

## Re: generating 180VDC at 5mA or so, simply...

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.design/2004-09/0227.html>

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**From:** Yzordderex (yzordderex\_at\_verizon.net)

**Date:** 09/01/04

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I certainly like the idea of doing stuff just for fun.

Maybe a 555 would work for you to control a boost converter. Drive the previous mentioned fet.

You say discreet components. Maybe a pair of transistors operated in freerunning mode to run boost converter. Could do bang-bang control and run the thing in burst mode. Maybe you can do the whole thing with 3 bipolar transistors and a fet. Maybe all bipolars.

regards,

Bob

mdeblis@hotmail.com (Mike Deblis) wrote in message news:<bc45f679.0409010100.6e9263c1@posting.google.com>...

> "Mike Deblis" <mdeblis@hotmail.com> wrote in message

news:<ch2n7j\$kvi\$1@hercules.btinternet.com>...

> > Hi,

> >

> > I was wondering how to generate about 180VDC continuous at a few mA (at

> > least 5) from 9-12VDC in (no mains).

> ...

>

> I should qualify this - 2% or 3% regulation is probably fine, and this

> is an exercise (not a class - I'm far too old for that!) in NOT using

> a switcher chip - I'm well aware of their advantages in commercial

> products, but this is just a bit of fun to see how simple such a

> non-critical PSU can be made. I've use LT and MAX (771/1771) for

> exactly this sort of PSU, but I don't need their 80-90% efficiencies

> and 1% reg etc. Its more a question of "given a couple of discrete

> semiconductors and a few passives, plus a hand-wound small inductor,

> can something good enough be made"? i.e. "outside the box" thinking...

>

> The object is to drive some neon discharge tubes that strike at about

> 180VDC and which take about 2mA or so each.

>

> Mike