

## **SMD Soldering**

## SparkFun Electronics Summer Semester

Add solder to one pad.



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 fush up against the PCB before soldering more connections. Re-grip the component, re-heat pad 1 and push the component flush against the PCB.



This is how a tantalum capacitor should look after making both solder connections.



Align the component while connection is still malten.



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 solder joint solidifies.





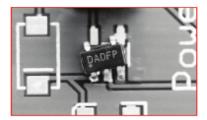




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If alignment is not good, do not solder more than 1 pad! Re-heat the joint, re-adjust component until aligned correctly, then move on to soldering other connections.



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.



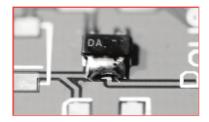
Hold still for 2-3 seconds. You will see solder start to flow up the wick. Once the excess solder has flowed into the wick, carefully lift up the wick and your iron in one fuld motion.



Nice and dean!



If you solder multiple pins together, don't worry about it! It can be easily fixed. Do not worry about jumpers! There are actually three pins under



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 jumper.



