Frequently Asked Questions

Circuitworks[®] Flex Conductive Pen, CW2900

1. What is the Circuitworks® Flex Conductive Pen and what does it do?

The Circuitworks[®] Flex Conductive Pen makes instant, highly adherent silver traces on flexible polymeric substrates, such as Mylar and Melinex. It's ideal for linking components, repairing defective traces and making smooth jumpers. The Flex Conductive Pen traces also have excellent adherence to Indium Tin Oxide (or ITO).

2. What's the difference between the Circuitworks[®] Conductive Pen and the Circuitworks[®] Flex Conductive Pen?

The Circuitworks[®] Conductive Pen is designed for standard circuit board repair. Its silver traces dry in minutes and have excellent adhesion to most rigid electronic materials. Flexible circuit boards are constructed with materials that allow flexibility while retaining conductivity. The different composition of the dielectric substrates used require a different type of conductive trace, one that can adhere to these materials, contain the flexibility of the substrates and have excellent conductivity. The Flex Conductive Pen matches these requirements in an easy to use package.

3. What are its features and benefits?

Features:

- Single component system
- Highly adherent
- Flexible polymer composition
- Excellent electrical conductivity

- Benefits:
- Easy to use, no mixing
- Bonds to ITO, Mylar and Melinex
- Retains conductivity after bending
- Good for repairing defective traces
- Tack free in 5 minutes

Fast Drying

4. How do I use the Circuitworks® Flex Conductive Pen?

Make sure your board is clean and dry for the best adhesion. We recommend Chemtronics Electro-Wash® PX Cleaner/Degreaser to remove any surface contamination that might prevent good material contact. Shake the pen vigorously for 30 seconds to insure proper dispersion of the silver flakes. Squeeze the pen while pressing down on the surface to begin the flow, then draw the trace along the desired path. It's best to practice with the pen before attempting detail work.

5. How long does it take the trace to dry?

The Circuitworks[®] Flex Conductive Pen trace will be tack free in 5 minutes at room temperature. Electrical conductivity is achieved within 15 minutes. You can heat cure the trace for 15 minutes at 80°C to 90°C for maximum durability and chemical resistance.

6. How electrically conductive is the Circuitworks[®] Flex Conductive Pen in comparison to the Silver Conductive Pen?

The coatings provided by both the Circuitworks[®] Flex Conductive Pen and the Silver Conductive Pen exhibit excellent conductivity. The conductivity measures 0.05 - 0.15 ohms/sq/mil for the Circuitworks[®] Flex Conductive Pen and 0.02-0.05 ohms/sq/mil for the Silver Conductive Pen.



7. What is the shelf life of the Circuitworks® Flex Conductive Pen?

Twelve (12) months from the manufacturing date stamped on the container.

8. How do I get a sample?

Contact your ITW Chemtronics® Sales Manager or contact ITW Chemtronics® customer service.

For more information, contact:

ITW Chemtronics® 8125 Cobb Center Drive Kennesaw, GA 30152-4386 Tel: 800-645-5244 Fax: 800-243-6003 www.chemtronics.com

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