

## Re: Can MOSFETs be tested with OhmMeter?

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In article <4170a07d\$0\$24701\$afc38c87@news.optusnet.com.au>, UmmaFriel says...

>

>*We can test normal PNP and NPN transistors with OhmMeter.*

>*Can we test (how) MOSFETs in the same way?*

Easy,

For n-channel mosfets.

As there is a diode from source to drain, first put some -ve bias on the gate so connect meter with +ve on ground (source) and -ve on gate to impress a bias on the gate and it will stay for a while if the device and air is dry as its a nice capacitor.

Then, without touching gate, remove leads and connect across source and drain, first one way then the other, in one direction it will be a diode in the other it should be off.

Then put +ve bias on gate in reverse of above procedure. Then measure again, this will show a lower than normal diode forward drop and conduction in the other direction as well if the mosfet is OK. On some good mosfets as little as 1.5v gate will show only a few ohms across source/drain - if you are fast enough. If charge bleeds quickly then gate might have some damage or device or air is moist. On good mosfets you can hold a gate charge for several minutes.

On slightly bad mosfets and after putting a +ve bias, reversing the source drain with a meter will drain some charge from the gate - I consider this slightly marginal as it doesnt seem to happen on a new device straight out of the tube but often appears to happen to devices that have been close to SOA for a while...

Caution, as mosfets dont need much to blow a gate, 20-30v is all it takes at ultra low current to pop a gate !

sci.electronics.basics: Re: Can MOSFETs be tested with OhmMeter?

You can also measure between gate and source or drain, in either direction, should be nothing if gate hasnt popped its insulator.

Reverse above for p\_channel.

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Rgds

Mike

Commodore VL Fuse Rail that wont warp or melt, Perth WA

<http://niche.iinet.net.au>