

Re: component identification ---- follow-up

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- *From:* "Arfa Daily" <arfa.daily@xxxxxxxxxxxxx>
 - *Date:* Wed, 8 Apr 2009 09:25:04 +0100
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"Smitty Two" <prestwhich@xxxxxxxxxxxxx> wrote in message
news:prestwhich-5FBFAB.19004907042009@xxxxxxxxxxxxxxxxxxxxx

In article <[ViECl.173639\\$q45.121209@xxxxxxxxxxxxx](mailto:ViECl.173639$q45.121209@xxxxxxxxxxxxx)>,
"Arfa Daily" <arfa.daily@xxxxxxxxxxxxx> wrote:

Hi Smitty

Peak DC out is $\sqrt{2}$ (1.414) *times* the RMS AC in, so with a resevoir cap of sufficient size, and not too much loading and source impedance, that's about the level of DC that you would measure on a normal multimeter.

You are thinking of calculating the AC RMS figure from the DC where you *divide* the DC level by $\sqrt{2}$ (or multiply by 0.707).

The fact that there is no resevoir cap, throws a bit of a spanner in the works when it comes to measuring the 'DC' out from the bridge because, whilst by strict definition it *is* DC, what you will actually have is a train of unipolar pulses, which the meter will make some attempt to integrate into a DC level that it can display. Obviously, this will be a misleading figure, and may even differ between an analogue, and a digital meter. The meter reading of "12" might well have been 'correct' in this case – if you see what I mean !

I wonder what additional circuitry this supply is powering ? It can't be anything 'electronic', as such a raggedy-arsed rail would play havoc ...

Arfa

Thanks Arfa, and others. School was over many years ago, and never having made the subject into an occupation, as I had planned, the theory quietly slipped away ...

Friend obliged my request for another reading, and now shows 28 VDC out of the unfiltered bridge, with his Fluke handheld meter. Would have

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saved us all a lot of bother if I'd recognized that 12 VDC as faulty right off, rather than thinking it was spot on.

N. Cook is correct, the DC only drives a relay to operate the carousel on command.

Smitty

Ah yes ... ! Hindsight is a wonderful thing ! Still, at least if it ever goes wrong again in any of our lifetimes, we'll have a better idea where to start looking ! You say about theory quietly slipping away. Sometimes I despair at the things I've forgotten – often from just 5 seconds ago – but then marvel at other 'useless' information and facts that seem to have stayed with me taking up space for ever. And even with all the stuff I've forgotten, and the very 'normal' upbringing and education I had, albeit at a decent school, my three grown children think that I am a 'genius', just because I know something like the fact that New York is north of the equator

Makes you wonder just where we're headed over the next couple of generations, and whether the current world crisis is anything to do with the general standards of education and morals that our current and previous generations enjoy ... :-\

Arfa

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