Re: Searching for engineer experienced in 24V vehicle electrical design.

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My intentions were not to waste anyones time. If I did I sincerely appologize. My original thoughts were that I would meet up with someone and discuss this outside the forum. However, responses came in quick and became overwhelming. So, I decided to carry on the conversation here. Unfortunately I wasn't able to fill in the details fast enough. That and I need to watch what I say. My company has a new product coming to market and I do not want to give any of their trade secrets away.

Back to the matter at hand. The BTS555 is truely a beast!!! I can't believe they crammed such a device in that small of a package.

About reverse battery connection and this FET. Reverse current may not damage this part. However, while reverse current flows, my 1 ohm load will heat up considerably. It may be a few minutes before whomever installed the product wrong to realize their mistake. By this time the load could approach 150C. I hate to be so vague, but need to watch what I say. I have protection mechanisms in place that will prevent further heating. However, this is destructive. The device will not recover and would become a warranty return. I would rather prevent reverse current flow all together.

The good thing is that the BTS555 is packaged in such a small format that I might be able to place a large body reverse current blocking diode in series with the load and have some room to spare.

Anyone know of a high current, low forward voltage drop, Schottky diode in a TO−220 or equivalent package?

George "Gerb" Marutz