80	55	68	60	82
3	>100	47	46	46	42	45	41	56	53	51	67	70
4	>100	89	82	80	70	88	66	72	77	80	74	83
5	>100	73	70	72	59	61	55	58	53	72	77	74
6	>100	>89	>89	>89	>89	89	79	86	77	81	>89	>89
7	>100	>89	>89	>89	>89	>89	86	79	84	74	78	>89
8	>100	>89	>89	>89	>89	>89	>89	>89	89	87	>89	>89
9	>100	>89	>89	>89	>89	>89	>89	>89	>89	86	88	85
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: 620.1 MHz; -4.00 dBm.
 LO IN: 650.01 MHz; +7.00 dBm
 IF OUT: 29.91 MHz; -10.81 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.

REV. X2
 SAM-4
 100818

Page 3 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant
 P.O. Box 350166, Brooklyn, New York 11235-0006 (718) 934-4500 Fax (718) 332-4661



The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see [minicircuits.com](http://www.minicircuits.com)