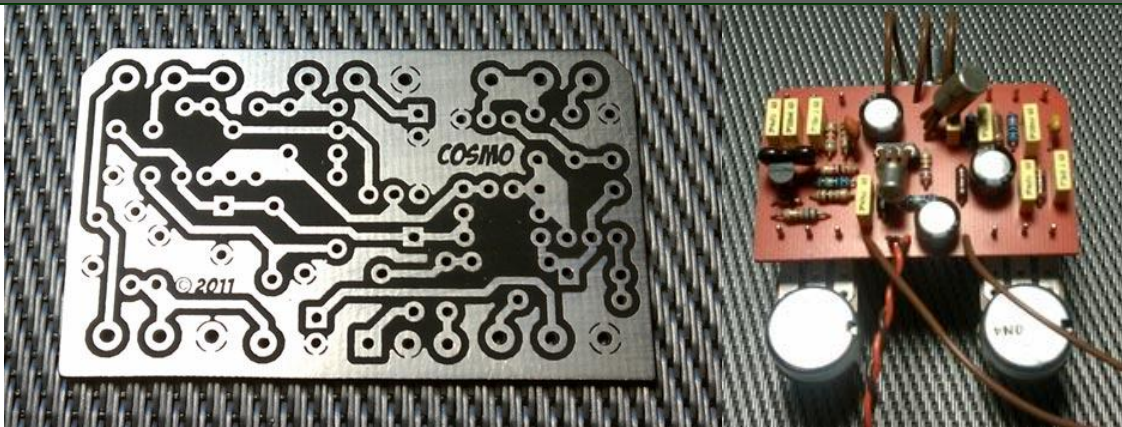


COSMOPOLITAN



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>

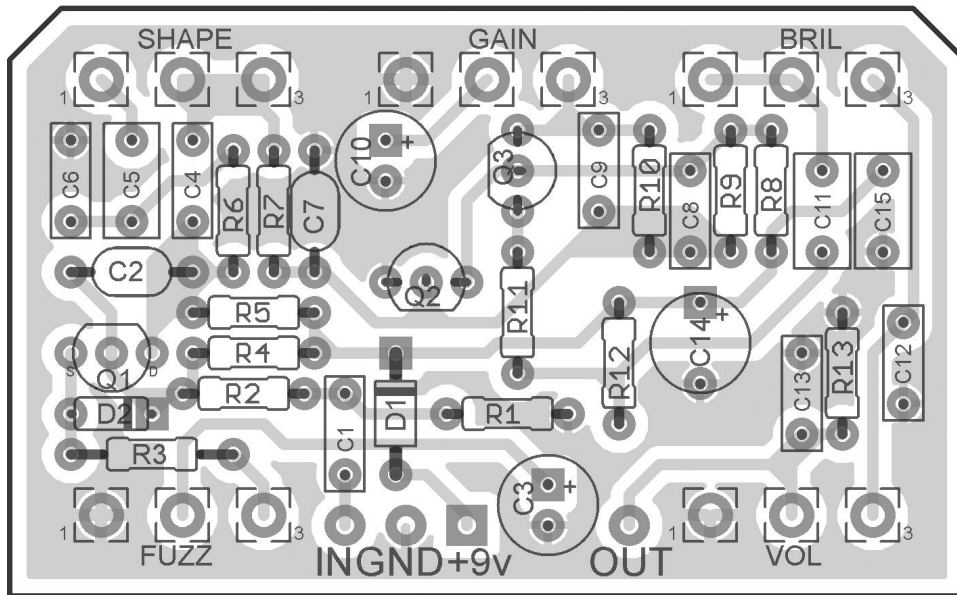
- General NPN germanium transistors (50-59 Hfe):

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

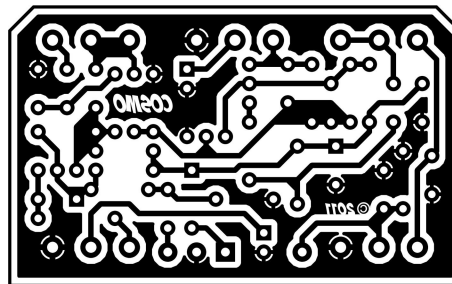
- AC127:

http://www.pedalpartsplus.com/mm5/merchant.mvc?Screen=PROD&Store_Code=PPP&Product_Code=4103&Category_Code=GTRANS

LAYOUT DIAGRAM

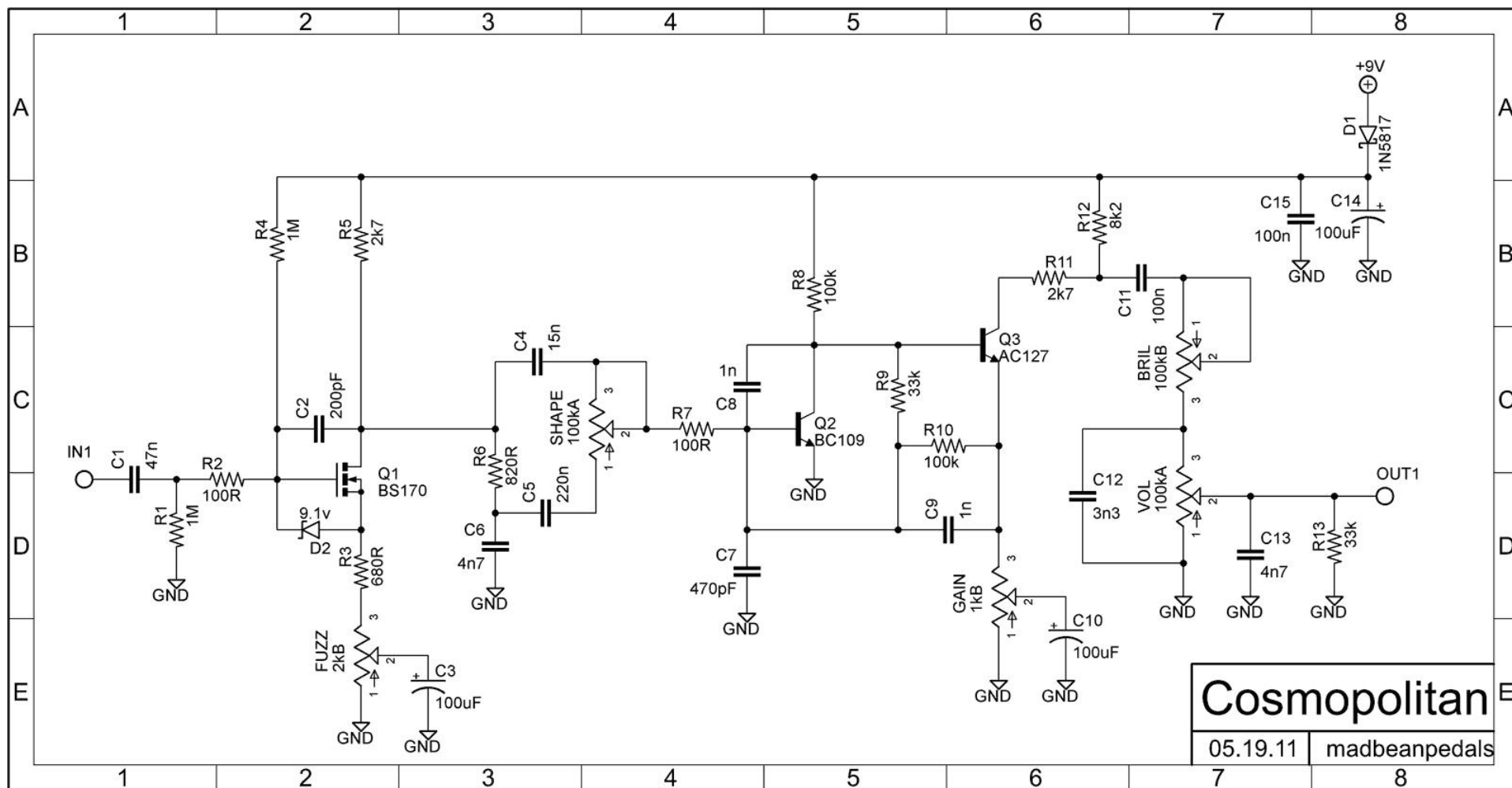


This PCB will fit in a 125B enclosure
2.36"W x 1.47"H



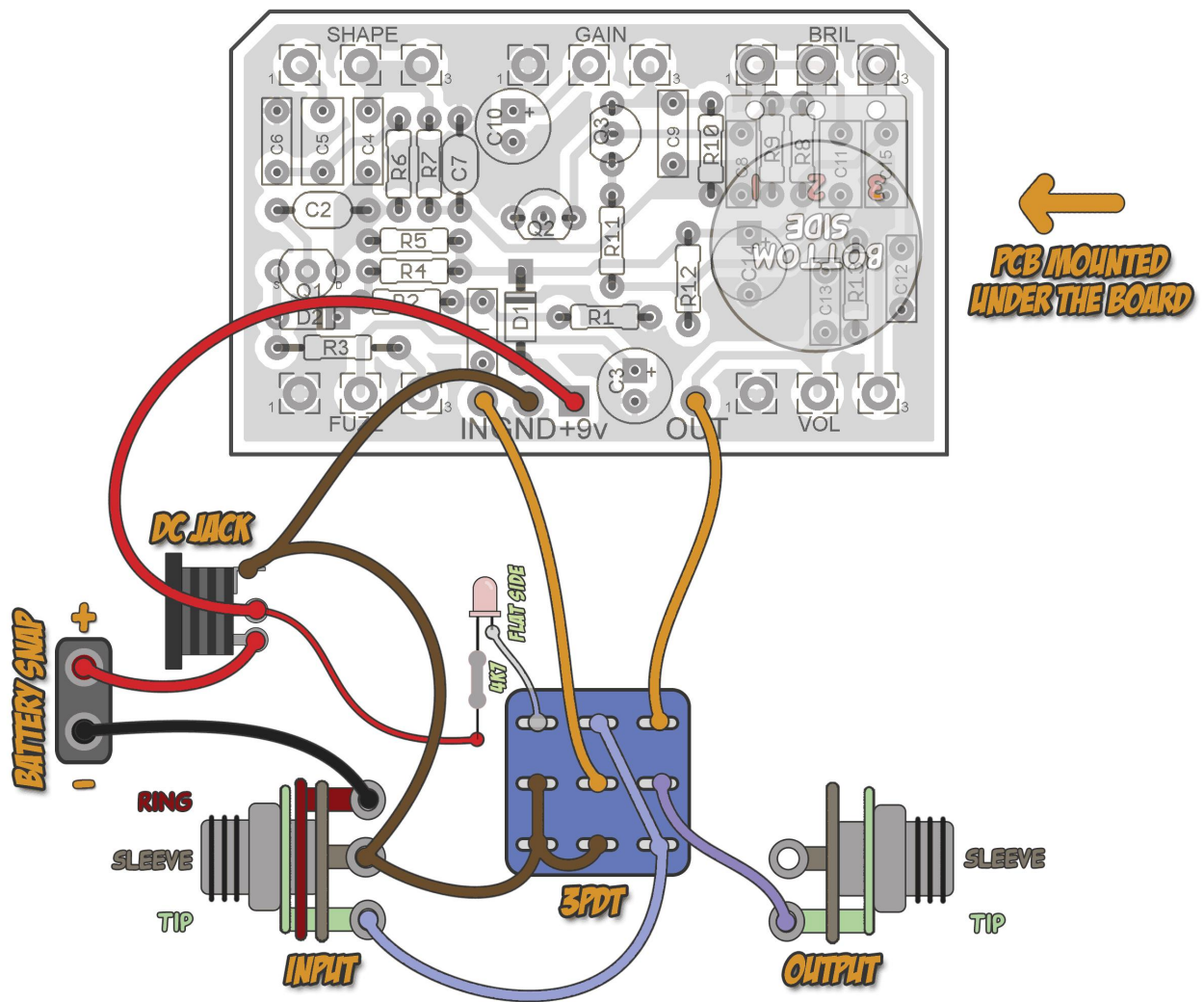
BILL OF MATERIALS

Resistors		Caps		Diodes	
R1	1M	C1	47n	D1	1N5817
R2	100R	C2	200pF	D2	9.1v Zener
R3	680R	C3	100uF	Transistors	
R4	1M	C4	15n	Q1	BS170
R5	2k7	C5	220n	Q2	BC109
R6	820R	C6	4n7	Q3	AC127
R7	100R	C7	470pF	Pots	
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		

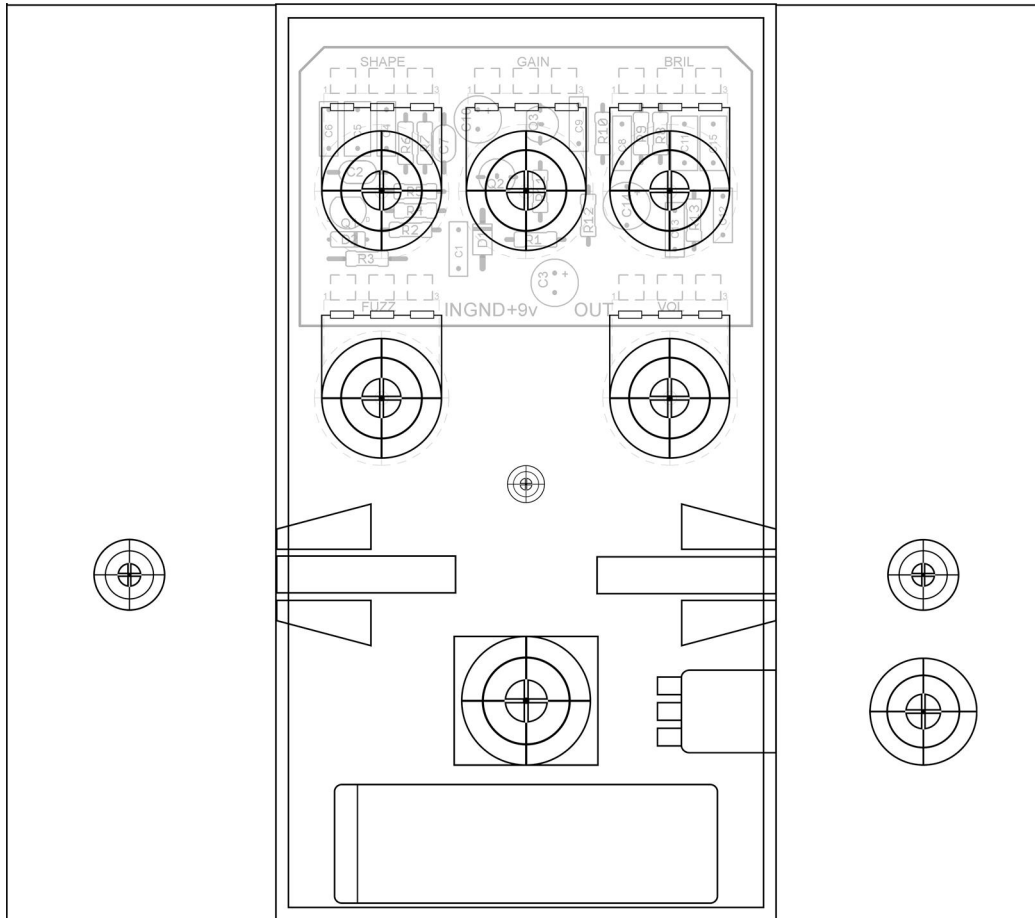


COSMOPOLITAN

WIRING DIAGRAM



5.41"W x 4.79"H



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