

ITBH09200B2 Class AB 200W at 440MHz

Introduction

This amplifier is designed with Innegration 28V LDMOS ITBH09200B2 to show its high efficiency operation at 440MHz for multiple application especially RF Energy. For more product info, please check its datasheet in our website

Demo and Transistor

Frequency band : 440 MHz,
Application : RF Energy
Configuration : Class AB
Test Signal : CW
Transistor : ITBH09200B2
Date code : 1442005H
PCB : 30 Mil Rogers 4350B

The amplifier has been characterized under the following conditions:

- Network Analyzer plots for gain and IRL.
- The output power measurement using CW / Pulse.

Note: The PA is tested with a supply voltage of $V_{DS} = 28V$, $V_{GS} = 2.72V$, $IDQ = 100mA$ all measurements unless otherwise noted.

Test Results:

● **CW Test**

Frequency: 440MHz

VDS=28V VGS=2.72V IDQ=100mA

Pin(dBm)	Pout(W)	IDS(A)	VGS(V)	VDS(V)	IDQ(mA)	Pout(dBm)	Gain(dB)	EFF(%)
34.3	200	9.0	2.72	28	100	53.0	18.7	80%

● **Small Signal gain:**

VDS=28V VGS=3.14V IDQ=1000mA

