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122-22

CONDUCTIVE INK FOR PLATED THROUGH HOLES

DESCRIPTION: 122-22 is a screen-printable, electrically conductive ink and coating which is particularly useful for plated through hole applications. This system is designed to maintain stable viscosity during all application methods and has a low odor. The product features excellent adhesion to FR2, FR3 and FR4, printed circuit board substrates, as well as Kapton, Mylar, glass and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching and thermal aging. Some applications for 122-22 include, but are not limited to, plated through hole applications, electroless plating, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, conductive ink for polymer thick film circuitry, and coatings for tantalum capacitors.

TYPICAL PROPERTIES:

Viscosity (cps)	7,000-8,000
Filler	Silver
Percent Silver cured	> 75
Settling Rate (mL/hr)	0.027
Volume Resistance, max. (Ω -cm)	0.00008
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to 200
Thermal Stability ($^{\circ}$ C)	Good to 325

SUGGESTED HANDLING & CURING: 122-22 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner #113-12. Prior to using, be certain to resuspend silver. Best properties, for most plated through hole applications, result when cured for 30 minutes at 70 $^{\circ}$ C, followed by a post cure of 30 minutes at 160 $^{\circ}$ C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 100 $^{\circ}$ C to 200 $^{\circ}$ C. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 3 months at 25 $^{\circ}$ C; or 6 months at 5 $^{\circ}$ C; or 12 months at -10 $^{\circ}$ C.

SAFETY & HANDLING: Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to suitability in a particular application or possible infringements on patents.

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