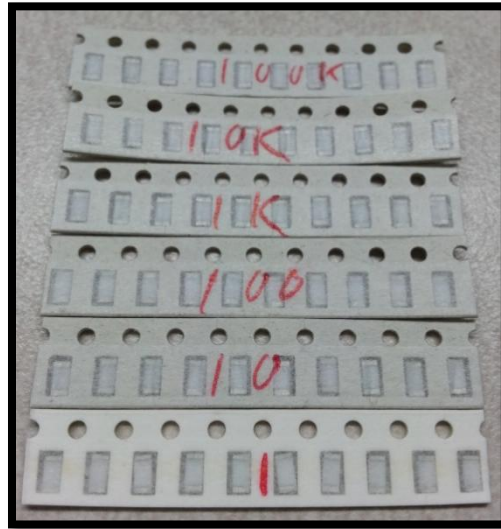
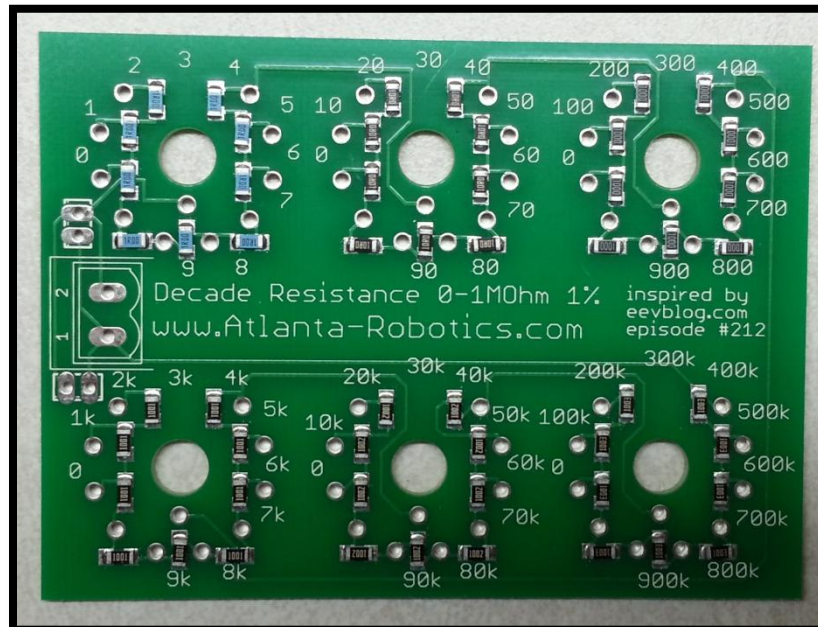




## Surface mount solder tips

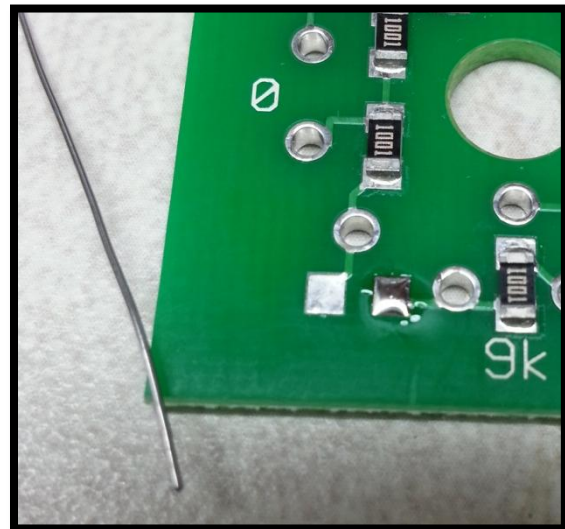
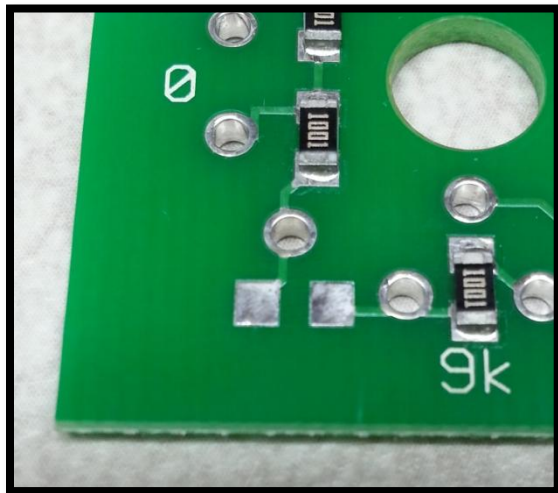


The Decade Resistance Board kit comes with 10 each of the above resistors. Only 9 are needed so you will have an extra of each in case you lose one. The resistors are placed on the board in an intuitive manner. The 1 Ohms get place in the top left corner, 10 Ohms in the top middle, 100 Ohms in the top right, 1k Ohms in the bottom left, 10k Ohms in the bottom middle and 100k in the bottom right. Below shows the PCB completely populated with surface mount resistors.

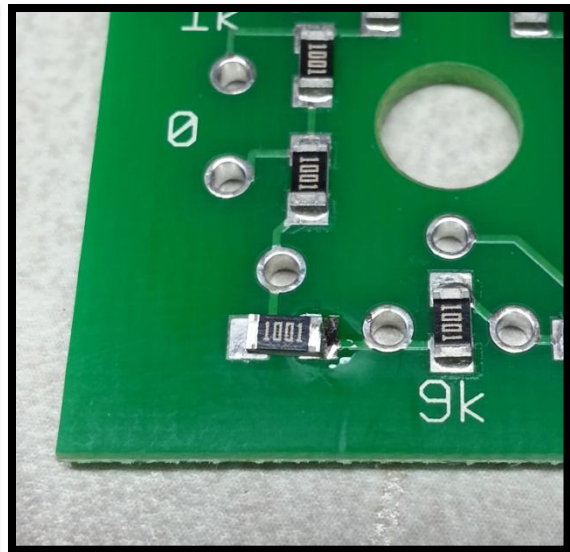
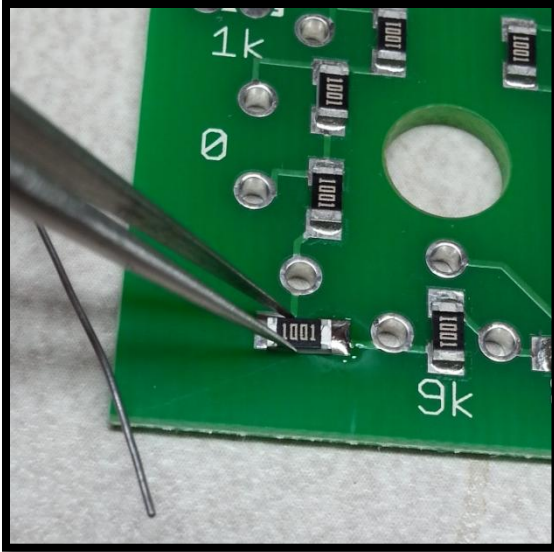




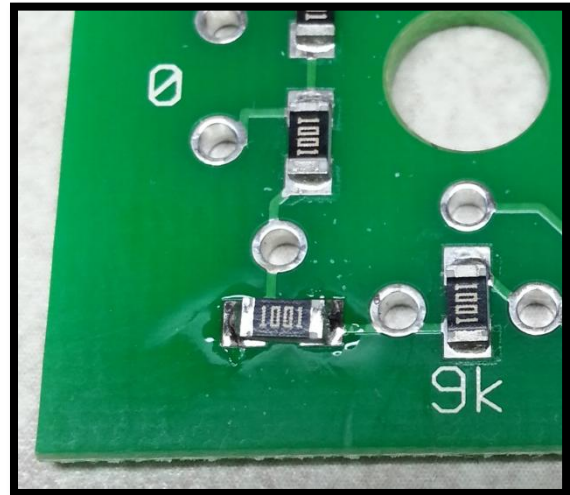
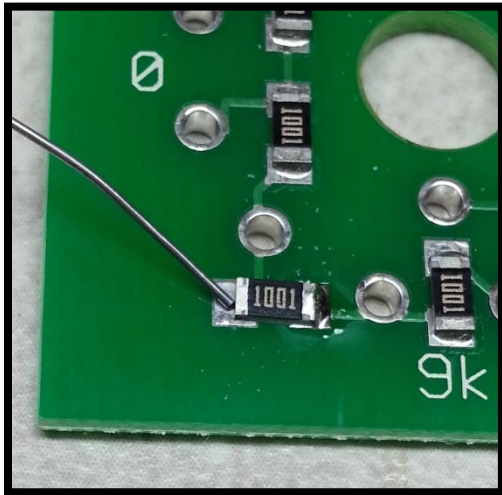
Above is the solder I like to use for surface mount hand soldering. This diameter (0.38mm) allows more precise placement of the solder. If you use solder that is thicker, such as 0.032" then as soon as the solder starts to flow onto the pad you almost immediately have too much solder.



Above left shows the resistor pad without any solder. Above right show one pad soldered. You only want to solder one pad in order to tack down the SMT part.



You then want to hold the resistor in place with a set of non-magnetic stainless steel fine point tweezers as shown on the above left image. Then take your soldering iron and reflow the solder on that pad in order to complete the solder joint for that side. Completed soldered pad shown above right.



Then solder the other pad with your normal soldering technique to complete the job as shown on the left. The image on the right shows the completed soldered resistor. As you can see the surrounding resistors have a much cleaner solder job. This is because they were soldered with solder paste and put into a reflow oven. Tutorials on this can be found at [www.Atlanta-Robotics.com](http://www.Atlanta-Robotics.com)