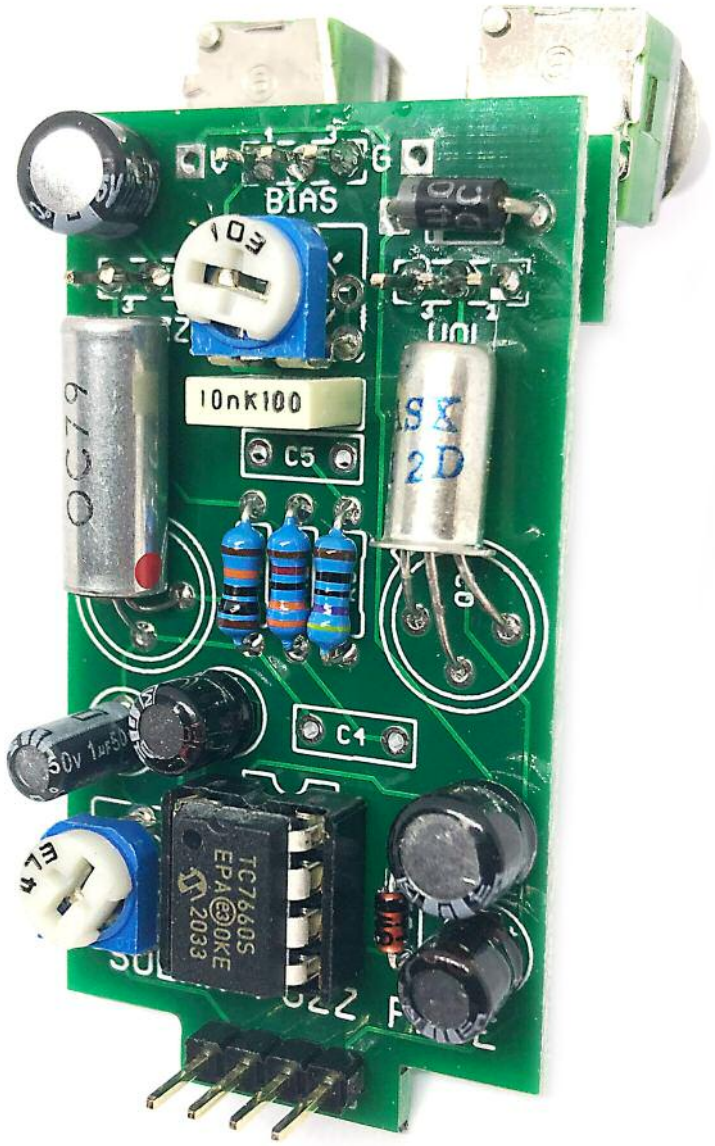
FuzzPup



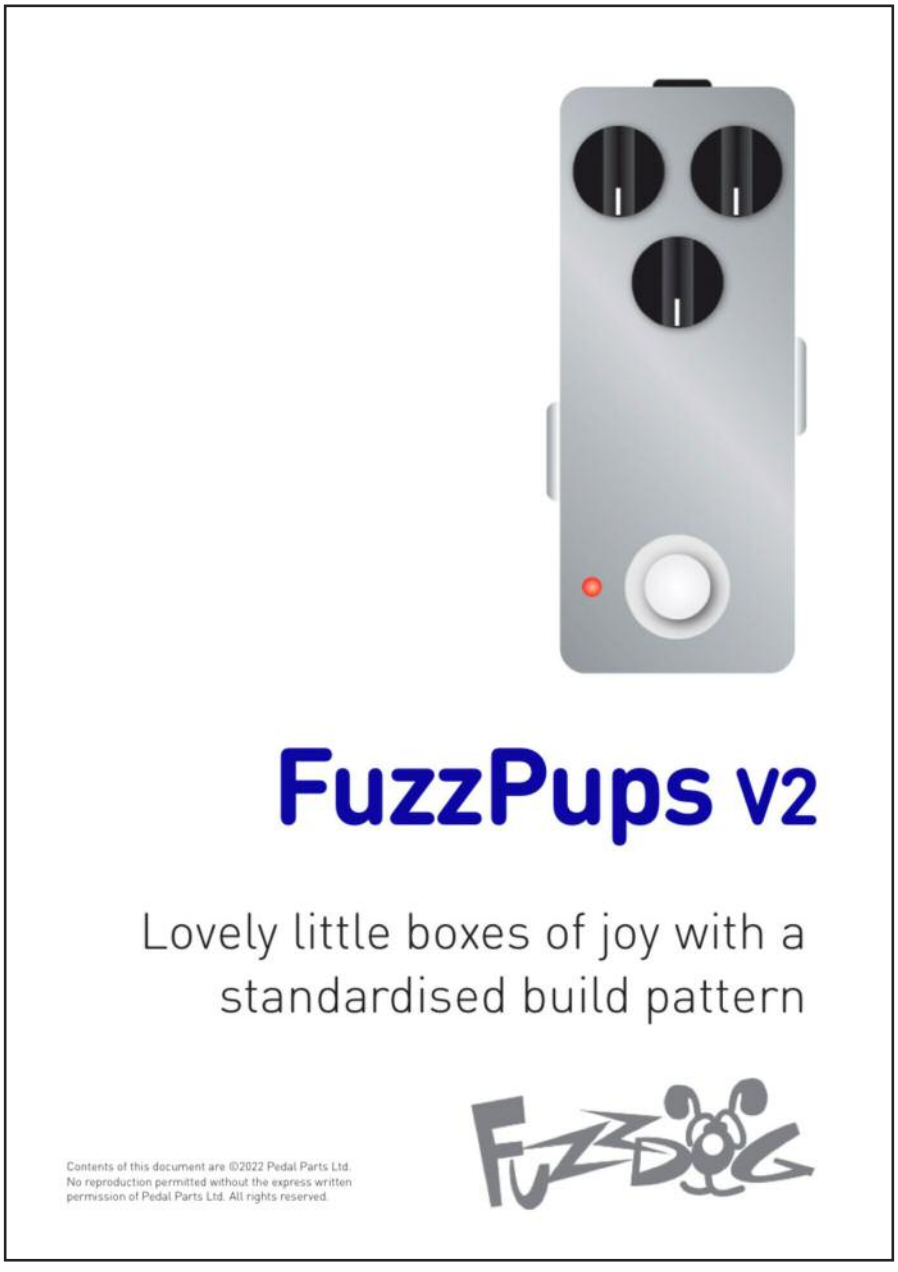
Solar Face

Si or Ge Fuzz Face with a magic bias dial

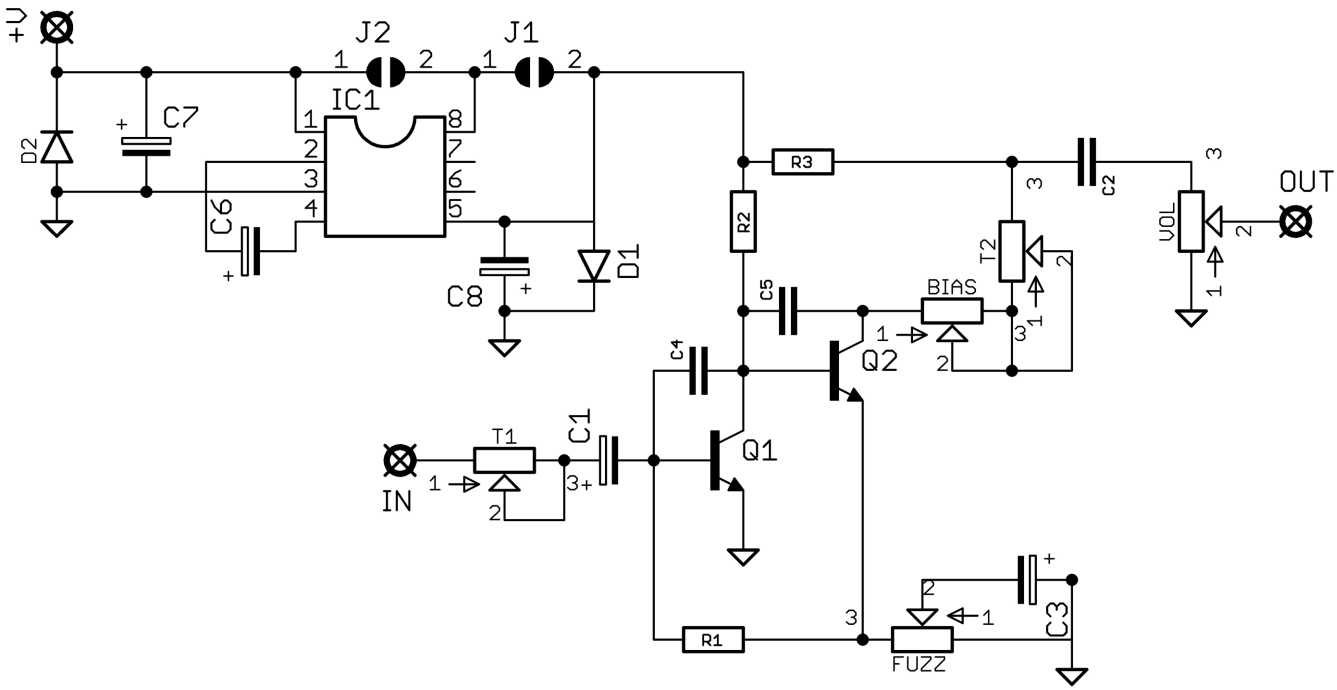
IMPORTANT
Before you start...

Grab the general build doc that covers all FuzzPup V2 builds. Most of the information you need for this build is in there.

Read it? OK, carry on.



Schematic + BOM



This is the full schematic including the following optional parts:

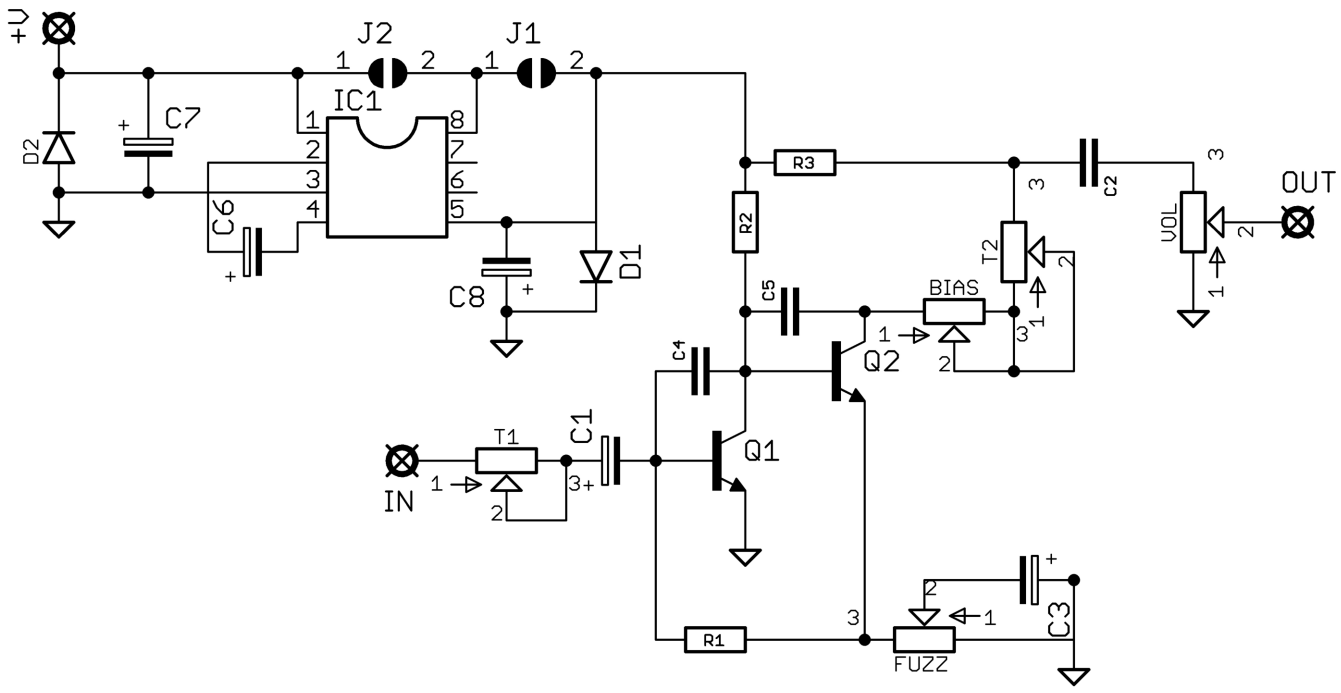
Voltage Inverter (D1, IC1, C6, C8) to make a positive ground build (using PNP transistors) work with standard negative ground supplies.

To use the voltage inverter simply add these parts. You also need to jumper the pads marked J2 on the back of the PCB with a blob of solder. You can use a 7660 or MAX1044.

If you're building a NPN / negative ground circuit, so don't require the inverter, leave these parts out and jumper the two pads marked as J1 on the back of the PCB with a blob of solder.

Smoothing Caps (C4, C5) to prevent high frequency oscillation on builds with higher gain silicon transistors. These aren't required on builds using germanium transistors in the standard Fuzz Face gain ranges.

Schematic + BOM PNP/Ge



R1	100K
R2	33K
R3	470R

C1	1u elec
C2	10n
C3	22u elec
C4	Empty
C5	Empty
C6	10u elec
C7	22u elec*
C8	10u elec

D1	1N4148
D2	1N4001
IC1	TL7660SEPA
Q1-2**	Ge Fuzz Face set
BIAS	5KB
FUZZ	1KC
VOL	250KA
T1	47-50K
T2	10K

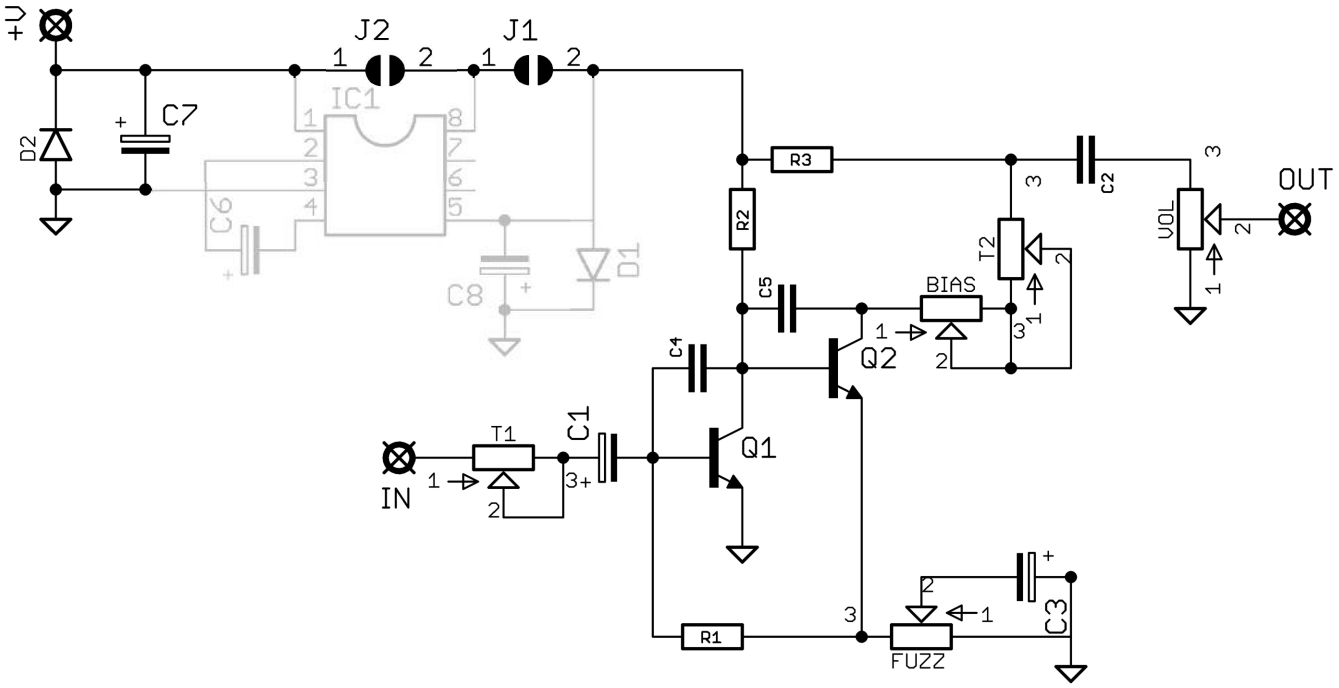
Parts listed in green are the optional voltage inverter. If you're not adding this leave these out and connect the J1 pads on the back of the board as detailed on the previous page with a blob of solder. You'll have to wire it as positive ground if you're using PNP transistors and aren't using the inverter.

*This is the largest value we could find that is short enough to physically fit into the build. Use 10u if your 22u are too big.

**Typical transistor gain values for a Fuzz Face are:

Q1 - 70ish
Q2 - 120ish

Schematic + BOM NPN/Si



R1	100K
R2	33K
R3	470R

C1	1u elec***
C2	10n
C3	22u elec***
C4	*
C5	*
C6	Empty
C7	22u elec‡
C8	Empty

D1	Empty
D2	1N4001
IC1	Empty
Q1-2**	BC108 etc
BIAS	5KB
FUZZ	1KC
VOL	250KA
T1	47-50K
T2	10K

*You should use small value ceramic caps for C4-5. The larger the value the more top-end will be removed from the signal.

We go for C4 - 470p, C5 100p

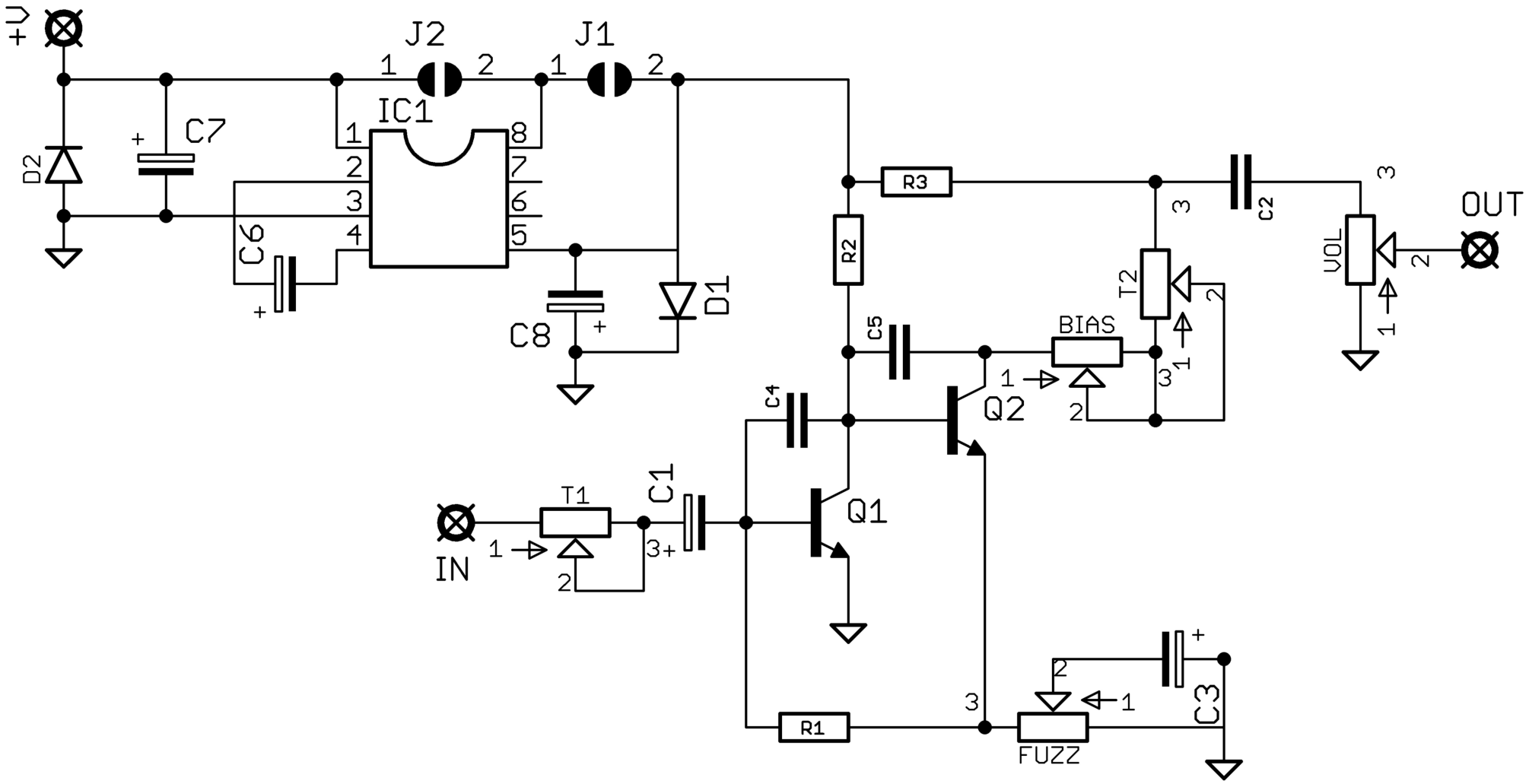
**Feel free to try any low-medium gain BJT transistors.

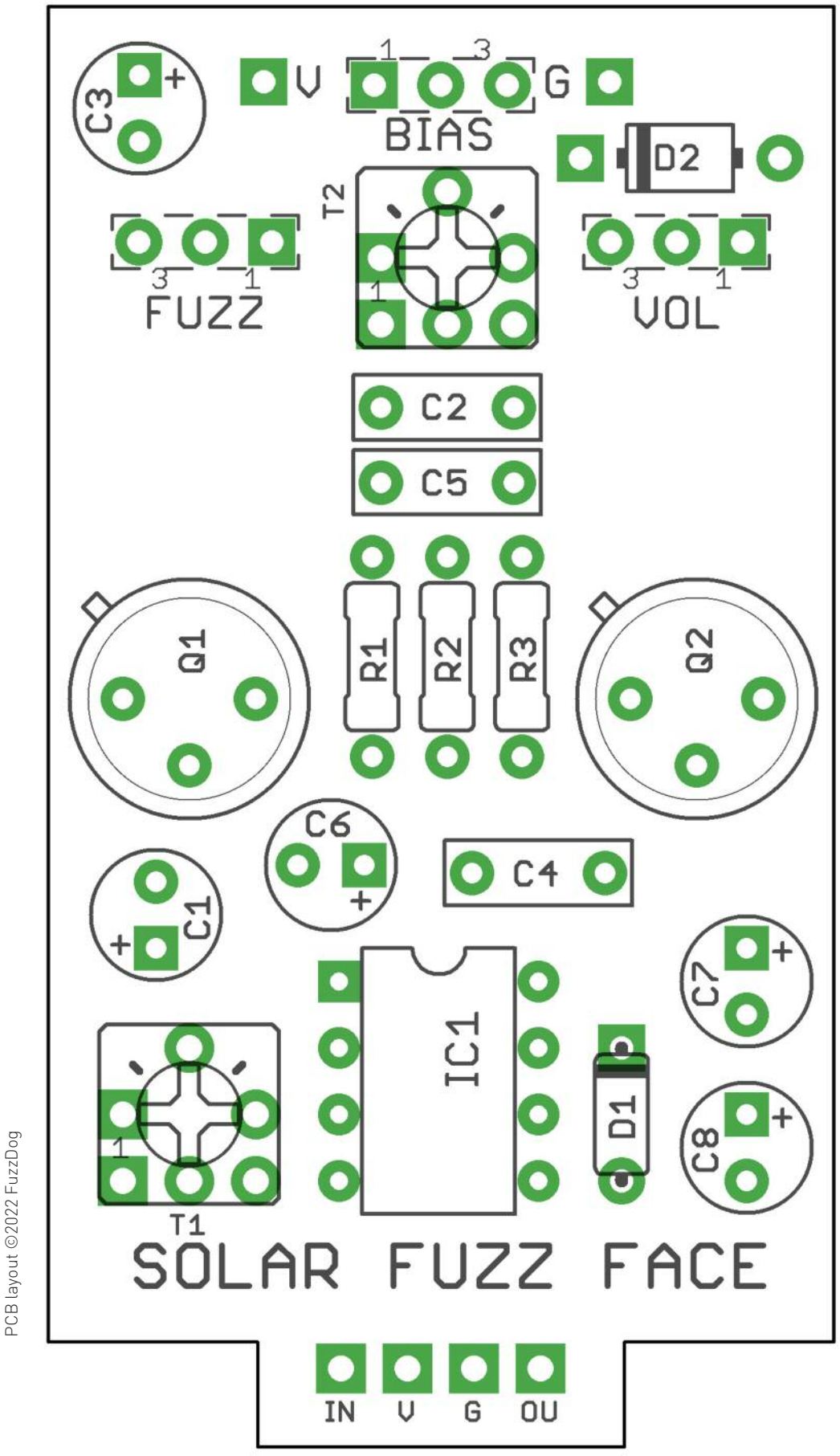
***Reverse C1 and C3 for this configuration.

‡This is the largest value we could find that is short enough to physically fit into the build. Use 10u if your 22u are too big.

Don't forget to jumper the J1 pads.

This configuration will also work for NPN Germanium transistors, but you won't need C4-5.


+V
J2
J1
1
2
1
2
IC1
C7
D2
C6
C8
D1
R3
R2
C2
T2
VOL
OUT
C5
BIAS
C4
Q2
T1
C1
Q1
IN
R1
FUZZ
C3



Everything else you need is in the
general build doc you've already read.

Head back to that.

FuzzDog.co.uk