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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.