RF MMIC Innovator www.berex.com

[Classification] Application Note

[Date] 2013.03

[Revision No.] Rev.A

[Measuring Instruments]

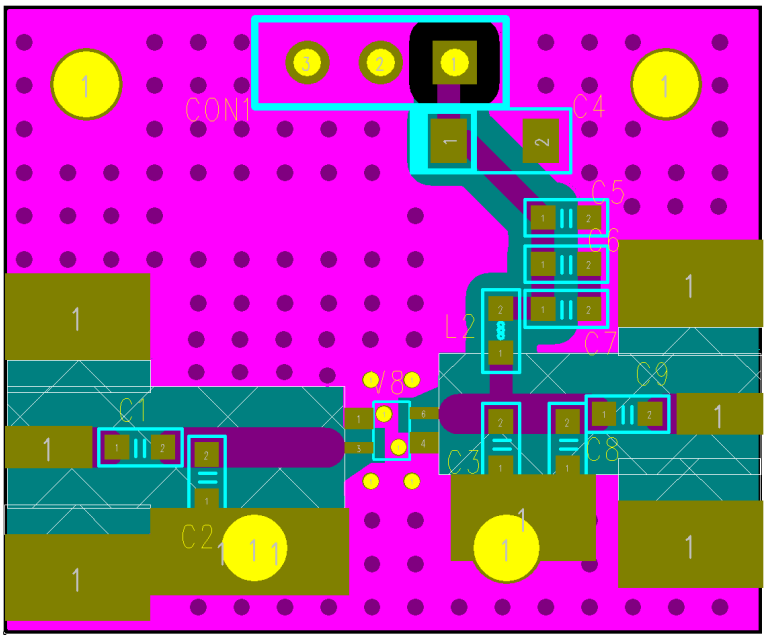
- NA_Agilent 8753ES
- SA_Agilent E4404B
- SG_Agilent 4438C
- SG_IFR 3416

Si-Ge Gain Block Amp BGS2

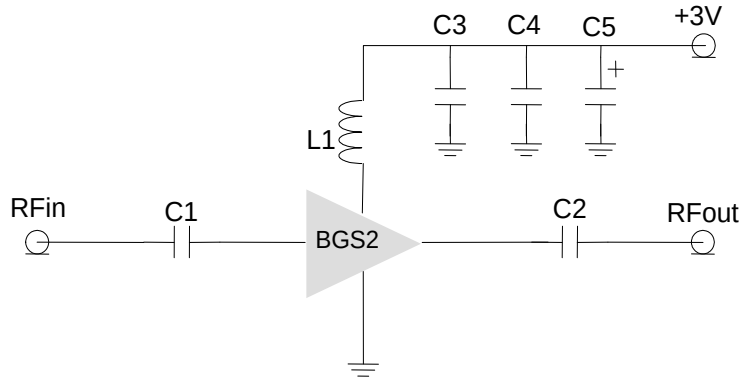
Application Note

Contents

1. BGS2_ 2600MHz Application Note



Ref. Des.	Description/ Part Number	Values	Vendor
C1	0603 CAP	100pF	Samsung
C2	0603 CAP	100pF	Samsung
C3	0603 CAP	100pF	Samsung
C4	0603 CAP	1000pF	Samsung
C5	A3216 CAP	10uF	AVX
L1	0603 CAP	56nH	Samsung
U1	SOT363 PKG	BGS1	BEREX



Note:

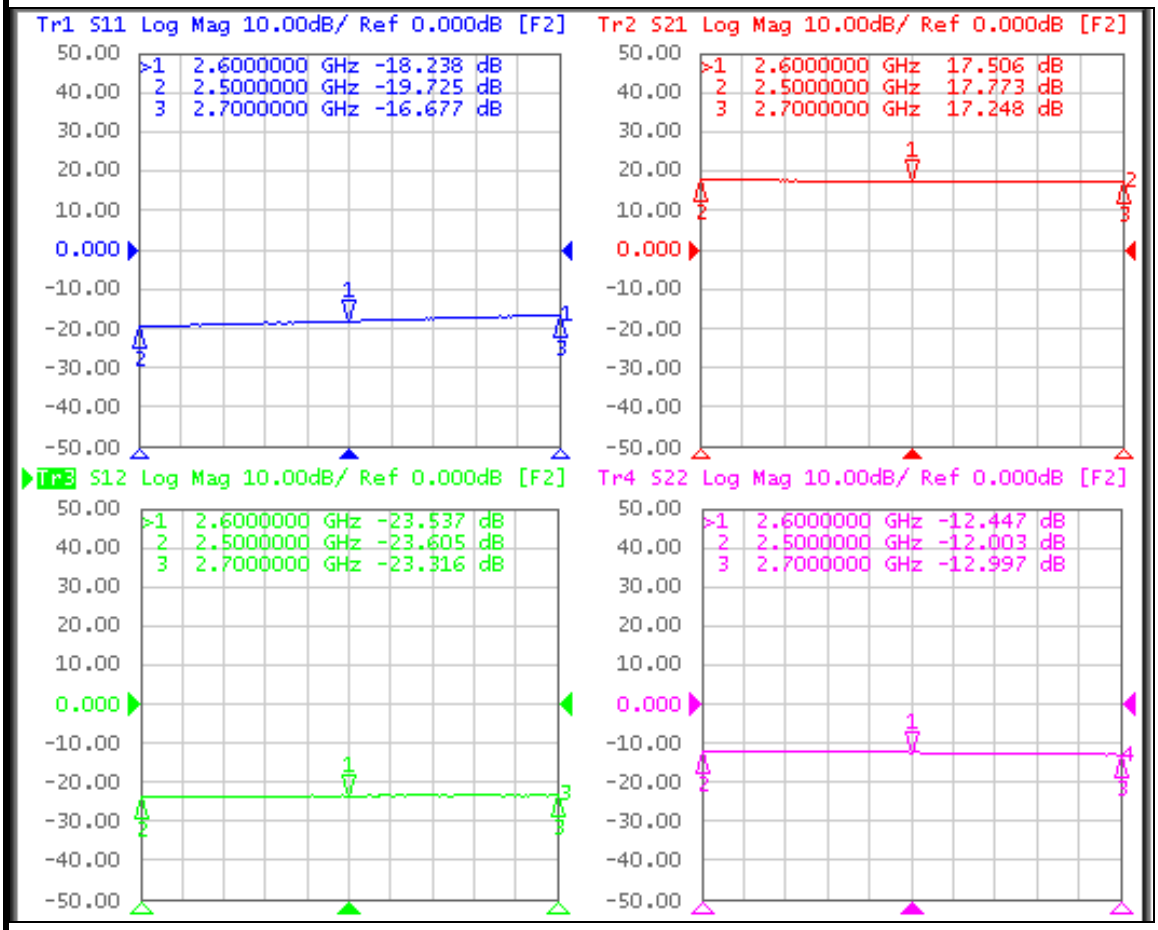
1. PCB: 31mil thick FR4

TITLE	
BGS2 Evaluation Board	
(2600MHz)	
Drawing Number	Rev.
Date	Drawn By
FILE NAME	SHEET

1.1 BGS2_2600MHz Test Result

SN	Freq [MHz]	Vcc [V]	Icc [mA]	Gain [dB]	OIP3 [dBm](1)	P1dB [dBm]	IRL [dB]	ORL [dB]	NF [dB]
-	2500	3.0	34	17.7	21	10.2	-19.7	-12.0	2.4
-	2600	3.0	34	17.5	21	10.4	-18.2	-12.4	2.4
-	2700	3.0	34	17.2	21	10	-16.6	-12.9	2.4

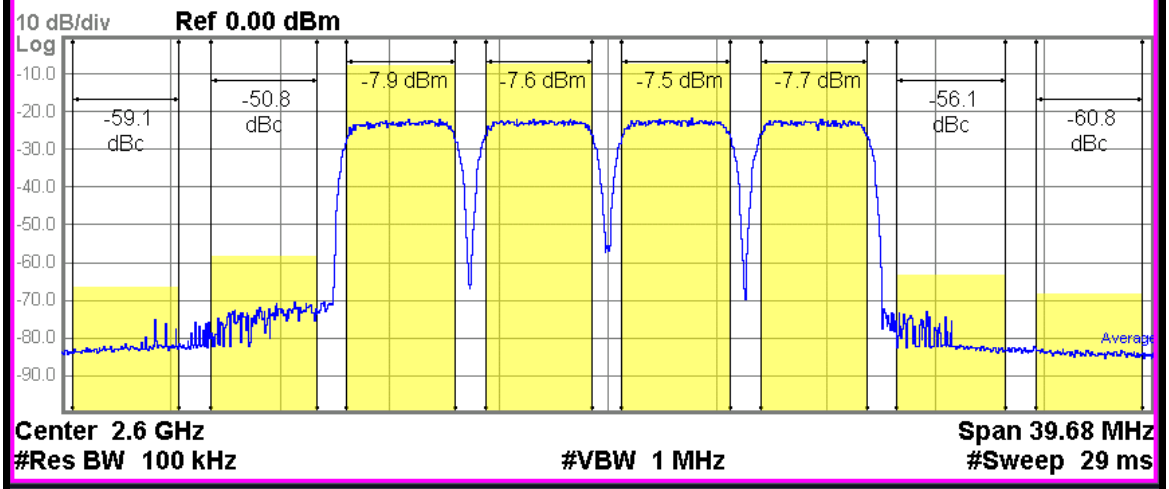
(1) OIP3 was tested @Pout=0dBm/tone 1MHz offset



1-1.WCDMA4FA_ ACLR Test Result

Out Power : -1.62 dBm

WCDMA 4FA : 2600 -50dBc



Total Carrier Power -1.626 dBm/ 15.36 MHz

Carrier Power			Filter
1	-7.865 dBm /	3.840 MHz	ON
2	-7.576 dBm /	3.840 MHz	ON
3	-7.501 dBm /	3.840 MHz	ON
4	-7.650 dBm /	3.840 MHz	ON

ACP-IBW

		Lower		Upper		
Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter
5.000 MHz	3.840 MHz	-50.81	-58.39	-56.10	-63.67	ON
10.00 MHz	3.840 MHz	-59.15	-66.73	-60.85	-68.42	ON

1-2. LTE_20MHz_ ACLR Test Result

Out Power : -1.22 dBm

LTE_FDD_20MHz_TM 3p1_100 : 2600 -50dBc