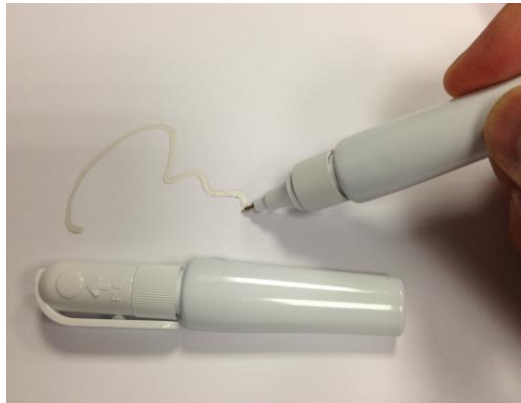




Instruction for Polychem Conductive Silver Pen #JN1913-A



Polychem Conductive Silver Pen #JN1913-A is used for making conductive traces or repair Printed Circuit Board (PCB). This conductive silver pen is safe to use thanks to its low content of low boiling point solvents. The dried silver ink has very good electric conductivity, excellent adhesion on various substrates and heat resistance.

Technical Advantages:

- Easy to use, self drying.
- Highly conductive ($5 \times 10^{-4} \sim 5 \times 10^{-5} \Omega \cdot \text{cm}$)
- Excellent adhesion on various plastics, glass, metals, etc.
- Flexible, will not crack.
- Good heat resistance up to 85°C.

Instructions:

- (1). Make sure the substrate is free of dust and oil. If it is necessary, use acetone or IPA to clean the surface of the substrate.
- (2). Before use, shake the conductive silver pen vertically for at least 1 minutes to mix the conductive silver ink in the pen. There is a mixing metal cylinder in the pen barrel to help the mixing. **This is a very important process to achieve good electric conductivity.**
- (3). Open the cap of the conductive silver pen and push the small needle in the front portion of the conductive silver pen on the substrate. Squeeze the pen barrel firmly till the silver ink flows out of the tip and then move the pen to make conductive traces.
- (4). Dry the conductive silver ink by one of the following methods:

a. In regular indoor environment (25°C): 12 hours. Hot air (60~80°C) can be used to reduce drying time.

b. For best electric properties and adhesion: hot air or oven 110~150 °C x 15 min.

Note: insufficient drying condition may reduce conductivity and bonding strength.

(3). Clean the tip of the conductive pen and close the cap for future use.

Storage Condition:

-10~+30°C, keep away from heat and open flame.

Shelf Life:

12 months

Additional Information:

The dried conductive ink can be cleaned-up by toluene and similar solvents.

The dried silver ink may turn dark (natural oxidation of silver) after prolonged exposure in the air. The oxidized silver (Silver Oxides, AgO or Ag₂O) still has good conductivity. However, if it is wished to prevent the silver ink from oxidation, to put a top coat (lacquer) on the silver traces may be considered.

Warning:

For industrial uses only. Avoid prolonged breathing of the vapor. Use in well ventilated area. Keep out of reach of children.

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