

G2MAH2435-50C6: 2400-2500MHz

Test Report G2MAH2435-50C6 ClassAB 2400-2500MHz 12V

Mar 28th, 2025

Introduction

This amplifier is designed with Innogrations 28V G2MAH2435-50C6 GaN

Demo and Transistor

Frequency band : 2400-2500 MHz
 Application : Telecom
 Configuration : Class AB
 Test Signal : Pulsed CW
 Transistor : G2MAH2435-50C6
 Date code :
 PCB : 20 Mil Rogers 4350

The amplifier has been characterized under the following conditions:

- Network Analyzer plots for gain and IRL.
- P1dB and P3dB Peak power measurement using the Pulsed CW and CW.
- RF Test Bench 3
- **Note: The PA is tested with a supply voltage of $V_{DS}=12V$, $I_{DQ}=60\text{ mA}$ $V_{GS}=-2.6V$. all measurements unless otherwise noted.**

Test Results:

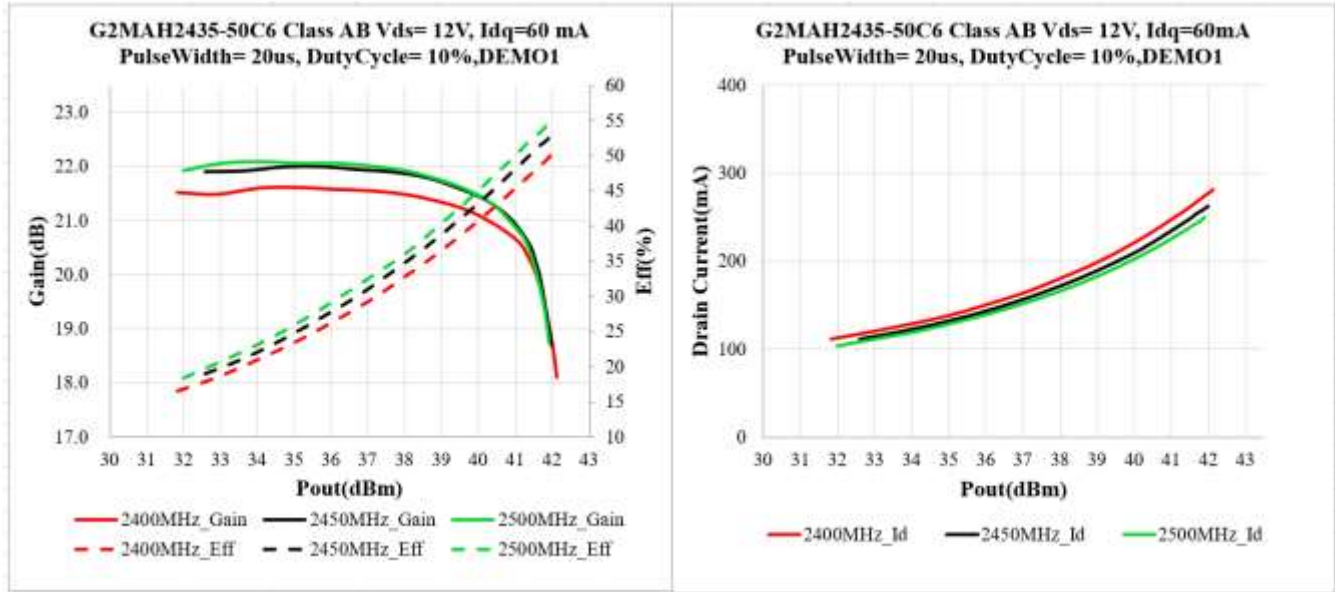
1. Pulsed CW (Pulse Width=20us Duty Cycle=10%)

$V_{DS}=12V$, $I_{DQ}=60\text{ mA}$
 $V_{GS}=-2.6V$

Freq (MHz)	P1dB (dBm)	P1dB (W)	P1dB Eff (%)	P1dB Gain (dB)	P3dB (dBm)	P3dB (W)	P3dB Eff (%)
2400	41.05	12.8	45.6	20.62	42.03	15.9	50.3
2450	40.89	12.3	47.5	21.02	41.92	15.5	52.5
2500	40.68	11.7	48.5	21.1	41.84	15.3	54.4

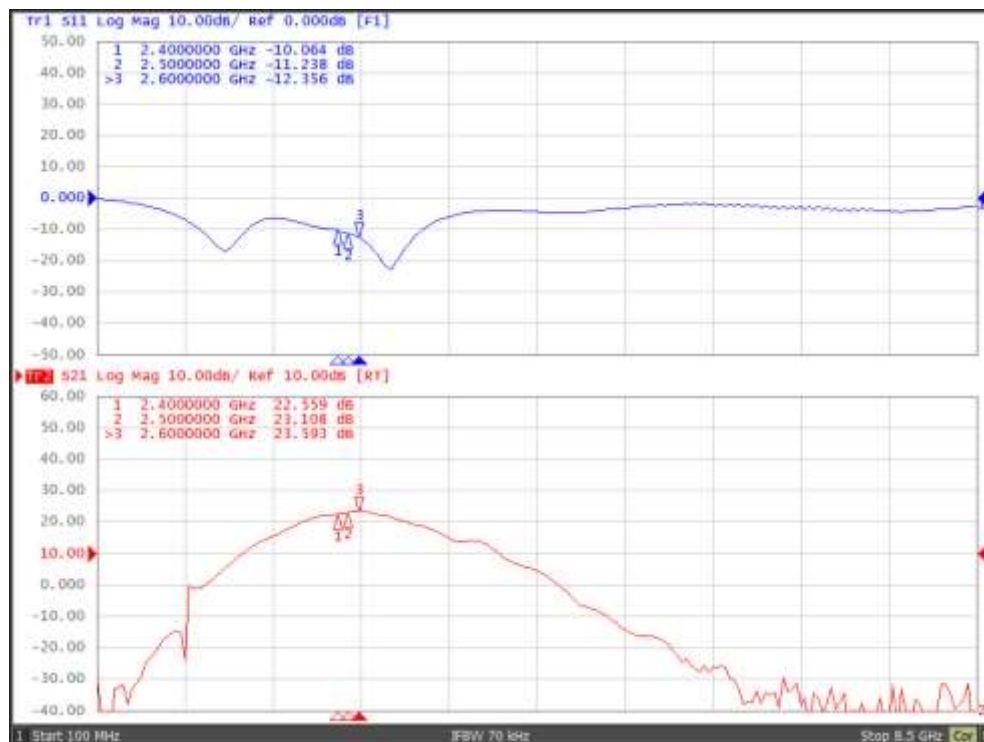
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AM-AM plot



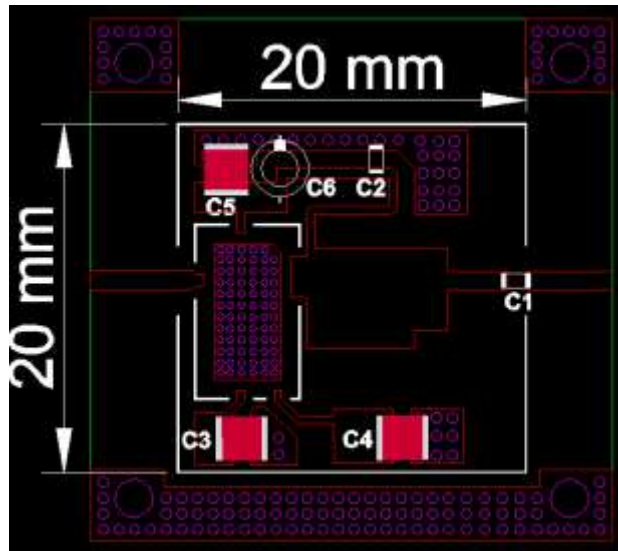
S21 S11 Network Analyzer Results

$V_{DS} = 12V$, $I_{DQ} = 60\text{ mA}$ $V_{GS} = -2.60V$



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DEMO And BOM Picture



		Part NO.	Vendor
C3,C4,C5	10uF 100V Chip Capacitor	C5750X7S2A106M230KB	TDK
C1,C2	12 pF Capacitor (0603)		
C6	100uF Capacitor		
PCB	RO4350B,20mll,er=3.48		