
Subject: C3g driver update

Posted by [Damir](#) on Sat, 03 Jun 2006 16:41:20 GMT

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I experimented with various cathode capacitors, but in the end I used two series connected red LEDs – the sound was brighter, cleaner and more linear, but can be a little «grainy» on the HF. On the top of this, g3 connection seems to have some impact on sound, as well as on the operating point – with cathode (or ground) connected g3, U_a is higher about 6-7 V then with anode connection, the same $I_a=11\text{mA}$ (CCS) and LED bias of 3,22V. It seems to me that ground connection has «sharper» sound, and anode connection somewhat softer and more natural, «organic» sound. Of course, add to this possible anode out or Mu-out from CCS load and we have many combinations for the listening tests... And I listen the same 4-5 songs in all cases and compared...huh... In the end, I choosed LED bias with anode out and anode connected g3, as shown on the picture. The sound is still direct and a little sharp, not too much bass, but more natural then other combinations, IMO. Of course, it is reccomendable that potential builder try those combinations for yourself on his speakers and music material. As I mentioned before, rel. low Rout of the driver (in this, anode out case little over 3kOhms), with grid choke load made possible to go a little «in red» («class A2»), without noticeable compression and distortion. In fact, my low-eff. speakers needs those «extra» 2-4 dB I used on peaks. Just the two tube design means directness and preserved phase of the input signal. I just punched two holes for the loctal C3g sockets on the chasis...
