Re: led questions

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- *From*: "Rodney" <rdavies@xxxxxxxxxxxx>

- *Date*: Fri, 19 Aug 2005 03:06:49 −0700

"redls1bird" <dakota39l@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message
news:StCdnZSH7IZNBJjeRVn_vQ@xxxxxxxxxxxxxxx
> hello all. im interested in using some leds for automotive lighting
> and such. i have a BASIC understanding of electronics and
> electricity. i am familiar with diodes, but not leds. The very
> small information i have found for auto use talks about using
> resistors in parallel, but noone really goes into why. i believe its
> to drop the voltage? but i wouldnt bet my next paycheck on it. can
> anyone give me some basics on building led circuits? especially how
> to connect multipes and determine the proper resistors to use?
> Thanks for the help in advance.
>
For standard LED's you only want about 3 volts and about 20 milliamps so you need to connect a resistor in series with the LED for a voltage drop of 11 volts since automotive voltage us about 14 volts(13.8) when the vehicle is running. Using Ohms Law, R = V/I so R = 11/20e−3 which is 550 ohms. A 470 ohm resistor would be a good enough standard value since the LED will take more than 20 milliamps. I know someone who usually uses 470 ohms for automotive purposes. I used 220 ohms for my six volt motorbike.
You need 470 ohms for each LED you use. Connect the LED's in parallel with one another.

Rod

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- ***References***:
  - ♦ ***led questions***
    - ◊ *From:* redls1bird

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