Testing For Fake Mosfets

- Testing ProcedureTesting IRFP260 (Fake) •
- Testing IRFP260 (Real) • References

Testing Procedure

Using a 12V source and a automotive 12v light bulb:

connect up the bulb and record its current draw from the bulb and the voltage of the supply.



To measure the Voltage from Drain to Source

- connect negative to Source(S)
- connect voltmeter as shown
- connect the + side of the voltmeter to Drain (Bulb should be off)
- connect the + side of the voltmeter to Gate (will activate the mosfet)
- connect the + side of the voltmeter to Drain (Bulb should be ON)
- record voltage



Testing IRFP260 (Fake)

Measurements

Voltage: 12.09v

Current: 2.00A

Voltage Drain to Source: 0.42v

Calculated R(ds)

 $R(ds) = Vds \ / \ I = 0.42v \ / \ 2.00A = \textbf{0.210 ohms}$

Datasheet Specs

https://www.vishay.com/docs/91215/91215.pdf

R(ds) = 0.055 ohms

<u>Result</u>

FAKE!

Testing IRFP260 (Real)

Measurements

Voltage: 12.06v

Current: 2.00A

Voltage Drain to Source: 0.075v

Calculated R(ds)

 $R(ds) = Vds \ / \ I = 0.075v \ / \ 2.00A = \textbf{0.0375 ohms}$

Datasheet Specs

https://www.vishay.com/docs/91215/91215.pdf

R(ds) = 0.055 ohms

Result

Real!

References

Reference	URL
Real vs Fake MOSFET How to identify a Fake Transistor? MOSFET Test	https://www.youtube.com/watch?v=XXcEgddzjnI