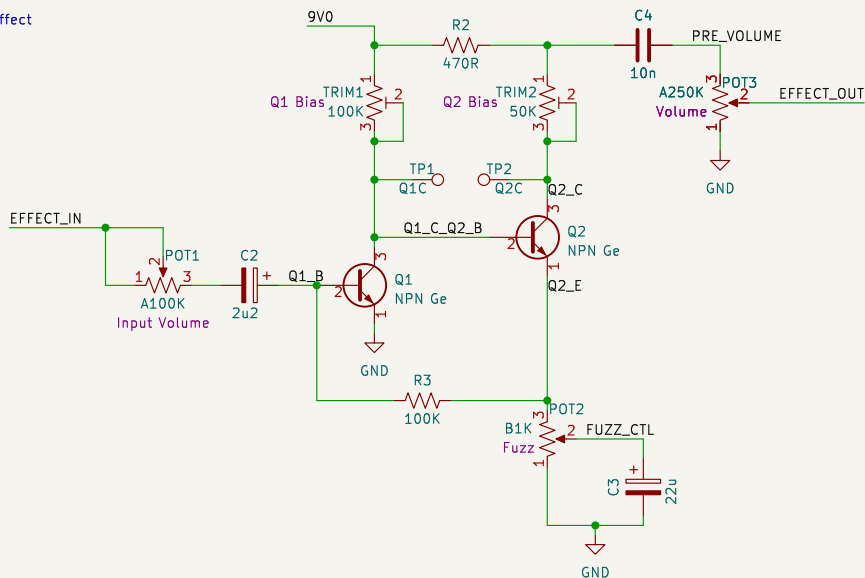


Effect



Designed for medium gain NPN Germanium transistors
Example: 2N1306

For PNP transistors, provide -9V and swap polarity of electrolytic caps.

Transistor pinout

1: Emitter
2: Base
3: Collector

Bias using TRIM1 (Q1), then TRIM2 (Q2)

Use multiturn trimpots to aid in bias adjustment

Start without input signal with circuit powered.

Q1: Adjust TRIM1 while probing TP1 DC voltage (target of 500–700mV to get in the ballpark)
Q2: Adjust TRIM2 while probing TP2 DC voltage (target of 5.0 V)

Drive input with an attenuated sine wave and monitor test points on a scope for fine tuning.

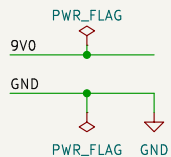
Q1: Adjust TRIM1 to asymmetrically clipping "nipple" shape.

Q2: Adjust TRIM2 to symmetric clipping trapezoid shape.

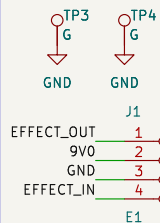
Confirm non-attenuated signal produces a still-rounded "U" shape on Q1, and a hard square wave on Q2.

Adjust max fuzz to ear, pull back on fuzz then clean up with Input Volume pot (or guitar volume).

Power



Connectors



Sheet: /

File: random_input.kicad_sch

Title: Random Input Fuzz Effect (Based on Fuzz Face)

Size: A4

Date: 2023-03-04

Rev: v0.27

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