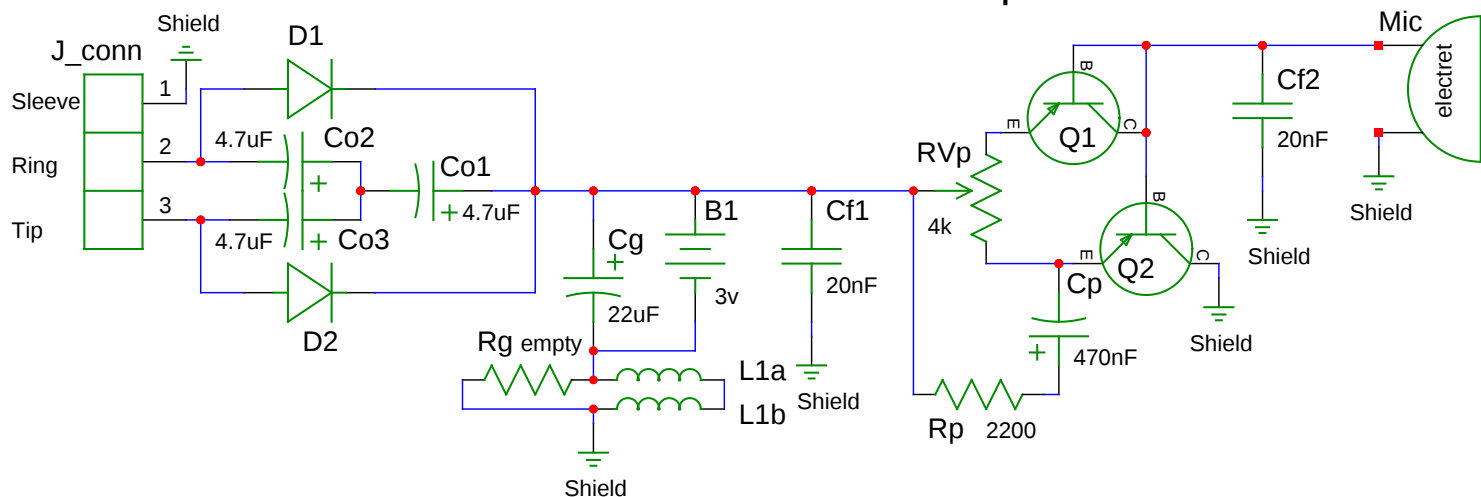


Parrot Electret Mic Pre-Amp



Trying to understand, fix, and increase volume, I traced this circuit out. I still don't fully understand it.

This pre-amp was supposed to go to line-in of a computer's sound card (a bit too quiet, though).

Modification: I connected Co2 and Co3 since this mic is mono for 9.4uF in series with Co1 for a total of 3.1uF.

The CoX capacitors will need to block DC from the battery and mic port if it is powered.

D1 and D2 are glass cased silicon types (probably similar to 1n4148).

Rg is an empty slot, so it is an open connection.

L1a + L1b is a transformer wired in series to be an inductor. Unknown inductance. Ohm for L1a+L1b = 124.3 ohm. L1a = 54 ohm. L1b = 68 ohm.

Cf capacitor are the green package film type.

Rp+Cp would seem to form a high pass filter of 153Hz. Cp would block the battery voltage.

RVp seems to raise or lower the DC offset for the electret AC signal. Maybe adjusts mA to electret???

Q1 and Q2 are 2n5087's (C-E C-B = 50v, E-B = 3v, 50mA, audio type, C-E drop = 0.3v, B-E drop = 0.85v, beta= $\sim$ 200).

I haven't seen a whacked darlington configuration like that before.