Polymer Silver Conductor
1901-S

Application
1901-S is a silver-filled, flexible resin material designed for use as a conductor on low-temperature substrates. This silver conductor may be used in the manufacture of four and five wire analogue resistive touch panels, for printed antennas in RFID applications and as conductors in flexible solar cells. After screen-printing and curing the silver film remains reasonably flexible, resistant to corrosion and acetone with the resistance of the conductor remaining constant over time. This versatile polymer has also been successfully used on other substrates such as cloth.

Coating 1901-S is formulated and processed to be RoHS compliant.

Typical Formulation Properties

Rheology: Thixotropic, screen printable paste
Viscosity: 170 ± 10 Pa.s at 25.5 ± 0.5 °C when measured using a Brookfield RVT, 1 rpm, No. 6 spindle.

Storage and Shelf Life: This product should be stored in tightly sealed containers at 5 to 25 °C, in a dry place away from direct sunlight. The shelf life of a factory sealed container is a minimum 6 months from date of shipment when properly stored.

Typical Process Parameters

Thinning: This paste is formulated at the appropriate viscosity for the intended application. Thinner 659 or 402 may be used to replace solvent loss.

Printing: A 200 or 325 mesh stainless steel screen with ~25 µm thick emulsion is recommended.

Curing Schedule: 125 °C/10 min

Substrate for Calibration: PVC plastic card

Typical Properties:

Cured Thickness: 25 – 35 mm
(measured on a 100 mm x 0.25 mm conductor track)

Approximate Coverage: 100 cm²/g

Resistivity: < 20 mΩ/sq.
(measured on a 100 mm x 0.25 mm conductor track)

Printing Resolution: 0.25 mm/ 0.25 mm

Limitation of Warranty and Liability

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