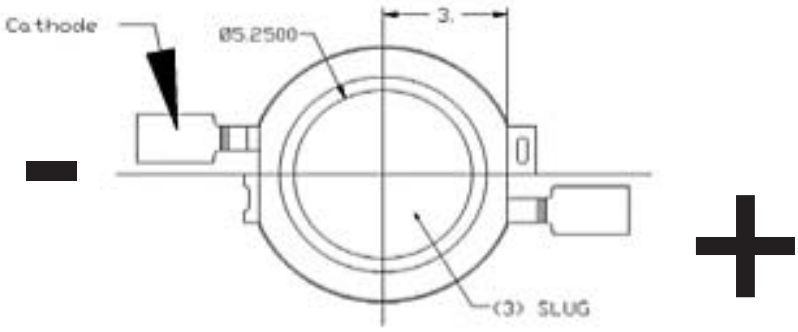
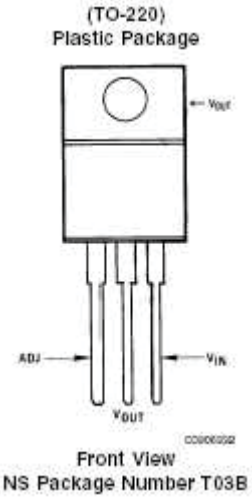


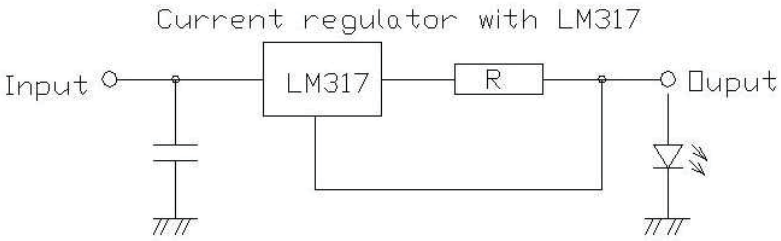
This Led Kit contains: 1 350mA White LED
1 Luxeon Substrate Board

You will need : soldering iron
Heat sink compound (available from Radioshack, Microcenter, Americian Science and Surplus, or any electronics suppliers)
Masking tape
LED driver constant .35A 2-35VOUT (digikey part# 945-1117-ND about $12.50 ea. This part will allow you to run mutiple LEDS at once.) or you can build a LM 317 constant current circuit. (LM317 is available at any electronics suppliers. We get our from Jameco for $1.00. However you'll need a few extra parts.)

First you'll need to form the two leads so the overlay of the LED slug fits on two pads of the substrate. Once you've done that, put a dab of the heatsink compund on the back and carefully line the slug up with the pads. Make sure some of the pad that your slug is on is showing so you can tack the lead to the pad when you solder the slug.You can use some masking tape to hold the slug in place so when you attempt to solder it, it doesn't move. Make sure your soldering iron is hot enough because it will take a lot of heat. If you attempt to solder the pads with a iron that is not hot enough you will make a huge mess on the substrate board.

LM317 INSTRUCTIONS:





Detailed instructions to build this circuit are available at http://users.telenet.be/davshomepage/current-source.htm

Further questions you can contact Anna Yu or Ed Bennett in the ATS department.