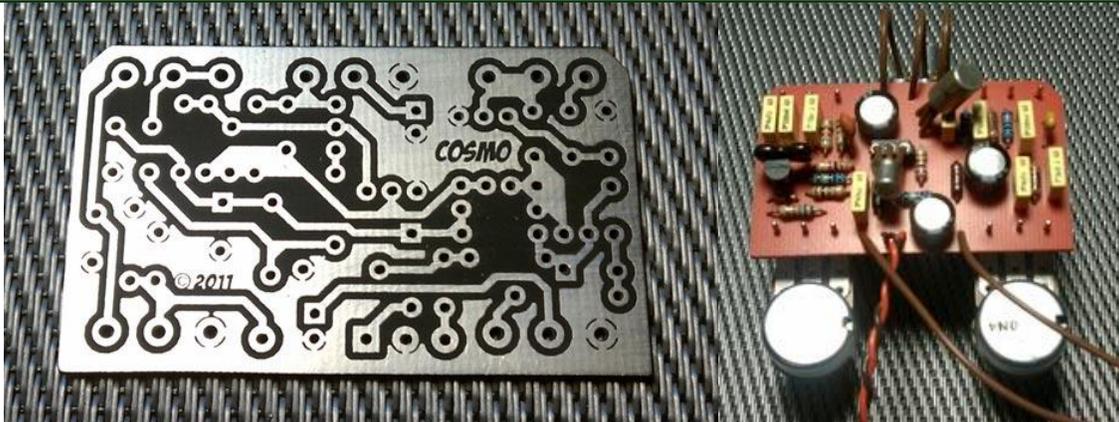


# COSMOPOLITAN



## FX Type: DISTORTION/FUZZ

Based on the Skreddy® Screwdriver™  
PCB artwork ©2011 madbeanpedals  
Release date: 05.19.11

Some fuzzes are better than others. A lot of people are content to build the same basic 8-12 part Fuzz Face/Tonebender while throwing every scruffy looking dumpster part they can find inside. Then there's this thing...the Screwdriver™. Not a FF or a Tonebender, but something else. It's a nice blend of gain, fuzz and filtering with controls in just the right place to make it exceptional sounding and versatile. The **Cosmopolitan** is a pretty straight-forward replica, with PCB mounted pots for the five controls.

### Controls

**FUZZ:** This control sets the gain for the input mosfet stage (labeled PRE in the Screwdriver).

**SHAPE:** Controls the amount of bass fed into the fuzz portion of the effect.

**GAIN:** Sets the overall gain of the unit in conjunction with the **FUZZ** control.

**BRIL:** This adds top end shimmer at the output.

**VOL:** A passive volume control.

### Build Notes

- **Q3** is reported to be a low gain and fairly leaky AC127 in the stock unit. While I did not measure leakage on mine, the gain of my AC127 was about 80 and produced really smooth results. Other NPN germaniums may work.

- You can use PCB mounted pots for this build soldered underneath the board. If using these types of pots, make sure to solder them last, after your in/out wires are in place.

<http://www.smallbearelec.com/Detail.bok?no=692>

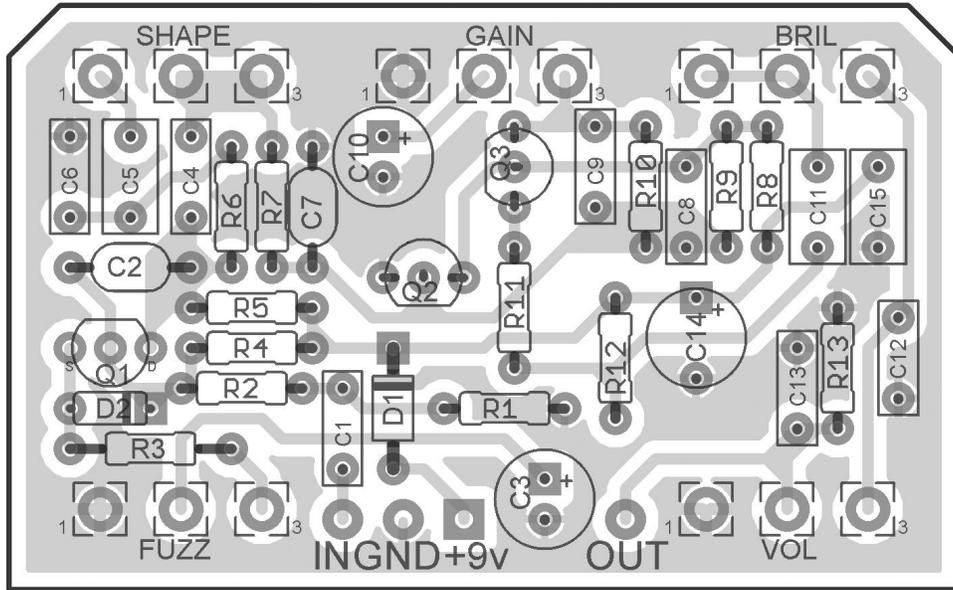
- General NPN germanium transistors (50-59 Hfe):

<http://www.smallbearelec.com/Detail.bok?no=920>

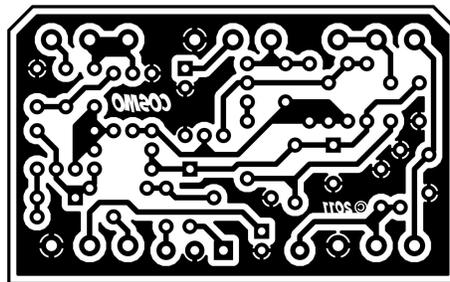
- AC127:

[http://www.pedalpartsplus.com/mm5/merchant.mvc?Screen=PROD&Store\\_Code=PPP&Product\\_Code=4103&Category\\_Code=GTRANS](http://www.pedalpartsplus.com/mm5/merchant.mvc?Screen=PROD&Store_Code=PPP&Product_Code=4103&Category_Code=GTRANS)

## LAYOUT DIAGRAM

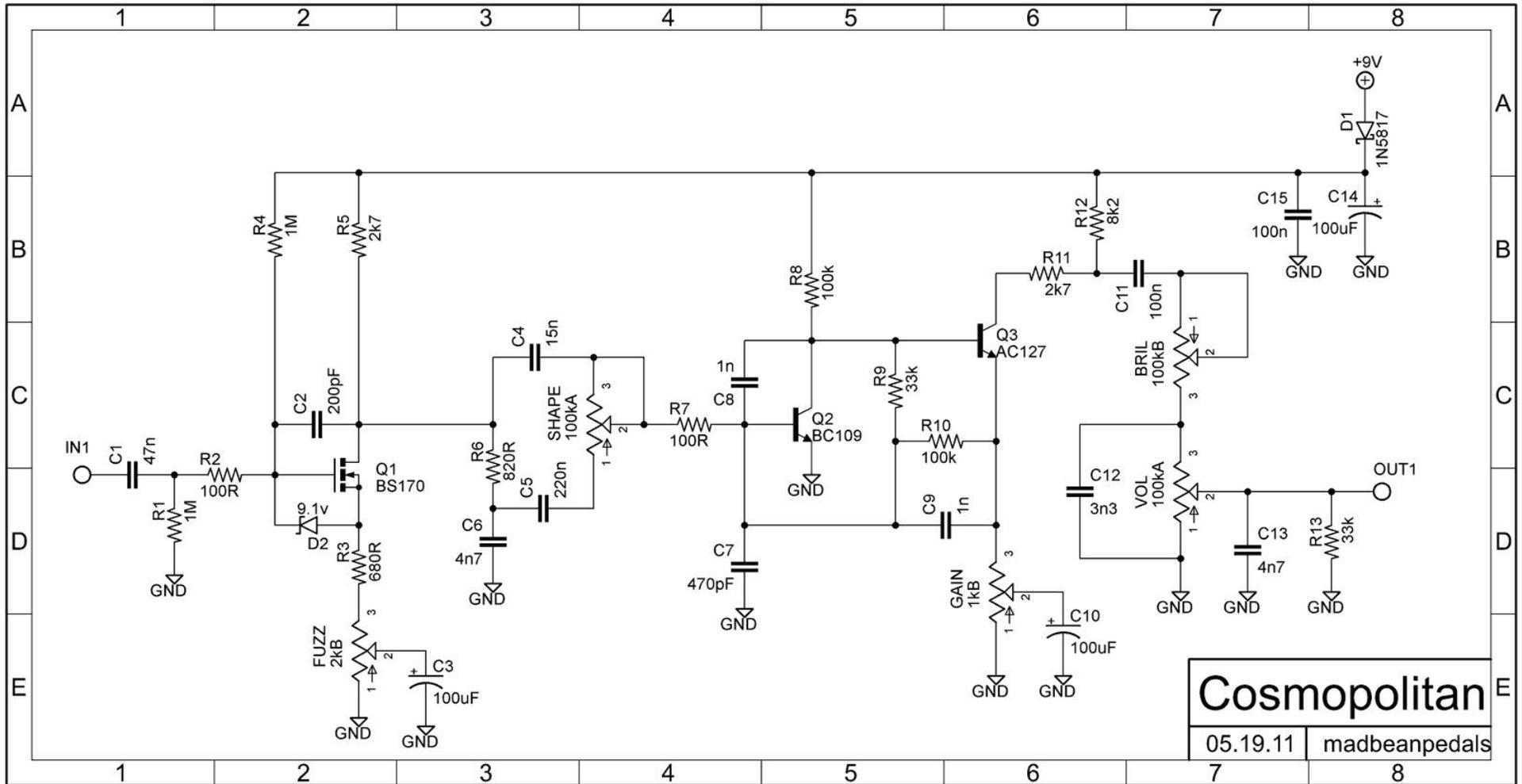


This PCB will fit in a 125B enclosure  
2.36"W x 1.47"H



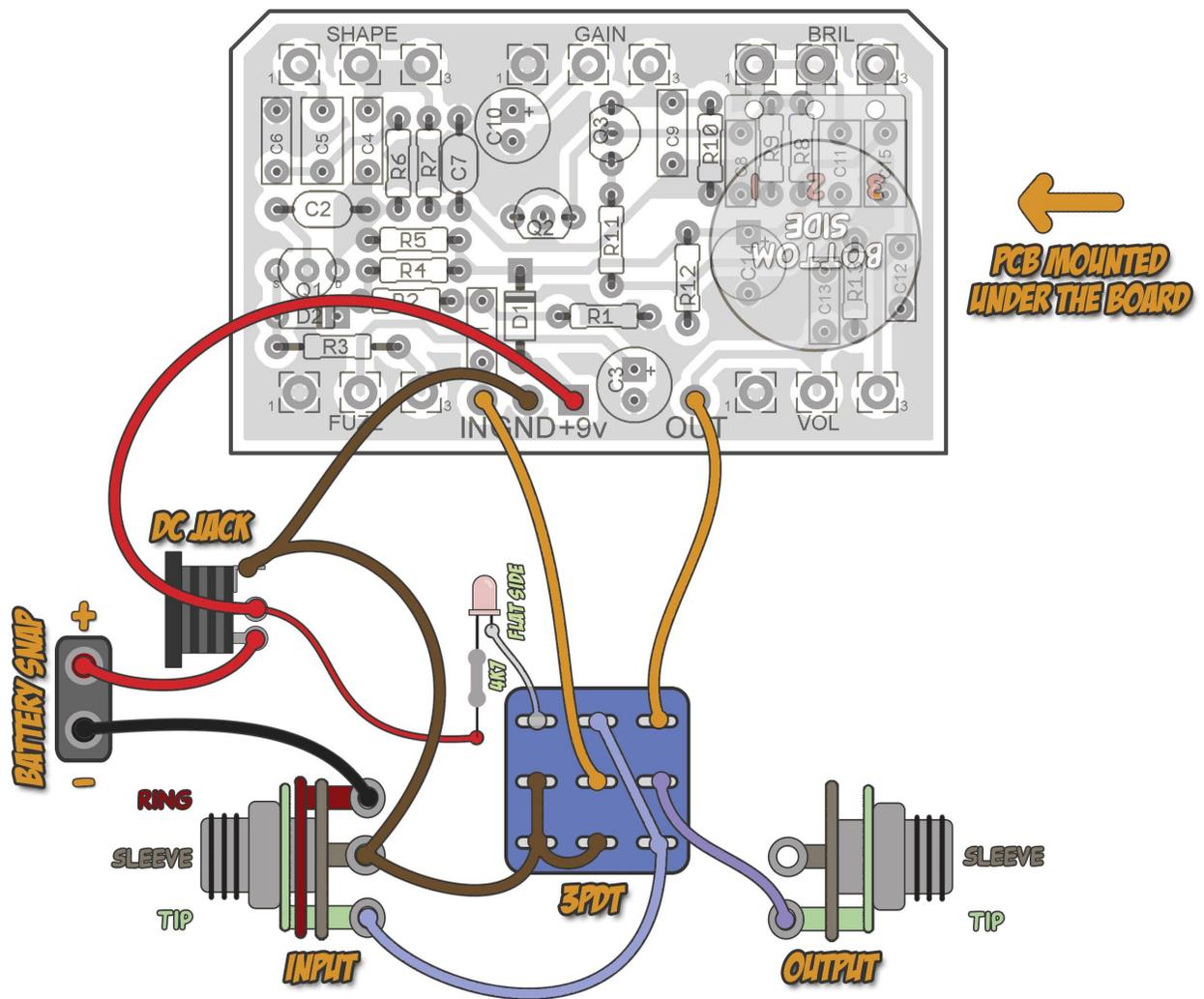
## BILL OF MATERIALS

| Resistors |      | Caps |       | Diodes             |            |
|-----------|------|------|-------|--------------------|------------|
| R1        | 1M   | C1   | 47n   | D1                 | 1N5817     |
| R2        | 100R | C2   | 200pF | D2                 | 9.1v Zener |
| R3        | 680R | C3   | 100uF | <b>Transistors</b> |            |
| R4        | 1M   | C4   | 15n   | Q1                 | BS170      |
| R5        | 2k7  | C5   | 220n  | Q2                 | BC109      |
| R6        | 820R | C6   | 4n7   | Q3                 | AC127      |
| R7        | 100R | C7   | 470pF | <b>Pots</b>        |            |
| R8        | 100k | C8   | 1n    | BRIL               | 100kB      |
| R9        | 33k  | C9   | 1n    | FUZZ               | 2kB        |
| R10       | 100k | C10  | 100uF | GAIN               | 1kB        |
| R11       | 2k7  | C11  | 100n  | SHAPE              | 100kA      |
| R12       | 8k2  | C12  | 3n3   | VOL                | 100kA      |
| R13       | 33k  | C13  | 4n7   |                    |            |
|           |      | C14  | 100uF |                    |            |
|           |      | C15  | 100n  |                    |            |

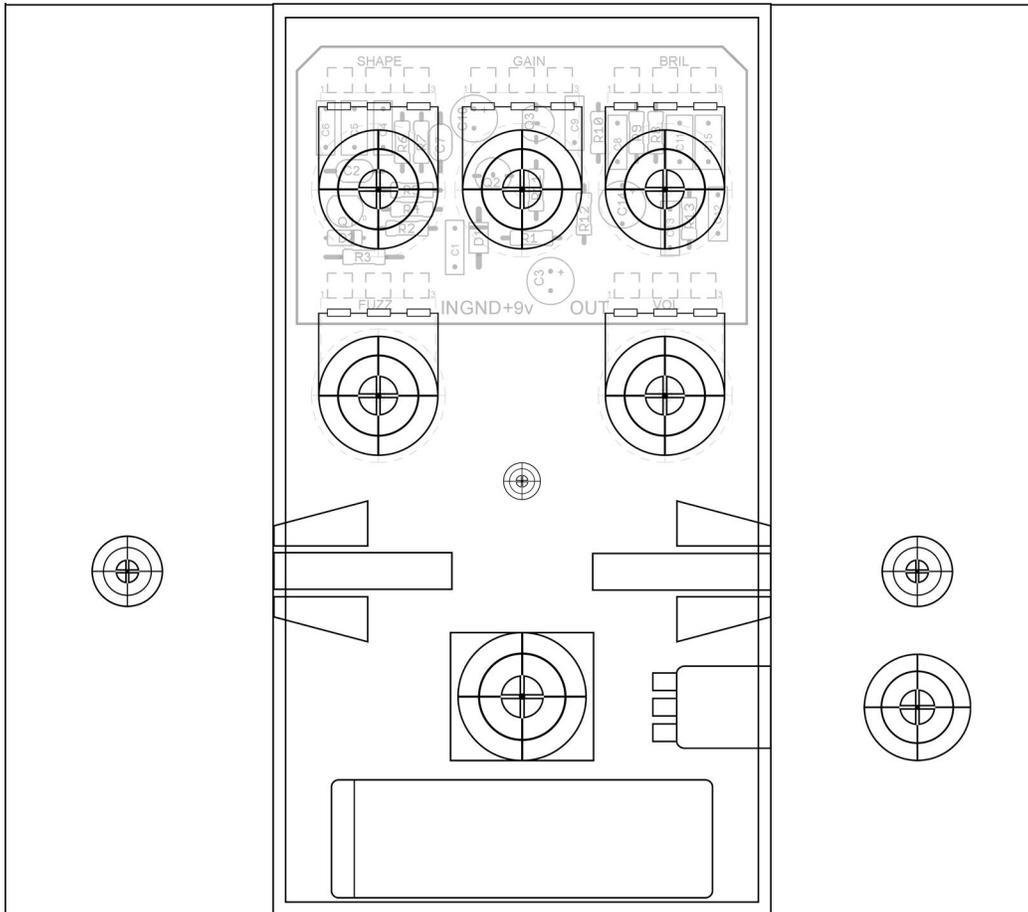


# COSMOPOLITAN

## WIRING DIAGRAM



5.41"W x 4.79"H



## Terms of Use



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