

NA-1564

BLA6G1011LS-200RG at 1030-1090 MHz

AMPLEON

Rev. 3 — 05 October 2015

Application Measurement
Report

Document information

Info	Content
Keywords	NA-1564
Abstract	Measurement results of a demo board for 1030-1090 MHz with 1x BLA6G1011LS-200RG

Revision history

Rev	Date	Description
1	20120111	
2	20150424	Update for web publication
3	20151005	The format of this document has been redesigned to comply with the new identity guidelines of Ampleon. Legal texts have been adapted to the new company name where appropriate.

1. Introduction

1.1 General Description

This document contains measurement results of a 1030-1090 MHz demo amplifier (Board NA-1564) with 1x BLA6G1011LS-200RG.

1.1.1 Test object details

Transistor type:	BLA6G1011LS-200RG (pressed down)
Production code:	m1107 X Philippines
Package:	SOT502B
Board:	BLA6G1011-200RG V2 -Output BLA6G1011-200RG V2 -Input
Demo number:	NA-1564

1.2 Used Test signals

Pulsed CW: $t_p=50\mu s$, $\delta=2\%$

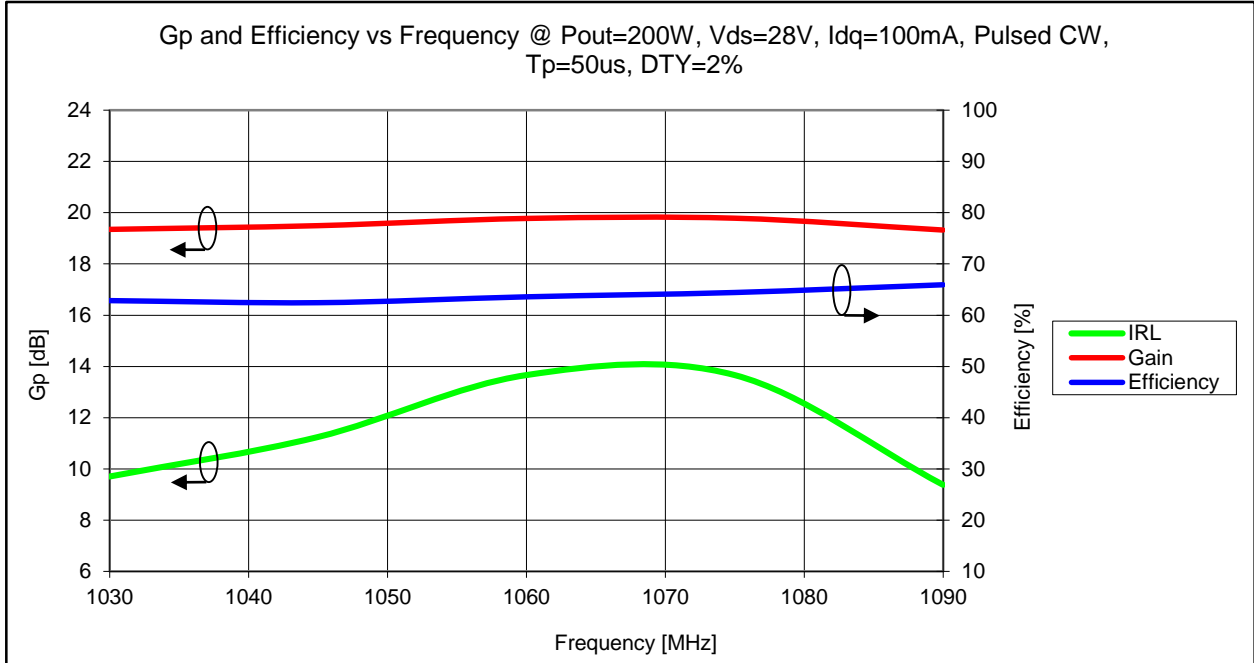
1.3 Testcircuit

A description of this circuit can be found in **chapter 3**. The test circuit has been designed on Rogers 6006, $h=0.64\text{mm}$, $\epsilon_r=6.15$, $2\times 35\mu\text{m}$.

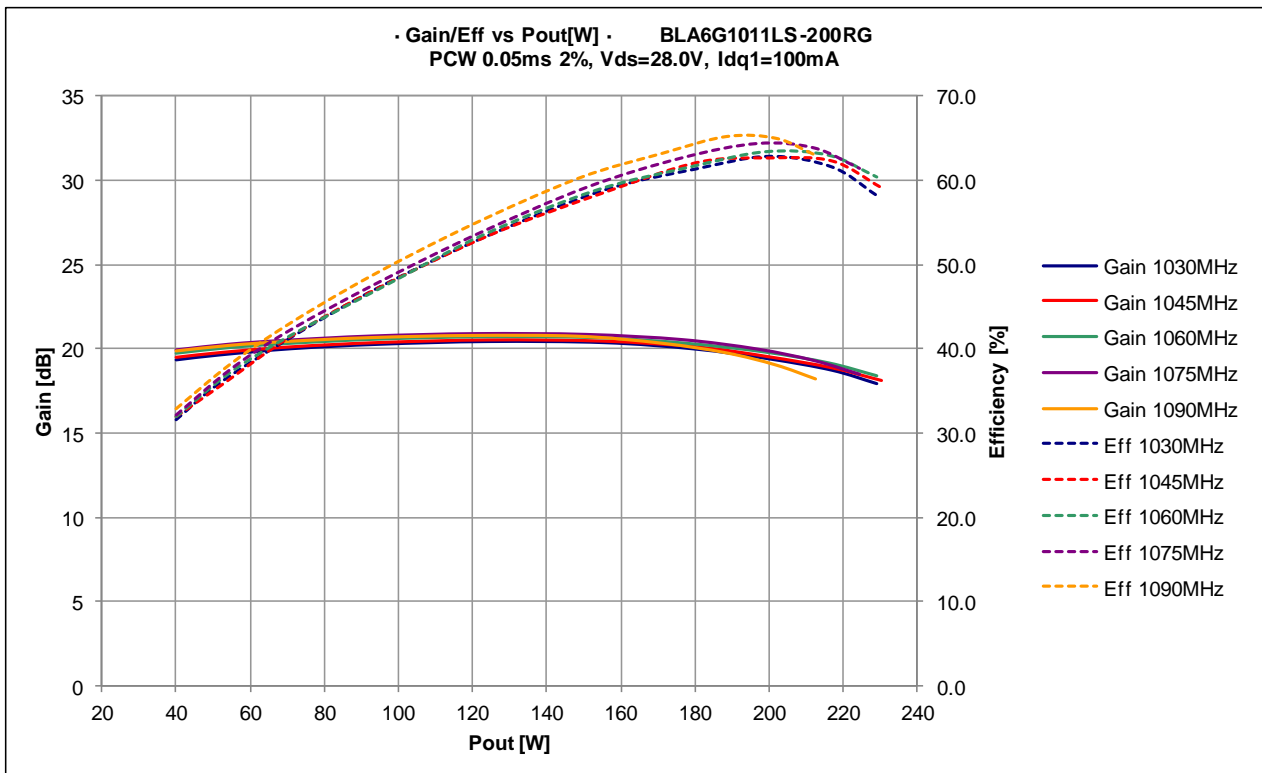
All testing has been performed at $V_{DS}=28\text{V}$, $I_{DQ}=100\text{mA}$ and $T_H=25^\circ\text{C}$.

2. Measurement Results

2.1 CW Pulsed-Frequency Sweep, Gain & Efficiency

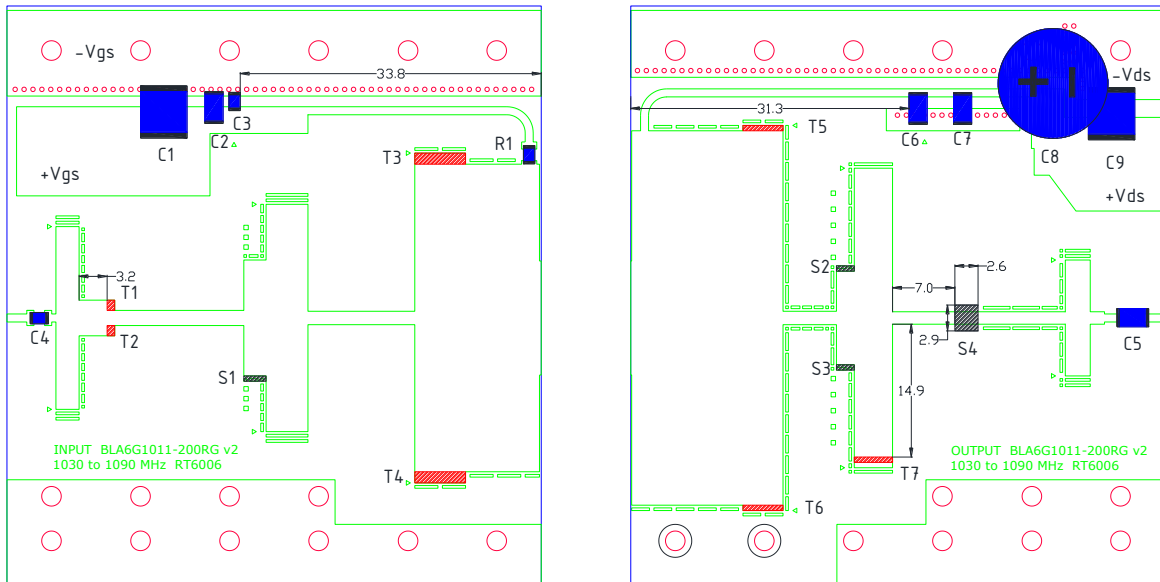


2.2 CW Pulsed-Power Sweep, Gain & Efficiency



3. PCB Layout

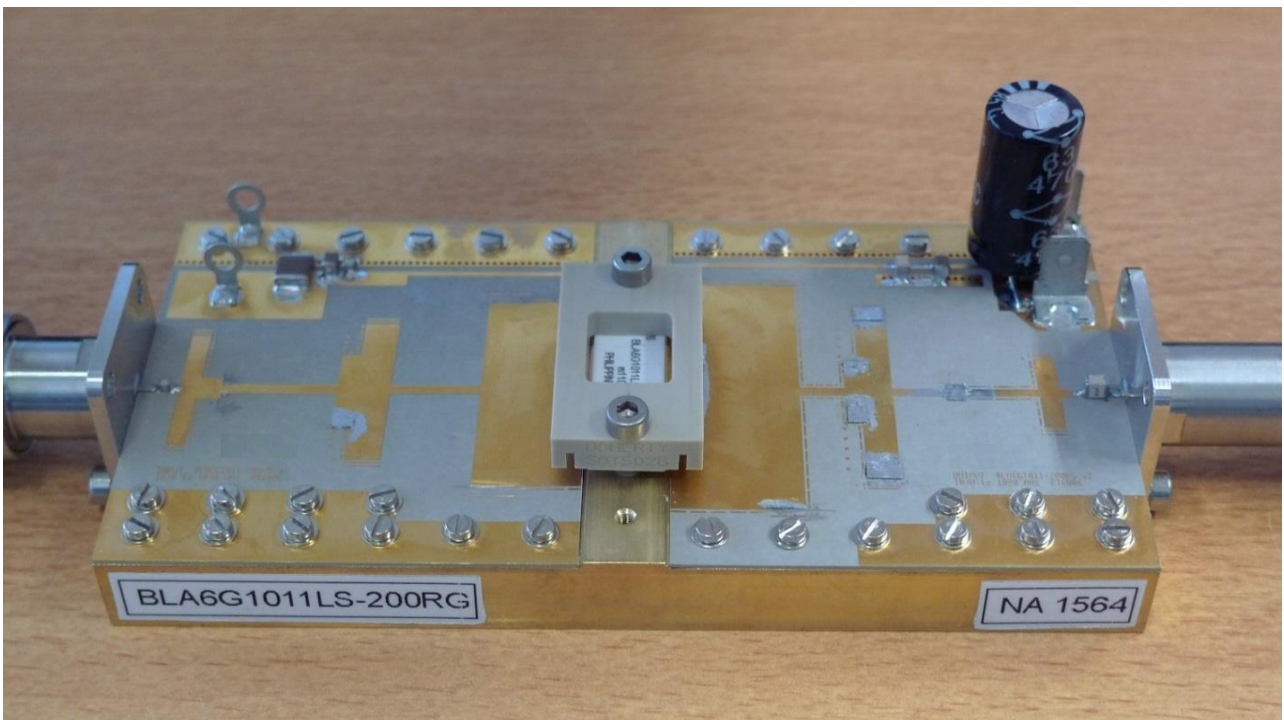
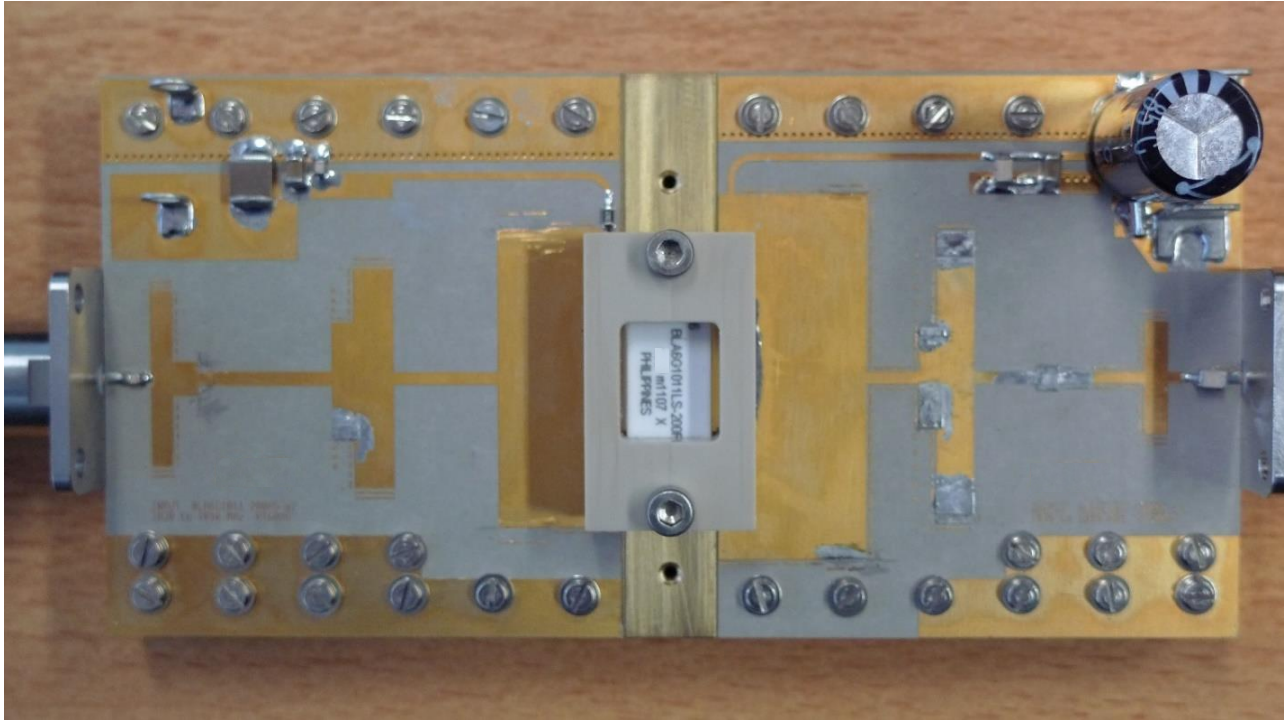
3.1 PCB Layout Drawing



Components list application circuit.

C1, C9	10 uF	TDK	
C2, C7	1uF	Murata	
C3	68 pF	ATC100A	
C4	82 pF	ATC100A	
C5,C6	33 pF	ATC100B	
C8	470 uF	Electrolytic capacitor 63V	
R1	12 Ω	SMD Resistor 1206	
S1,S2,S3,S4	Metal strip		
T1,T2,T3,T4,T5,T6,T7	Cut out		
PCB Material: Duroid 6006, thickness 0,64 mm, $\epsilon_r = 6.15$ Cu = 2x35 micron (gold plated)			

3.2 Photo's Demo Board



4. Attachments

Please see the attachment for the support files.

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