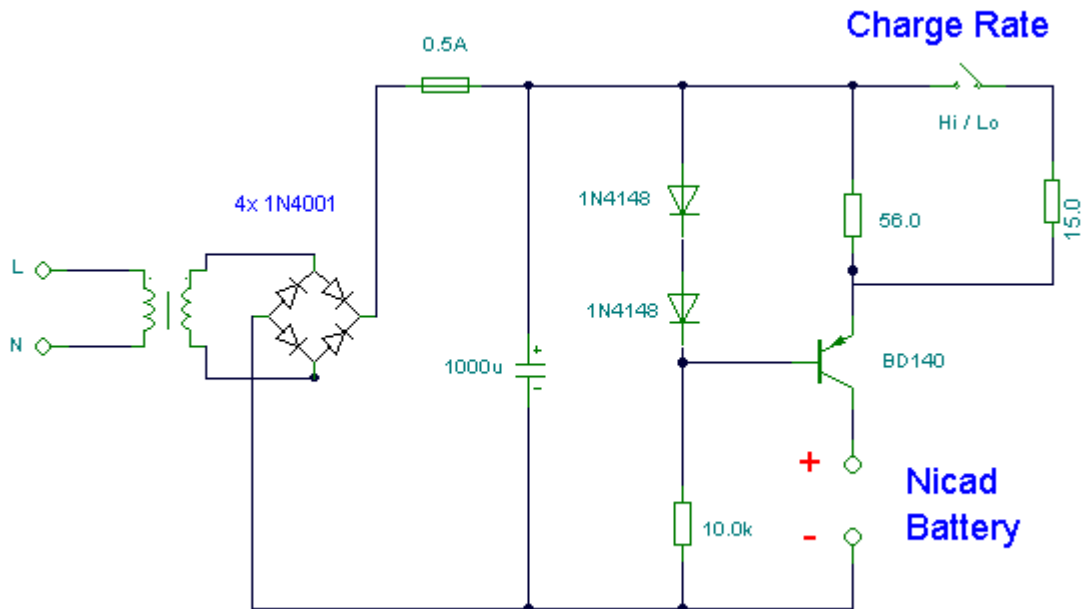


Nicad Battery Charger



Notes:

This simple charger uses a single transistor as a constant current source. The voltage across the pair of 1N4148 diodes biases the base of the BD140 medium power transistor. The base- emitter voltage of the transistor and the forward voltage drop across the diodes are relatively stable. The charging current is approximately 15mA or 45mA with the switch closed. This suits most 1.5V and 9V rechargeable batteries.

The transformer should have a secondary rating of 12V ac at 0.5amp, the primary should be 220/240volts for Europe or 120volts ac for North America.

WARNING: Take care with this circuit. Use a voltmeter to observe correct polarity. Nicads can explode if short circuited or connected with the wrong polarity.