

One-part Conductive Adhesive

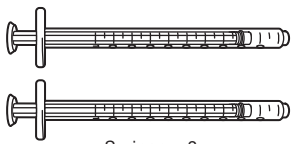
NO SOLDER

Instruction

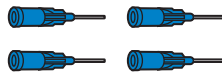
Specifications

Viscosity	100 Pa · s (23°C)
Density	2.37 g/cm ³
Volume Resistivity	$3.5 \times 10^{-3} \Omega \cdot \text{cm}$
Tack-Free Time	5 minutes (23°C, 50% RH)
Cure Conditions	80°C 60 minutes or 23°C 24 hours
Shear Strength	1.2 MPa (Cu x 3216 Sn)
Application Temperature	80°C

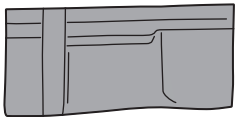
1. Contents



Syringe x 2



Syringe Needles x 4



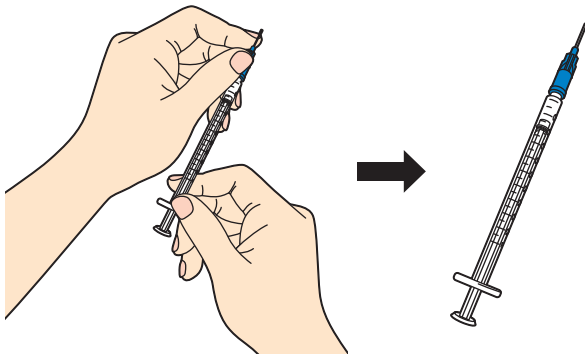
Conductive Adhesive Pack
0.6ml x 1 pack (2 syringes worth)



Silicon Rubber for Storage x 1

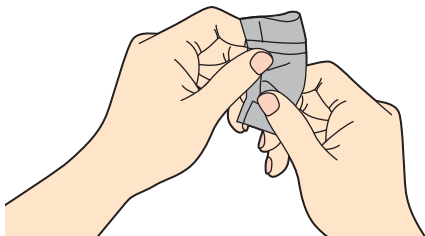
2. Attaching the needle to the syringe

Push down with some force while twisting the needle into the syringe.
*If too little pressure is applied there is a danger that the needle may come off the syringe when injecting the conductive adhesive.



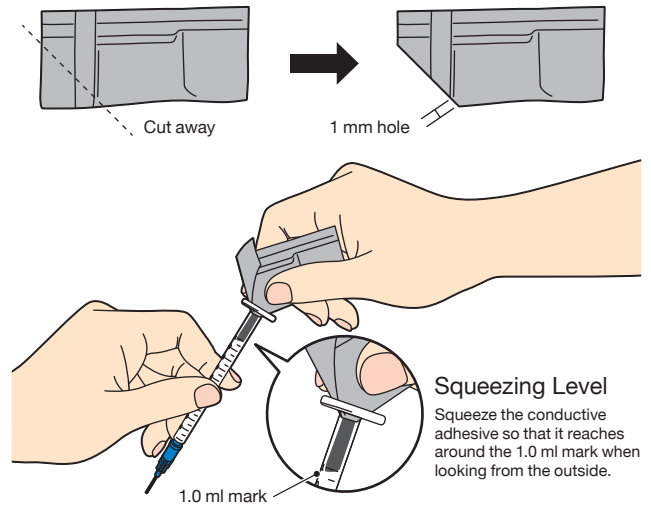
3. Rubbing the conductive adhesive pack

Rub up and down the adhesive pack around 20 times to mix the conductive adhesive together.



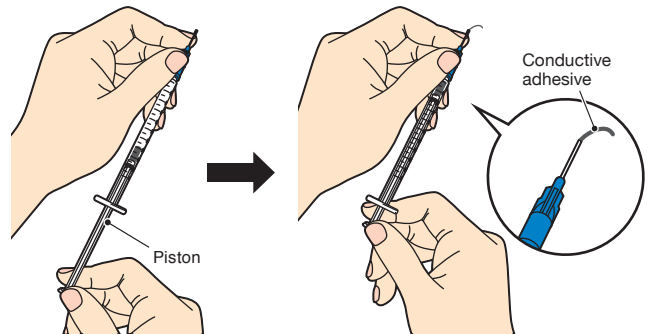
4. Transferring the conductive adhesive to the syringe

Transfer the conductive adhesive from the corner of the pack and make a 1 mm hole in the corner of the part that contains the adhesive. Push the cut corner of the pack 5 mm into the syringe once the piston is removed, and squeeze out 0.3 ml of adhesive.



5. Pressing the conductive adhesive down to the needle

To transfer the conductive adhesive down towards the needle, push the piston down into the syringe until the adhesive starts to come out of the needle a little bit. *If you push down the piston once with great force, conductive adhesive will continue to come out of the needle for a while.

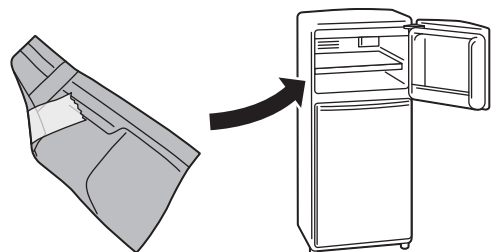


Warning

If the end of the needle is not firmly connected to the syringe then the needle may come away. Make sure to push the needle in while keeping the needle secured with one hand.

6. Storing the conductive adhesive pack

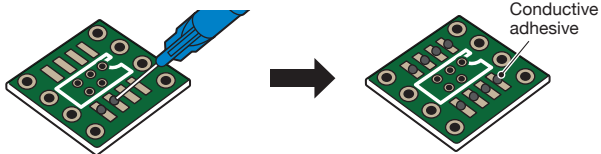
So that the conductive adhesive that remains in the pack does not spoil, wipe the hole, fold the corner over, and secure it in place with tape, etc. Then place the pack in a plastic bag and quickly store it in a freezer. *Make sure to use any adhesive in an open conductive adhesive pack within one month of opening.



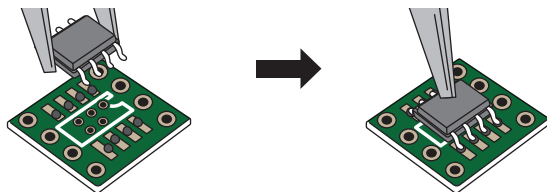
7. Attaching electrical components with the conductive adhesive

Method I

1. Apply the adhesive in the pattern in which you wish to attach the components

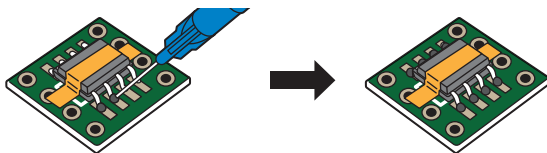


2. Place the components directly on top, and adhere by pushing straight down.

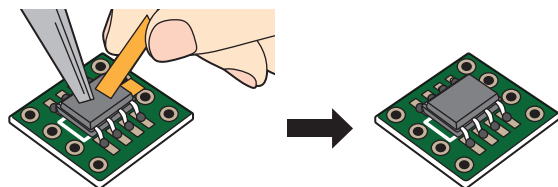


Method II

1. Secure the components down with some weak tape and then adhere by covering the legs of the components into the pattern you wish to adhere to.

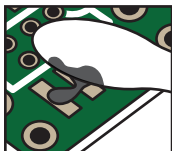


2. Check to see whether the conductive adhesive has set and while pressing the components down with your fingers or a set of pliers, slowly remove the tape without removing the component. *Refer to Step 9 for instructions on how to set the adhesive.



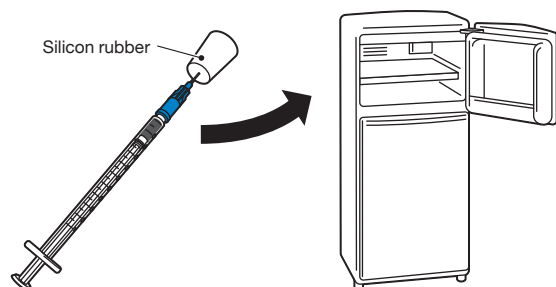
Warning

If the conductive adhesive is accidentally applied to other components and patterns on the circuit board then there is a danger that the circuit may stop working properly. If this happens, Press down and wipe away the conductive adhesive using a tissue or cotton bud so that the adhesive stops connecting these points.



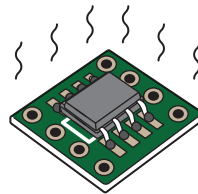
8. Storing a syringe that is in use

If you have finished using the adhesive but there is still some left in the syringe, stick the end of the needle into the silicon rubber and store it in the freezer. *Use the remaining conductive adhesive in the needle within one week.



9. Setting the conductive adhesive

The adhesive should take 24 hours to set and become conductive when left to stand flat at room temperature. By raising the temperature to 80°C using a heater, the adhesive can set in 1 hour.



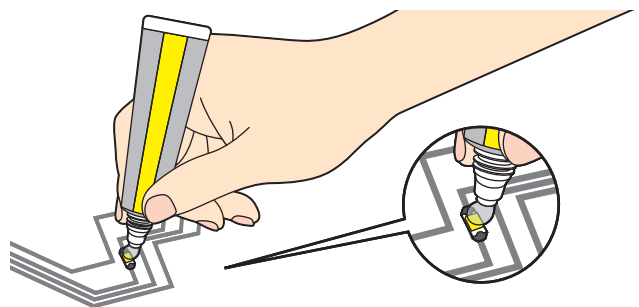
Warning

These setting times are estimates only. If you have used a lot of adhesive, multiply these times by 2.

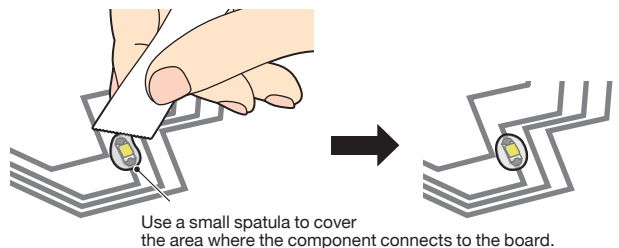
10. Covering the adhered surface (For flexible PCB's etc.)

Conductive glues do not adhere as strong as soldering. We recommend using non-conductive glues after No Solder cures to cover and fix components that require strong adhesions such as components at bends.

* We strongly recommend the following tested glues. Other glues may cause chemical reactions and damage No Solder.



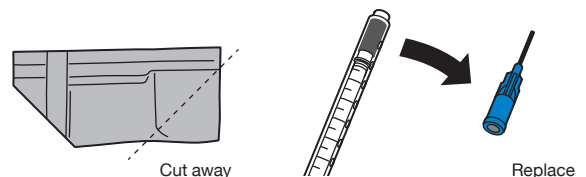
*Tested adhesives: Cemedine Super X / Super X Gold



11. Re-using the conductive adhesive

When re-using the adhesive, if some has set near the hole in the packet or the tip of the needle, cut a separate part of the adhesive pack and change the needle.

*When disposing of the syringes or any other used parts, dispose of them in accordance with instructions issued by the local authority.



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