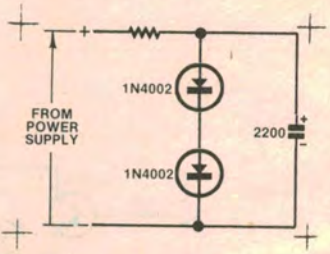
Simulate a Nicad cell



This circuit was developed to simulate the presence of a nickel-cadmium cell in a piece of equipment. It is run from a DC power supply via a suitable high value resistor. The two diodes limit the "cell" voltage to approximately the same value as a fully charged nicad cell while the 2200μF capacitor ensures a low output impedance. The voltage rating of the capacitor is unimportant.

Select the value of the series resistor to "bleed" approximately 10 to 50% of the anticipated load current through the diodes. For intermittent load applications, both bleed and load currents will flow through the diodes. If the intermittent load exceeds (say) 600mA, use larger diodes.

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PSSST! Got any neat circuit ideas? Why not send 'em in to us? We pay between $5 and $20 per item, depending on how much work we have to do to publish it.