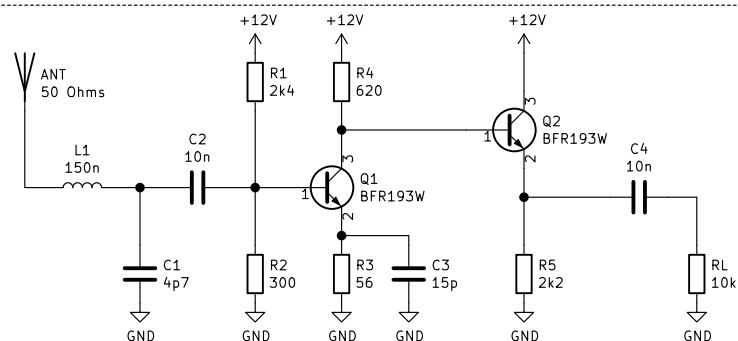


RF Matching and Amplifier



Matched to single-ended 50 Ohm antenna.

Gain of amplifier @ passband: 20dB

Gain of matching circuit @ passband: 7dB

Rout approx. = 22 Ohms

BJTs may require series base resistors or ferrite beads to avoid oscillations.

Additionally, could use RF choke from power supply to feed bias resistors and emitter follower. Will help mitigate RF leaking back into the PSU.

Matching circuit is of low-pass filter type.

Nominal amplifier bandwidth (-3dB): 65kHz to 169MHz

Matching bandwidth (-3dB): 76MHz to 132MHz

Philip Salmony

Sheet: /

File: SchematicSketchpad.sch

Title: RF Matching and Amplifier

Size: A Date: 2020-04-16

KiCad E.D.A. kicad (5.1.5)-3

Rev: v0.1

Id: 1/1