

Re: Which MOSFET / IGBT can afford 5A current normal operation and 40A current at 1–2 seconds?

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From: Winfield Hill (hill_a_at_t_rowland-dotties-harvard-dot.s-edu)

Date: 11/29/04

Date: 29 Nov 2004 13:34:00 -0800

Winfield Hill wrote...

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> *Electronic Swear wrote...*

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>> *The DC motor is operated at (rectified) 220Vac. It is for food
>> juicer. We don't want to use current sensing because the motor
>> start-up current is very large. Similiar to what the current at
>> lock rotor. As a result, current monitoring is not a very good
>> method.*

>

> *Why not use current sensing and let the processor decide when the
> special case of a startup means forgiving high current a little
> longer?*

>

>> *the motor will be over-loading for a short moment when the user
>> is putting a very hard / big food for juicing at the beginning.*

>

> *Another case the microprocessor can detect.*

Plus, you can use the SCRs with phase control to reduce the current during stall, to avoid requiring shutoff entirely, unless the stall condition lasts far too long. You could also create a "stutter" in an attempt to free up the stall, and to send a signal to the user. You can list me on the patent applications. :<) Or just send money.

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Thanks,

- Win