

LBG-26-11**Test Report ITCH20020P3 Class AB 1400MHz**

Test Report ITCH20020P3 Class AB 1400MHz**April. 8th, 2026****Introduction**

Introduction This amplifier is designed with Innogrations 28V ITCH20020P3 LDMOS at 12.5V, for more detailed product information, please refer to dedicated datasheet.

Demo and Transistor

Frequency band : 1400MHz
Application : Telecom
Configuration : Class AB
Test Signal : CW test
Transistor : ITCH20020P3
Date code : P20252381
PCB : 20 Mil Rogers 4350B

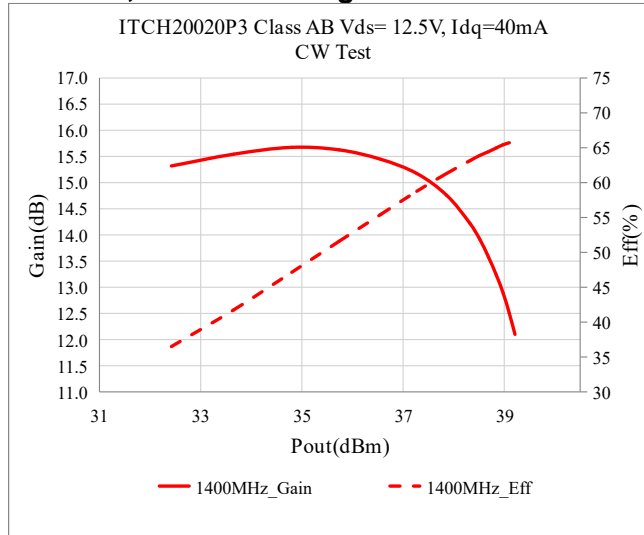
The amplifier has been characterized under the following conditions:

- Network Analyzer plots for gain and IRL..
- P1dB and P3dB Peak power measurement using the CW , Test , Gain, Efficiency
- RF Test Bench 1

Test Results:

1. RF test

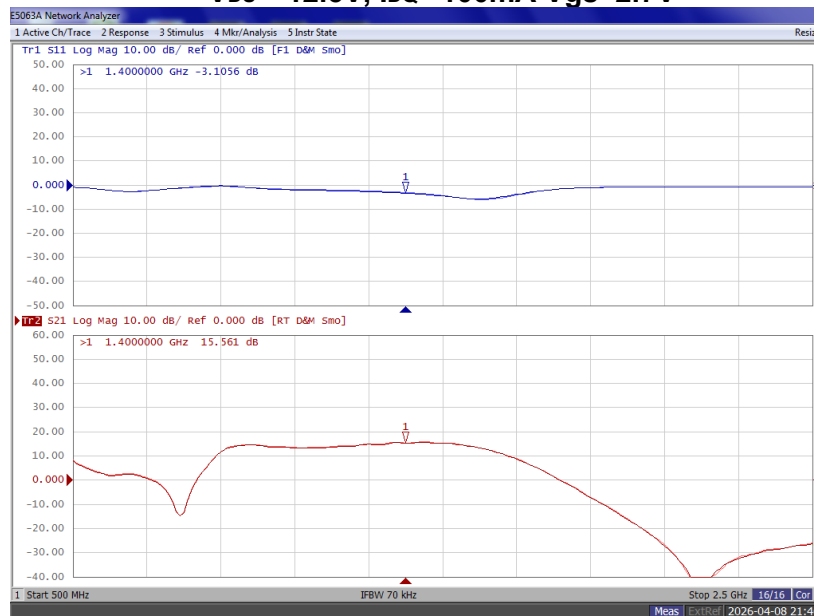
- CW VDS = 12.5V, IDQ = 40mA Vgs=2.52V



| Freq (MHz) | P1dB (dBm) | P1dB (W) | P1dB Eff (%) | P1dB Gain (dB) | P3dB (dBm) | P3dB (W) | P3dB Eff (%) |
|------------|------------|----------|--------------|----------------|------------|----------|--------------|
| 1400 | 37.93 | 6.2 | 61.6 | 14.68 | 39.04 | 8.0 | 65.6 |

2. Network Analyzer Results (S11, S21)

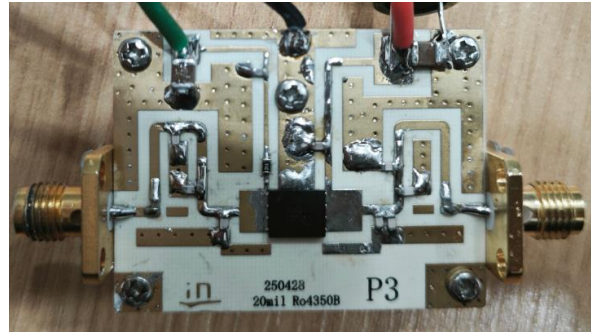
VDS = 12.5V, IDQ = 100mA Vgs = 2.7V



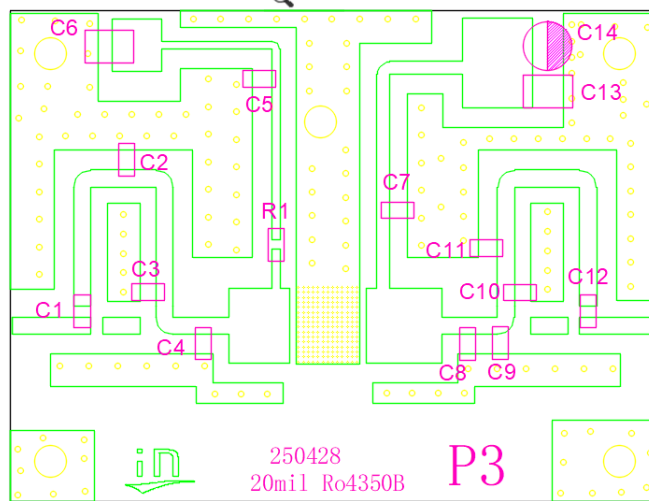
LBG-26-11

Test Report ITCH20020P3 Class AB 1400MHz

Demo Picture



3. PCB Layout



4. BOM of Test Circuit

| Component | Value | Footprint | Quantity |
|------------------|-------------|-----------|----------|
| C1,C5,C7,C12 | 22PF | 0603 | 4 |
| C2,C8,C9,C10,C11 | 2PF | 0603 | 5 |
| C3 | 1PF | 0603 | 1 |
| C4 | 7.5PF | 0603 | 1 |
| C6,C13 | 10UF | 1210 | 2 |
| C14 | 470UF/63V | | 1 |
| R1 | 10 ohm | 0603 | 1 |
| U1 | ITCH20020P3 | DFN6*5 | 1 |