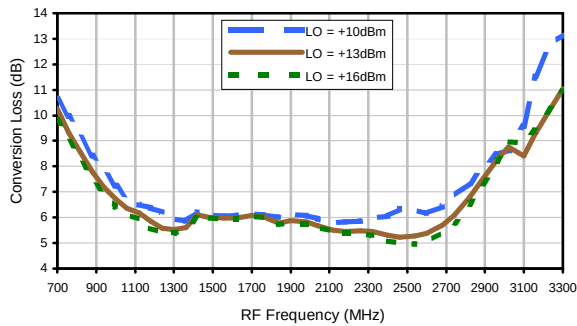


Frequency Mixer

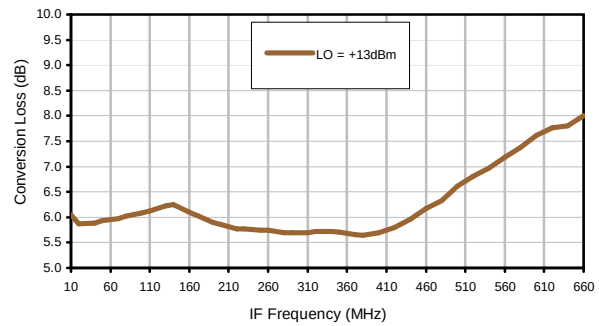
ADE-ED12874/4

Typical Performance Curves

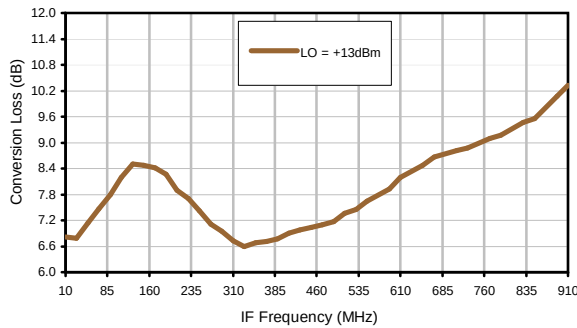
Conversion Loss @ IF=30 MHz



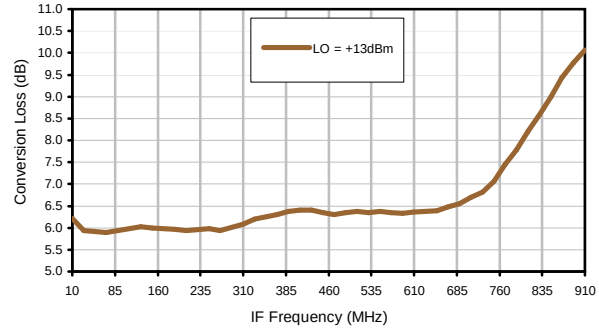
Conversion Loss vs. IF @ RF=2010.1 MHz



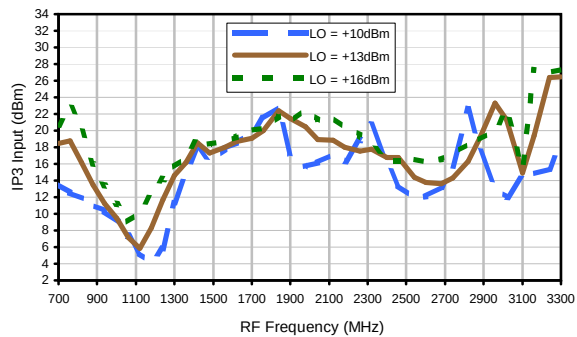
Conversion Loss vs. IF @ RF=989.9 MHz



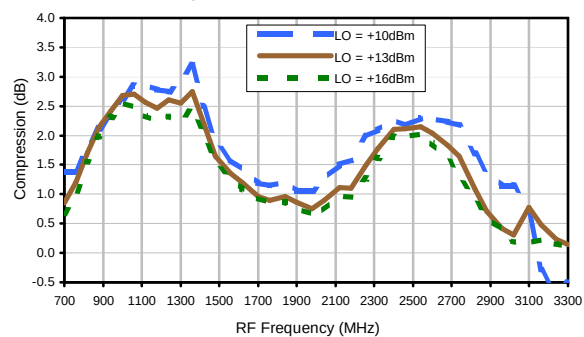
Conversion Loss vs. IF @ RF=2710.1 MHz



IP3 Input



Compression @ RF IN = +9 dBm



REV. X3

ADE-ED12874/4

101013

Page 1 of 3

Mini-Circuits®

IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED • RoHS compliant

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

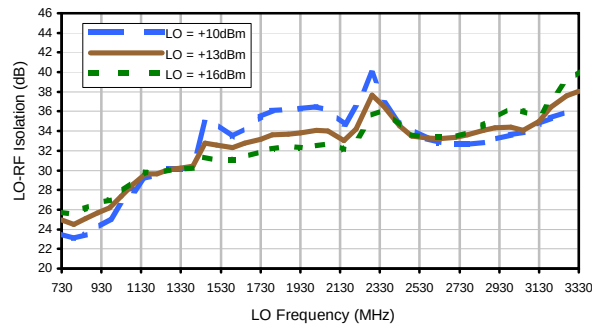


The Design Engineers Search Engine finds the model you need, instantly • For detailed performance specs & shopping online see

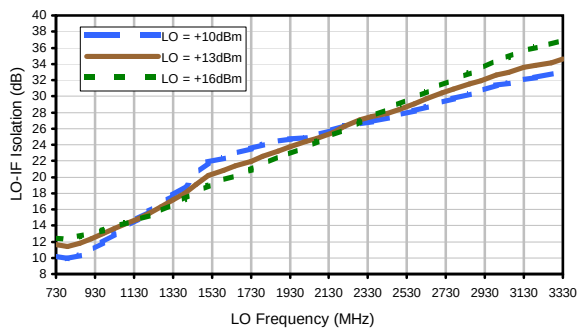


Typical Performance Curves

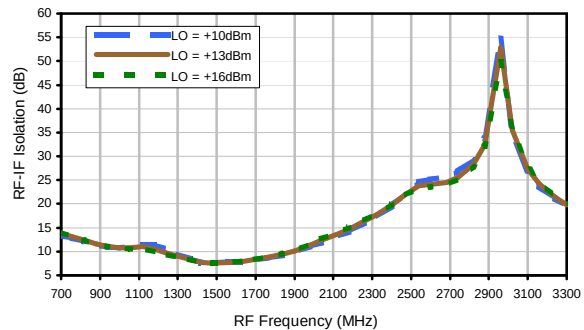
LO-RF Isolation



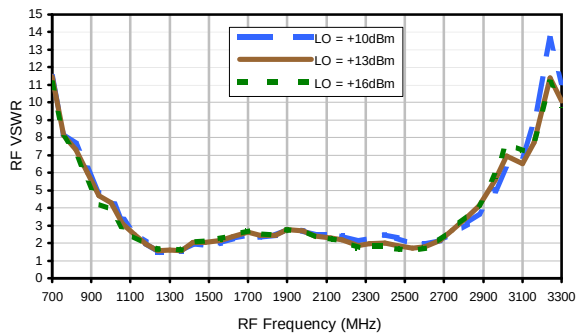
LO-IF Isolation



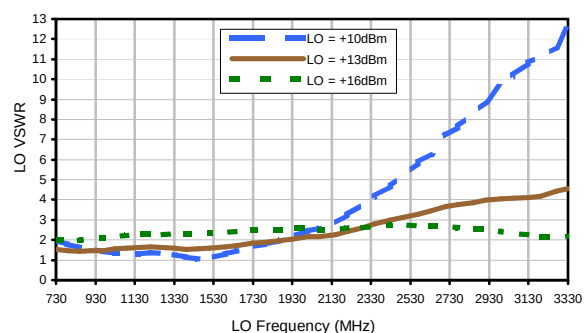
RF-IF Isolation



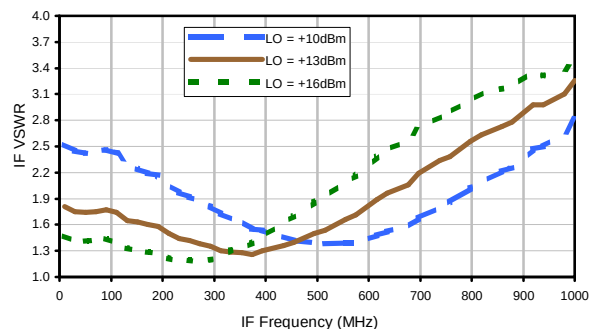
RF VSWR



LO VSWR



IF VSWR



REV. X3

ADE-ED12874/4

101013

Page 2 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED • RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (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



Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	1	30	14	25	23	38	38	51	49	55
1	-	8	+0	38	35	40	43	37	52	58	53	60
2	71	> 78	64	54	63	76	56	57	58	71	63	72
3	> 90	70	> 78	73	63	74	> 78	> 78	> 78	72	> 78	> 78
4	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
5	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
6	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
7	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
8	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
9	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
10	> 90	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78	> 78
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions:

RF IN: 2000.00 MHz; -6.00 dBm.
LO IN: 2030.00 MHz; +13.00 dBm
IF OUT: 30.00 MHz; -11.59 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	11	40	24	36	37	56	59	75	66	79
1	-	8	+0	40	35	43	55	42	57	62	63	64
2	51	71	57	50	56	64	49	50	51	67	60	73
3	84	50	60	53	42	55	65	60	74	56	71	74
4	> 90	76	81	> 88	72	62	71	> 88	64	64	67	83
5	> 90	77	74	77	86	74	63	75	88	78	74	73
6	> 90	> 88	> 88	> 88	> 88	> 88	> 88	82	> 88	> 88	79	77
7	> 90	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 74	> 88	> 88	> 88
8	> 90	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 86	> 88	> 88
9	> 90	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88
10	> 90	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88	> 88
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions:

RF IN: 2000.00 MHz; +4.00 dBm.
LO IN: 2030.00 MHz; +13.00 dBm
IF OUT: 30.00 MHz; -1.74 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. X3

ADE-ED12874/4

101013

Page 3 of 3



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED • RoHS compliant

P.O. Box 350186, Brooklyn, New York 11235-0003 (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

