## 1.1.**DETAILED ASSEMBLY**

[] All of the components are through-hole technology with wire leads. A lead bender is a useful tool for forming the leads at 90 degrees for easy insertion into the pad holes. The general rule is installing the lowest components first, working towards components that are higher off the board. This enables you to support the low components as you solder them.

## [ ] Resistors, Diodes

[] Install Resistors R1 and R2. Install the gold tolerance band towards the top (terminal wires side) for easier reading of values, this is not critical, just be consistent.

[ ] Install diodes D1, D2. Observe polarity – band as marked on the board

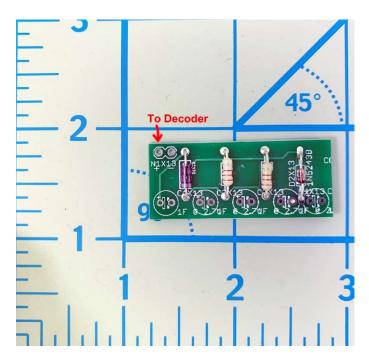


Figure 1- board with axial components (resistors and diodes) installed

## [ ] Capacitors

[] install the capacitors, C1-C5 (they're all the same), on their sides so they lay in between the resistors and diodes, This keeps the overall height lower for easier installation. Polarity is important! The long lead is the "+" side as marked on the board, the negative side is the side with the white band.

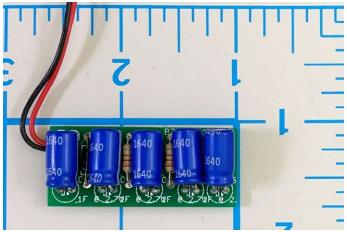


Figure 2 - PCR-KA with Capacitors Installed

## [] Header

[] Install wires (or an 0.100 - 2.54 mm header if desired) from the bottom of the board, so that C1 will sit down properly. By convention, Red is positive and Black is negative.

Trim all leads and clean the board, I use 91% Isoproyl and a Q-Tip type swab.