

Re: Shaker LED flashlight

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- *From:* mrdarrett@xxxxxxxx
 - *Date:* Wed, 9 Jan 2008 16:07:06 -0800 (PST)
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On Jan 9, 3:40 pm, linnix <m...@xxxxxxxxxxxxxxxxxxxx> wrote:

On Jan 9, 1:08 pm, mrdarr...@xxxxxxxx wrote:

On Jan 9, 10:16 am, "amdx" <a...@xxxxxxxxxxxx> wrote:

Just for fun and as a reinforcement of the electricity books my son has been reading. I bought a shaker flashlight. (magnetic flux cutting across wire moving electrons , the electrons then stored on plates of a capacitor) The flashlight has a magnet that slides back and forth through a coil. The flashlight cost \$1.00. After I opened the package I noted a small screw rattling inside the light, so I took it apart and I found two cr2032 lithium batteries in series powering the LED. The coil is connected to a fullwave bridge and the unit has a .22f capacitor. There is a 10 ohm resistor in series with the LED. If I remove the batteries and short across the holder the LED will not light, no matter how much I shake it. I just found the batteries in there to be a disappointment. :-)
Mike

Well, the good news is, you now know of a cheap source of CR2032 batteries (which can be expensive elsewhere)...

Michael

Re: Shaker LED flashlight

Actually, there are cheaper sources. I got some of them for a penny each, after throwing away the ASIC and 100 SMD LEDs. I need a few thousands of them, but it wouldn't justify the gas cost. CR2032s are approximately 25 cents each in volume.

Where'd you get the ASIC and LEDs?

I've got to stop shopping at Wal-Mart...

M

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