

Re: voltage limiting problem

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On Thu, 15 May 2008 08:17:33 -0700 (PDT), john <conphiloso@xxxxxxxxxx> wrote:

Hi,

The thing is that my application needs full VCCS current to go into the Load and the Opamps should only be monitoring the voltage across the load and the capacitor in series. The opamp usually have very impedance input. How much controlled current do you think opamp needs to operate properly? The maximum current the VCCS is producing is 0.01A.

John,

Please examine the clipper circuit.

Op amp #1 has +1V on it's non-inverting input. The output of this op amp can only reduce the voltage on the monitored point through D1. If the voltage on the monitored point is already less than one volt, its output will remain high until required to function.

Op amp #2 has -1V on it's non-inverting input. The output of this op amp can only increase the voltage on the monitored point through D2. If the voltage on the monitored point is already more positive than -1V, its output will remain low until required to function.

This is the simplest explanation I can give you. Op amp 2 will normally have an output near the negative rail. Op amp 1 will normally have an output near the positive rail. If your VCCS forces the mode outside the range of +/- 1V, you should see the two op amps beginning to do something.

I'm not going to troubleshoot your VCCS. Just make sure its doing everything that you think it's supposed to be doing before applying the limiting circuitry.

RL

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