

## MU1510C Class AB 450-520MHz Sep 23, 2022

### Introduction

This amplifier is designed with Innogrations 28V LDMOS transistor MU1510C, please find more product information of its datasheet

### Demo and Transistor

Frequency band :450-520MHz  
Application : Multi Market  
Configuration : Class AB  
Test Signal :CW  
Transistor : MU1510C  
Date code :214610  
PCB : 30mil Rogers4350B

The amplifier has been characterized under the following conditions:

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

**Note: The PA is tested with a supply voltage of  $V_{DS} = 13.6V$ ,  $I_{dq} = 200mA$  all measurements unless otherwise noted.**

**HL-22-39**

**Test Report MU1510C**

**Test Results:**

**1. Summary**

@Bench 2(Chengdu)

**(1)Test Condition:**

VDS=13.6V VGS=2.9V IDQ=200mA

Signal mode: CW Frequency: 450-520MHz

MU1510C VDS=13.6V VGS=2.9V IDQ=200mA CW						
Freq (MHz)	Pout (dBm)	Pout (W)	IDS (A)	Pin (dBm)	Gain (dB)	Eff (%)
450	45.44	35.0	4.52	30.6	14.84	56.93
490	46.45	44.2	4.41	28.68	17.77	73.62
520	44.93	31.1	2.97	28.21	16.72	77.04

**2. Network Results**

**Test Condition:**

VDS=13.6V IDQ=200mA VGS=2.9V

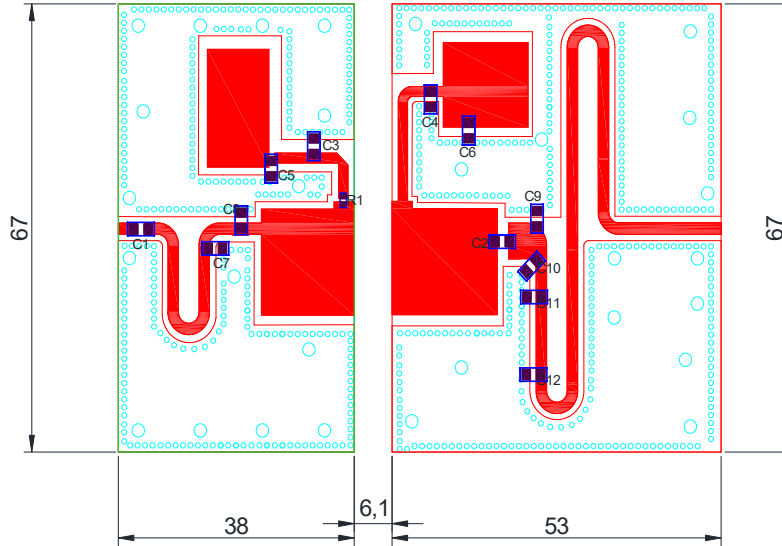
Input Power = 0dBm



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**3. BOM of Test Circuit**



Component	Description	Suggestion
C1,C2,C3,C4	120pF 北京元六鸿远电子	MQ101111
C5 C6	Ceramic multilayer capacitor, 10uF, 100V	
C7	22pF 北京元六鸿远电子	MQ101111
C8	18pF 北京元六鸿远电子	MQ101111
C9	15pF 北京元六鸿远电子	MQ101111
C10,C11,C12	10pF 北京元六鸿远电子	MQ101111
R1	Chip Resistor, 10Ω	
PCB	0.762mm [0.030"] thick, εr=3.48, Rogers RO4350B, 1 oz. copper	

**Demo Picture**

