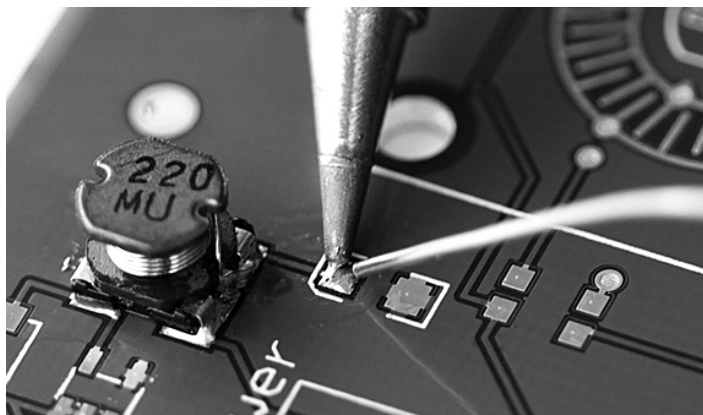
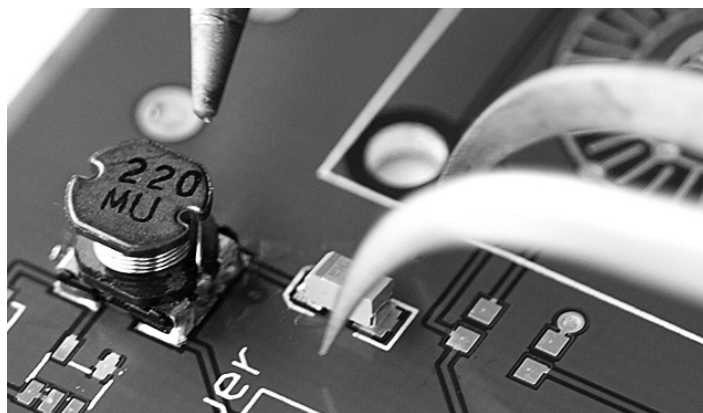


SMD Soldering

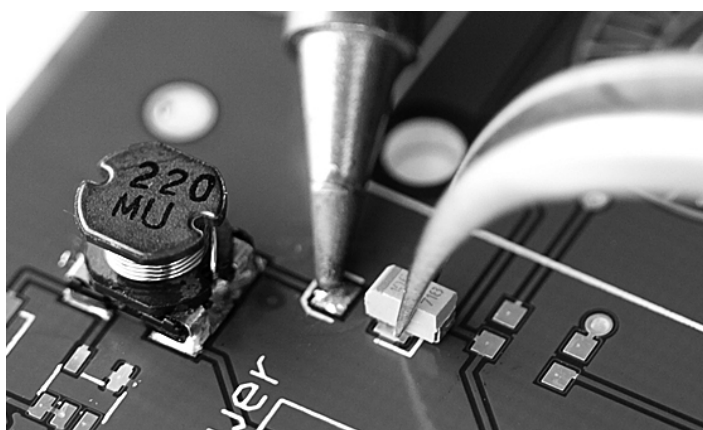
The quick basic method of soldering SMD components.



Add solder to one pad.



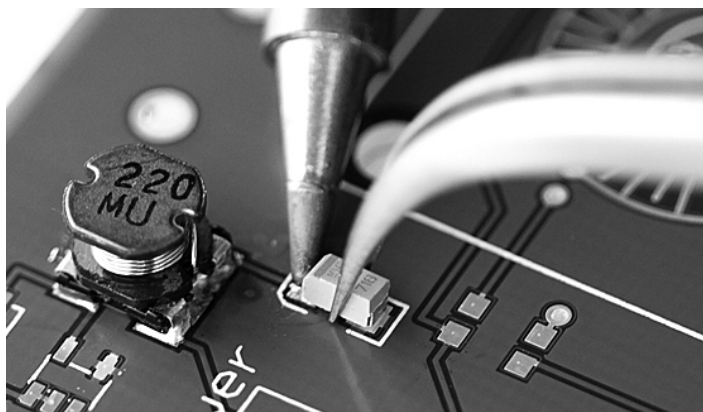
Once you have good alignment, *continue* to hold the component in place, and remove your iron. *Continue* to hold component for 1-2 seconds while the pad solidifies.



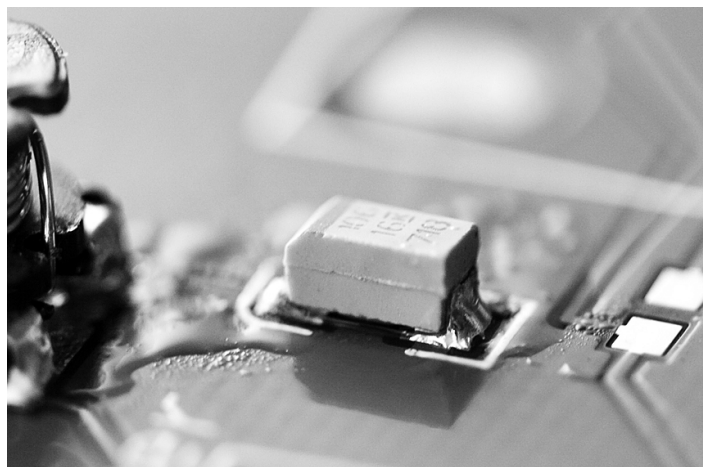
While that pad is molten, *slide* the component into place. Do not push down from the top - slide the component into the blob of solder horizontally.



From above, the alignment looked good. From the side, you can see the rear pad is hovering slightly above the PCB. This can lead to problems on multi-pin components (open connections). Be sure the component is flush up against the PCB before soldering more connections. Re-grip the component, re-heat pad 1 and push the component flush against the PCB.



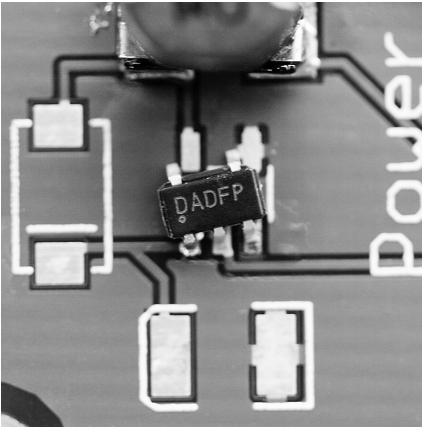
Align the component while connection is molten.



A soldered tantalum capacitor

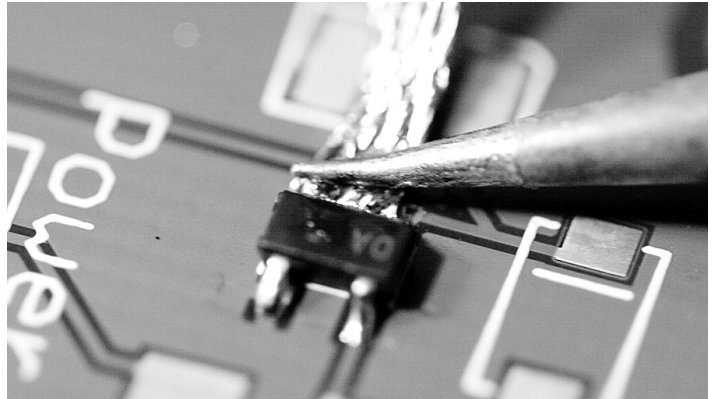
SMD Soldering Workshop

Soldering Multi-pin Devices

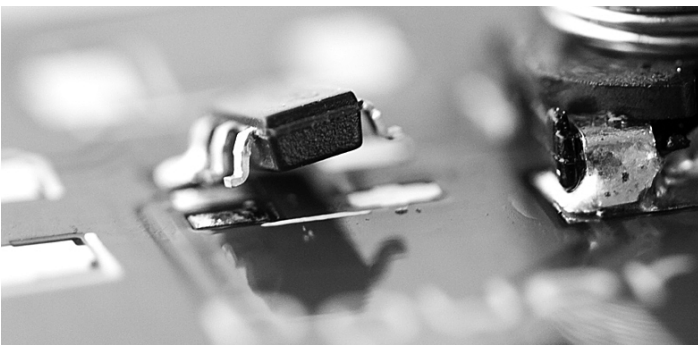


If alignment is not good, do not solder more than 1 pad! Re-heat the pad, re-adjust component until aligned correctly, then move on to soldering other connections.

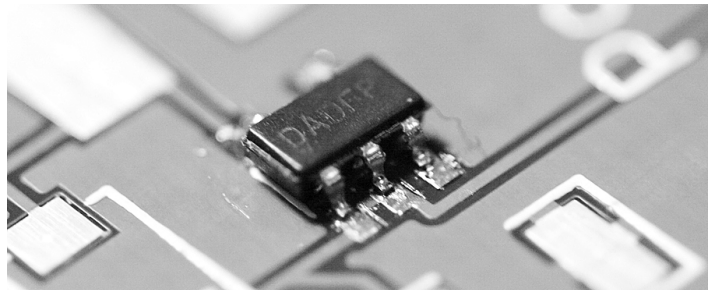
Pull out some solder wick. Put a small amount of solder on the end of your iron (this will transfer heat from iron to wick to the jumper). Sandwich the wick in between the iron and the solder bridge.



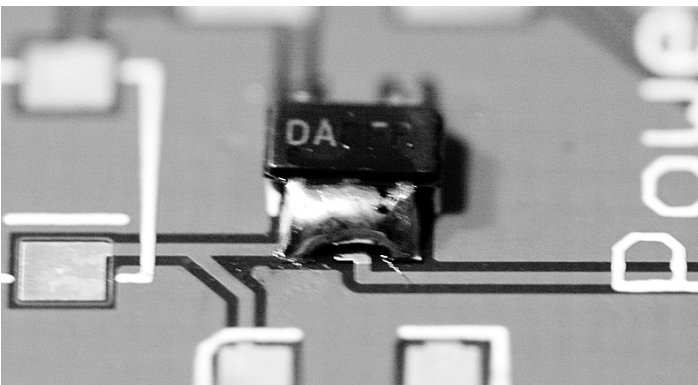
Hold still for 2-3 seconds. You will see solder start to flow up the wick. Holding the iron against the wick and PCB, slide the sandwich sideways away from the jumper.



This is bad. It would be nearly impossible to finish the connections on this part. Make sure you have the component flush against the PCB.



Nice and clean!



Do not worry about jumpers! There are actually three pins under that blob.



Bad bad bad. There was not enough solder for the connection on the left. Middle pin is lacking solder and should have been heated for longer. Right pin has had solder applied by an iron rather than applied to two heat parts (the board and the pin).

