

RF MMIC Innovator

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[CLASSIFICATION] APPLICATION NOTE

[DATE] 2016.03

[REVISION NO.] REV.A

[MEASURING INSTRUMENTS]

- NA\_AGILENT 8753ES

- SA\_AGILENT E4404B

- SG\_AGILENT 4438C

- SG\_IFR 3416

## Internally matched IF Amp BIG4

### Application Note



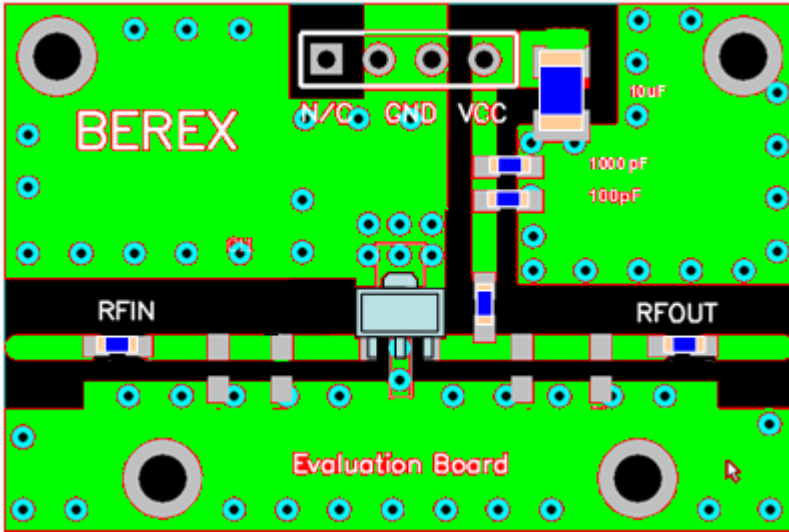
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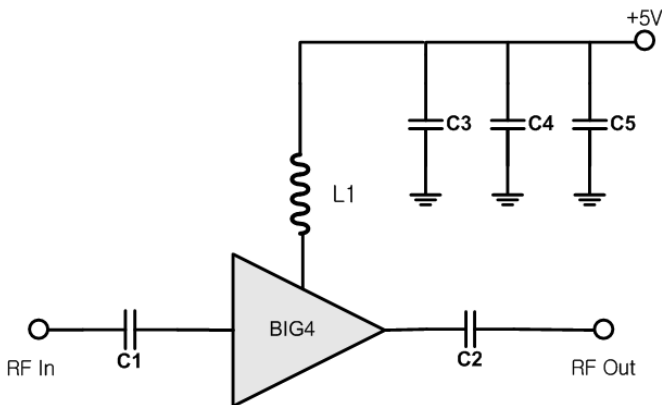
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1. BIG4\_10~50MHz Application Note



Ref. Des.	Description/ Part Number	Values	Vendor
C1	0603 CAP	10uF	Samsung
C2	0603 CAP	10uF	Samsung
C3	0603 CAP	100pF	AVX
C4	0603 CAP	1000pF	Samsung
C5	A3216CAP	10uF	AVX
C6	0603 CAP	NA	
C7	0603 CAP	NA	
C8	0603 CAP	NA	
C9	0603 CAP	NA	
C10	0603 CAP	NA	
C11	0603 CAP	NA	
C12	0603 CAP	NA	
L1	0603 IND	2.2uH	Ceratech
L2	0603 IND	NA	
L3	0603 IND	NA	
R1	0603 RES	NA	
U1	SOT89 PKG	BIG 4	BEREX



Note:

1. PCB: 31mil thick FR4

TITLE	
BIG4 Evaluation Board	
(10~50MHz)	
Drawing Number	Rev.
Date	Drawn By
FILE NAME	SHEET

### 1.1 BIG4\_10~50MHz Test Result

SN	Freq [MHz]	Vcc [V]	Icc [mA]	Gain [dB]	OIP3 [dBm] <sup>(1)</sup>	P1dB [dBm]	IRL [dB]	ORL [dB]	NF [dB]
-	10	5	86	20.4	36.0	20.4	-15.7	-8.0	3.0
-	20	5	86	20.8	39.0	20.5	-16.3	-10.9	2.8
-	30	5	86	20.9	40.0	20.6	-16.7	-11.9	2.8
-	50	5	86	20.9	40.5	20.7	-17.0	-12.7	2.8

(1) OIP3 was tested @Pout=8dBm/tone 1MHz offset

