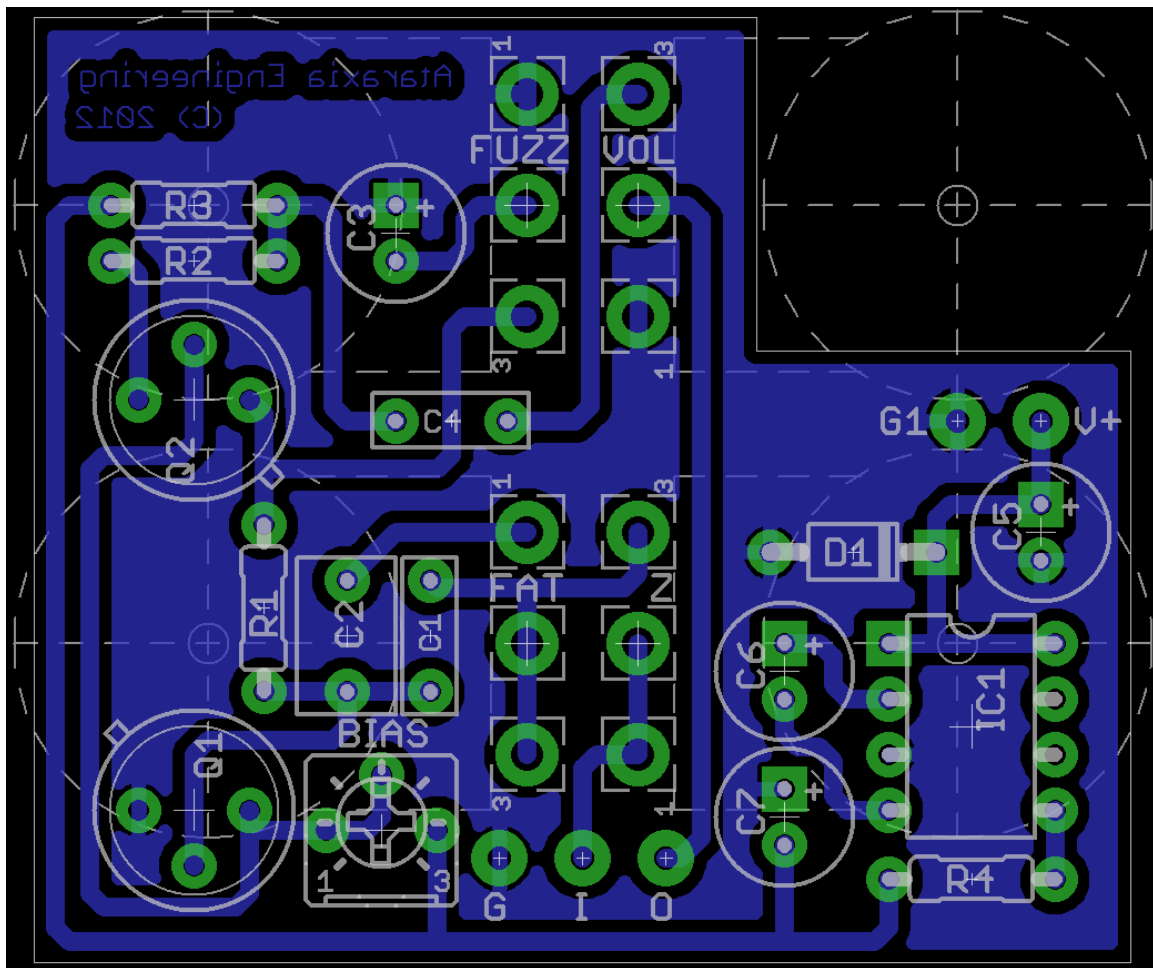


4-Knob Fuzz Face

The 4-Knob Fuzz Face is a germanium Fuzz Face variant that incorporates a few popular mods. First is the “input Z” mod, which adds a variable resistor in series with the input. Varying the setting can help when you place the fuzz after a low impedance buffer or when you want to clean it up a bit.

Second is an input cap blend knob. This allows some control over the bass response, going all the way from a thin, tight tone to the classic thick Fuzz Face sound.

Thirdly, a charge pump providing negative voltage has been added to the power supply allowing you to daisy chain with normal negative ground pedals while using more common PNP germanium transistors.



Parts List:

R1 – 100k, 1/4W

R2 – 8k2, 1/4W

R3 – 1k, 1/4W

R4 – 51R, 1/4W

C1 – 100nF, 5mm

C2 – 1uF, 3.5mm

C3 – 22uF, 3.5mm

C4 – 100nF, 5mm

C5 – 100uF, 3.5mm

C6 – 10uF, 3.5mm

C7 – 10uF, 3.5mm

IC1 – MAX1044, LT1054, ICL7660SPCR

Q1 – Germanium PNP, Hfe 60-90

Q2 – Germanium PNP, Hfe 80-120

D1 – 1n4001

Z – 50kB

Fat – 100kB

Fuzz – 1kC

Vol – 500kA

Bias – 100k

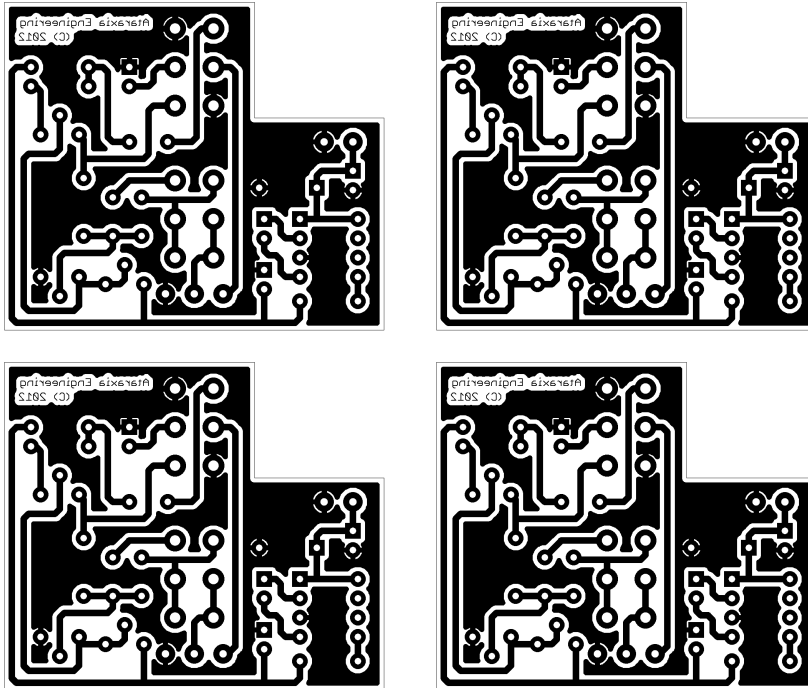
Film capacitors are spaced for Epcos B32529C series, found on Mouser at http://www.mouser.com/EPCOS/Passive-Components/Capacitors/Film-Capacitors/Polyester-Film-Capacitors/_/N-5g7wZ1z0zl90?P=1z0vn48

Electrolytics are spaced for Nichicon MW series, found on Mouser at http://www.mouser.com/Passive-Components/Capacitors/_/N-5g7r?Keyword=nichicon+mw&FS=True

Bias trim pot is a Bourns 3386P, found on Mouser at <http://www.mouser.com/ProductDetail/Bourns/3386P-1-104LF/?qs=m2uG%2fFdTAPUskYVKqYtdTHfM0f4CefPLf6qOn43phFM%3d>

Pots are right angle PC mount Alpha 16mm. Available from various suppliers such as Small Bear, Mammoth, etc.

Transfer:



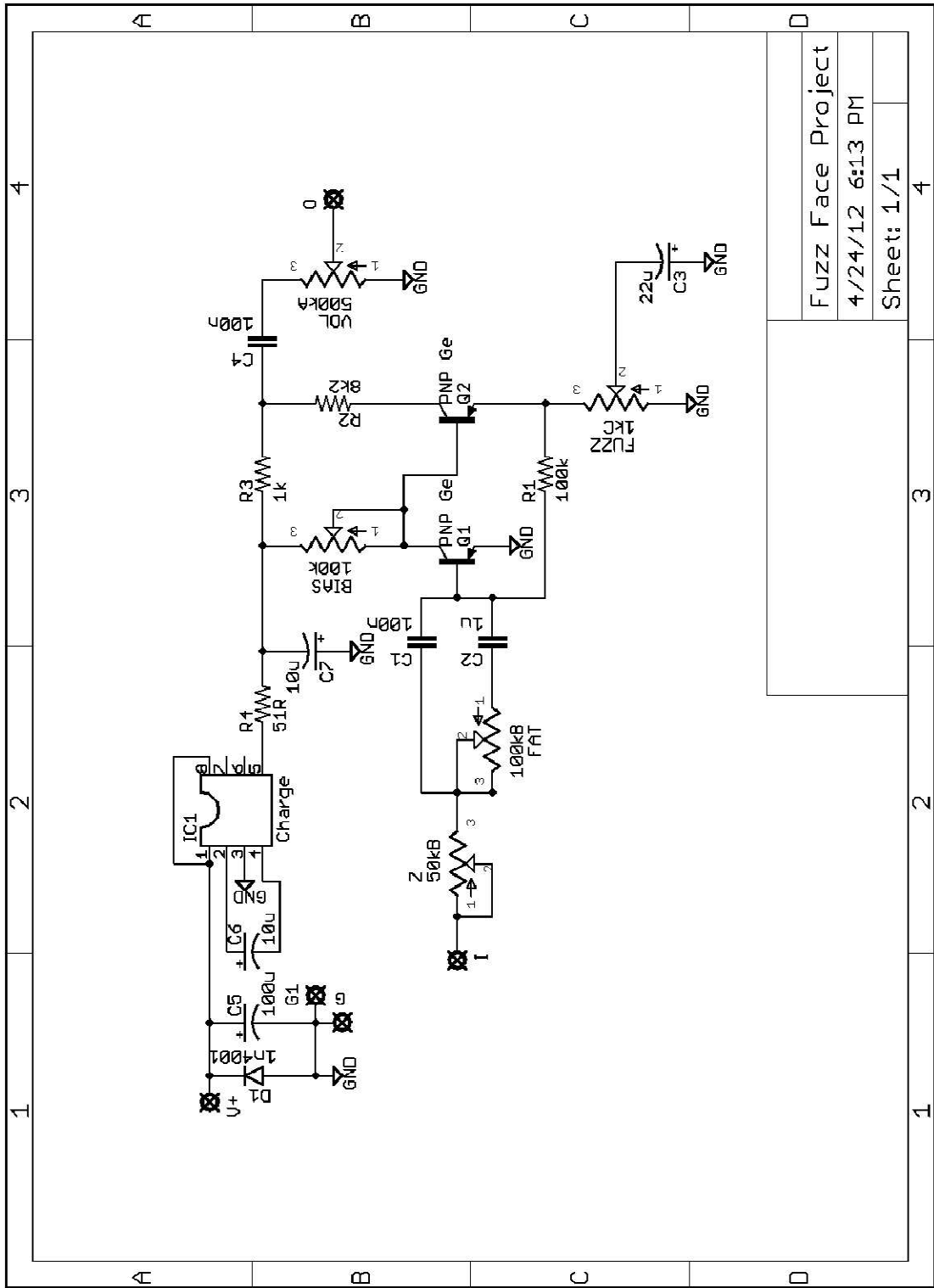
Build Notes:

Bias should be adjusted until your multimeter reads between -4~-6V on the collector of Q2 (pin on the farthest left).

To build with NPN silicon or germanium, check your pinouts and jumper pin 1 and 5 of IC1. You can then omit IC1, C6 and C7. Also be sure to flip the orientation of C3 so that negative goes to ground.

The drilling template includes 2 9V jack locations. Pick one and make sure that you don't drill both. Pots require a 9/32" bit, LED a 5/16" bit, switch and 9V jack a 1/2" bit and the jacks require a 3/8" bit. Drilling template is sized for a 1590B, which will be fairly tight. If you lack experience as a builder, it might be preferable to switch to a 125B.

Schematic:



Fuzz Face Project
 4/24/12 6:13 PM
 Sheet: 1/1

Drill Template:

