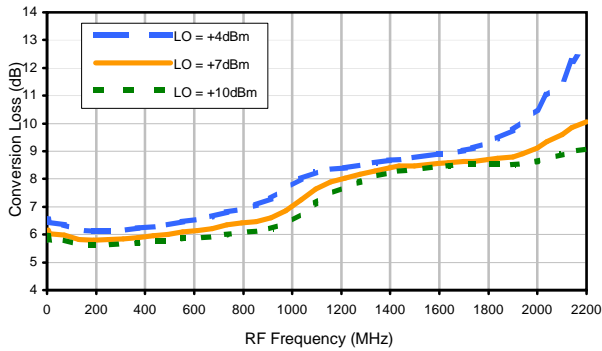


# Frequency Mixer

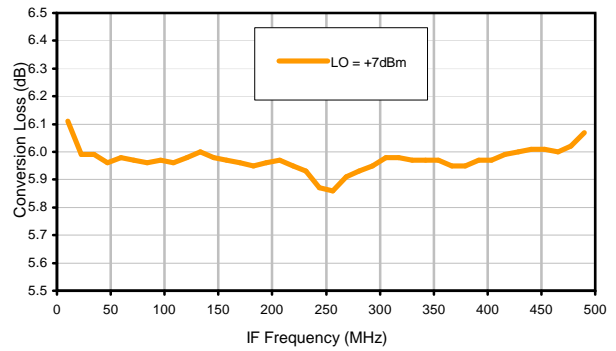
# LRMS-5J+

## Typical Performance Curves

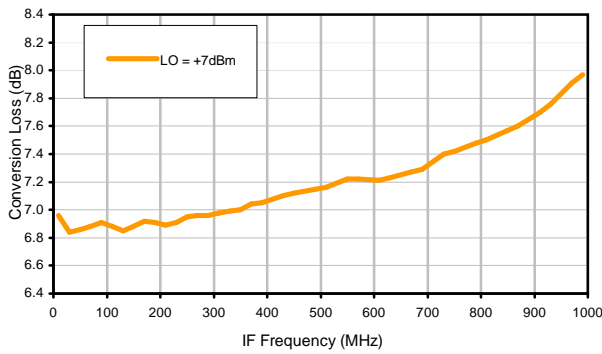
Conversion Loss @ IF=30MHz



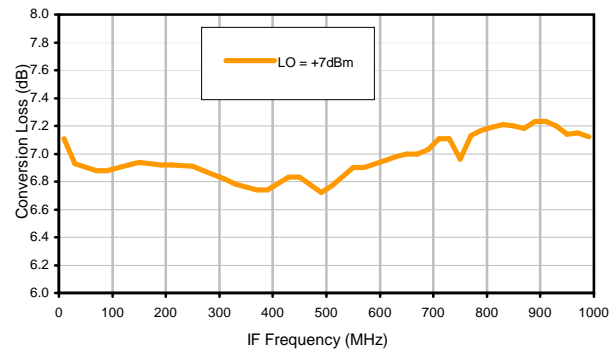
Conversion Loss vs. IF @ RF=500.1MHz



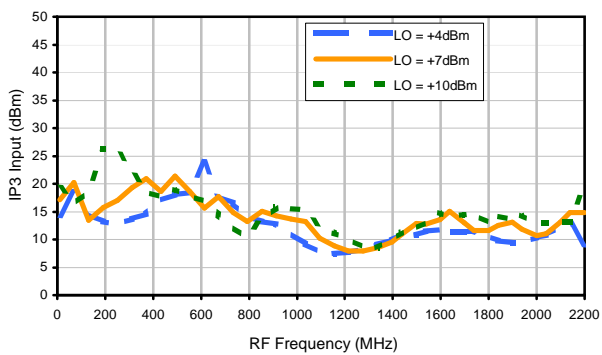
Conversion Loss vs. IF @ RF=10.1MHz



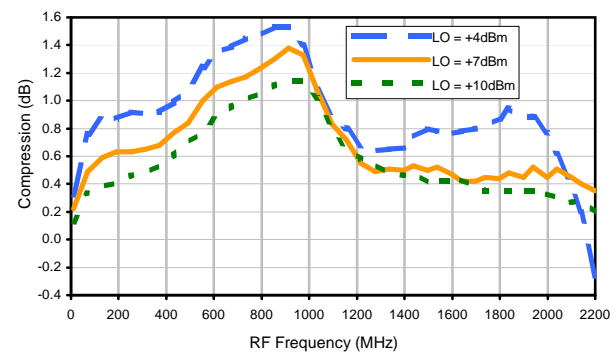
Conversion Loss vs. IF @ RF=1000.1MHz



IP3 Input



Compression @ RF IN=+1dBm



REV. X2  
LRMS-5J+  
100817  
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

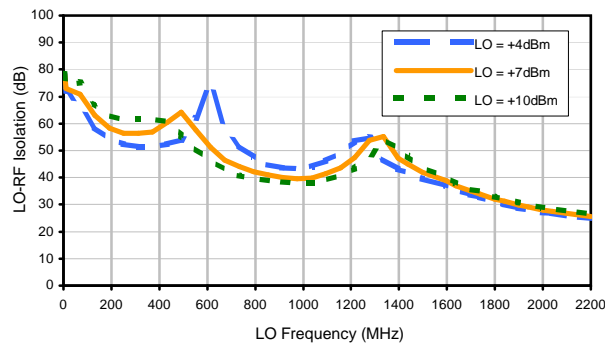


The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see

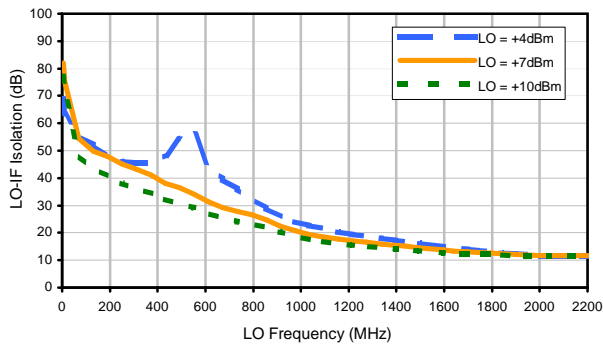


## Typical Performance Curves

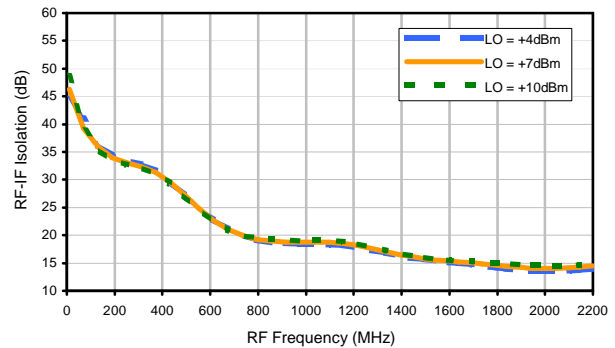
LO-RF Isolation



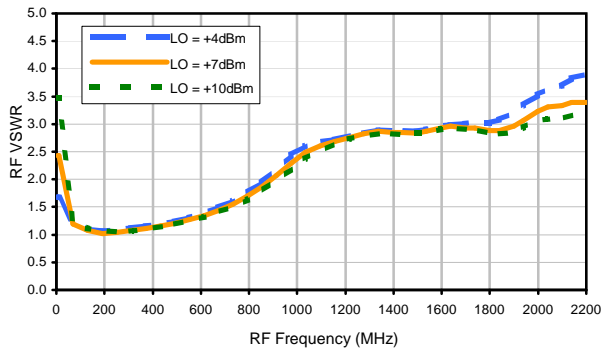
LO-IF Isolation



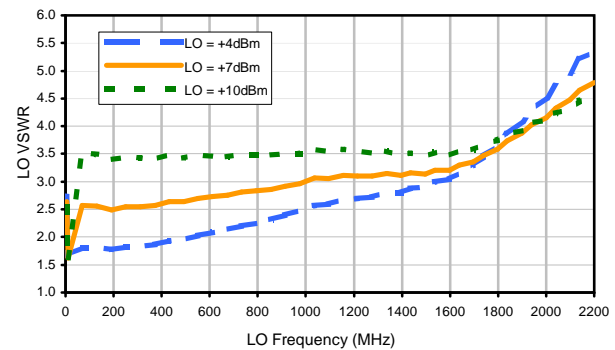
RF-IF Isolation



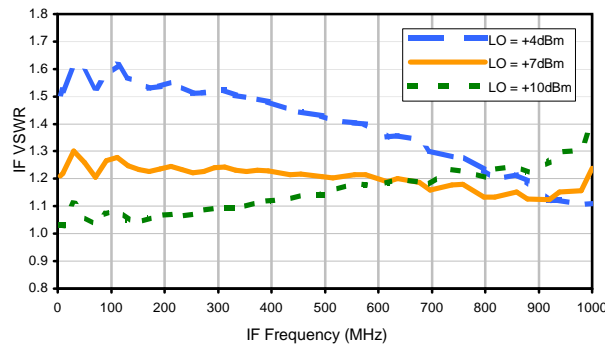
RF VSWR



LO VSWR



IF VSWR



## Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	+1	23	11	18	8	40	25	44	36	41
1	-	13	+0	37	16	39	39	46	36	51	41	58
2	111	55	36	61	35	73	49	58	45	57	56	61
3	119	70	64	66	72	68	70	74	73	72	63	74
4	112	97	96	86	85	86	86	82	89	81	88	83
5	118	122	107	97	94	106	90	94	101	104	98	95
6	119	108	107	108	102	111	105	90	104	109	101	119
7	110	100	107	102	126	115	105	96	88	105	103	104
8	138	106	102	100	107	99	108	99	100	96	108	105
9	119	101	110	98	105	107	105	115	109	95	99	109
10	105	104	101	104	99	100	106	103	119	135	105	101
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 750.1 MHz; -14.00 dBm.  
 LO IN: 780.01 MHz; +7.00 dBm  
 IF OUT: 29.91 MHz; -20.3 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	7	33	22	31	21	54	39	58	44	59
1	-	13	+0	38	17	44	42	49	48	57	50	65
2	90	47	27	50	27	57	43	57	38	56	55	62
3	112	45	43	47	47	51	47	59	74	66	54	69
4	107	62	65	61	55	55	44	62	57	58	58	63
5	109	64	66	65	57	67	56	62	64	79	68	68
6	116	79	80	70	82	68	57	66	59	68	71	71
7	117	85	76	83	77	90	72	75	68	72	73	81
8	117	99	95	88	84	85	97	85	76	79	69	92
9	122	96	105	95	88	99	87	100	84	78	76	77
10	112	105	102	115	101	93	91	88	96	88	80	88
	RF CAL	0	1	2	3	4	5	6	7	8	9	10

### LO HARMONICS ORDER

Test conditions: RF IN: 750.1 MHz; -4.00 dBm.  
 LO IN: 780.01 MHz; +7.00 dBm  
 IF OUT: 29.91 MHz; -10.41 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  
 LRMS-5J+  
 100817  
 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://minicircuits.com)