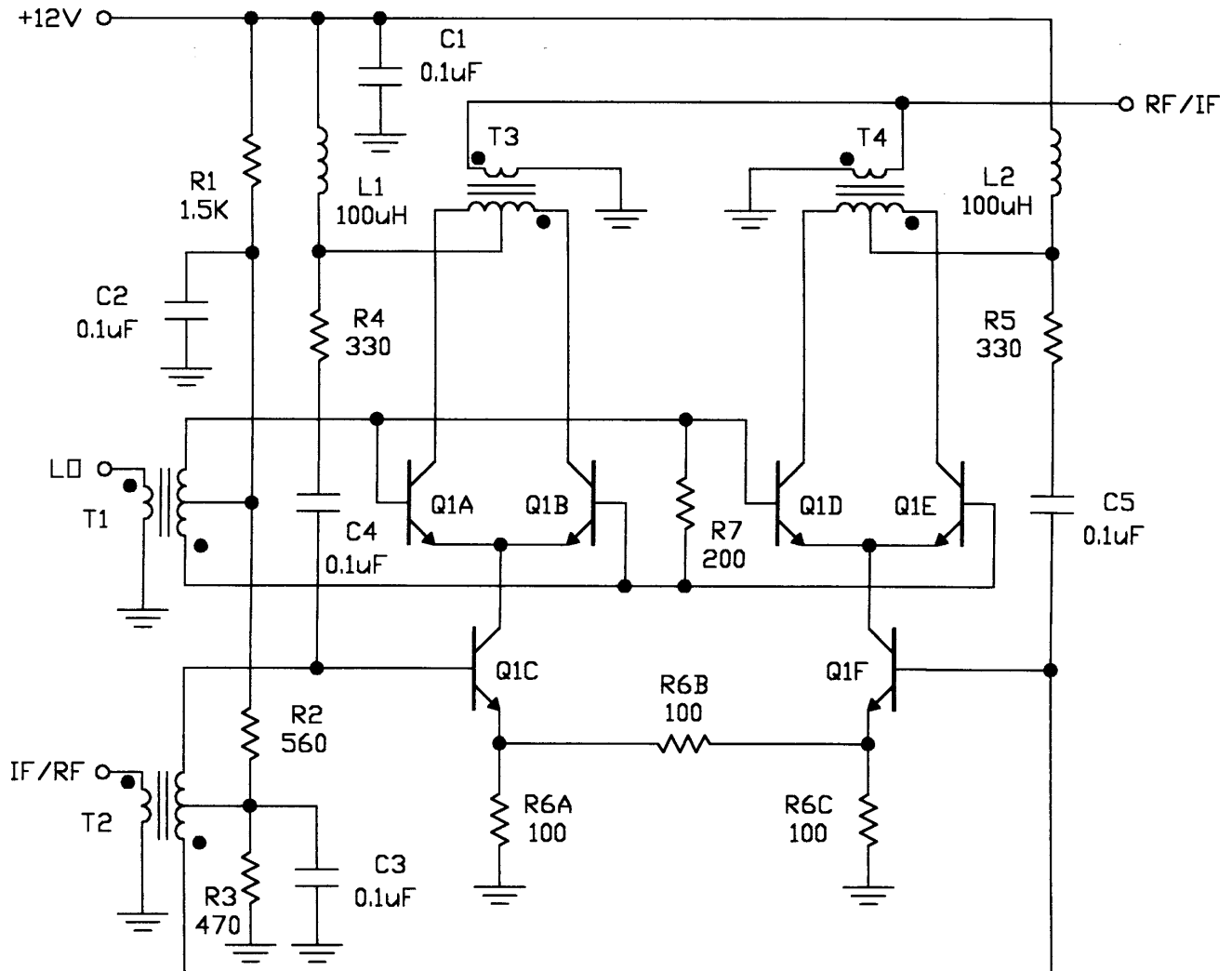


Type II Series/Shunt Feedback Mixer



PARTS LIST

- Q1 - CA3054 or CA3102 array (presently made by Intersil, previously made by Harris and RCA)
- R6 - 3 resistor array (individual resistors may be used if matched to 1%)
- T₁ - T₄ - Mini-Circuits T4-1 (note polarity on T₃ and T₄)

This invention is protected by US Patent 6,140,849. Licensing for commercial purposes is available.

CONSTRUCTION NOTES

1. Keep all leads short. This is a high-performance circuit and stray inductances can cause instability.
2. Transformers T₁ - T₄ may be easily made by twisting three pieces of magnet wire (#32 or smaller) together and threading 4 turns through a small binocular core such as Fair-Rite 2843-002-402. Windings ratio is 1:1:1.
3. Circuit is intended for operation from 2-60MHz.
4. LO level is 0dBm.