Polymer Silver Conductor
1901-SB

Application
1901-SB 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-SB is formulated and processed to be RoHS compliant.

Typical Formulation Properties

**Rheology:** Thixotropic, screen printable paste

**Viscosity:** 25 ± 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 may be used to replace solvent loss.

**Printing:** A 250 mesh stainless steel screen with ~10 µm thick emulsion is recommended.

**Curing Schedule:** 125 °C/20 min

**Substrate for Calibration:** Alumina

**Typical Properties:**

**Cured Thickness:** (measured on a 427 mm x 2.4 mm conductor track) 5 - 15 µm

**Approximate Coverage:** 100 cm²/g

**Resistivity:** < 100 mΩ/sq. (measured on a 427 mm x 2.4 mm conductor track)

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RoHS

EU RoHS Directive 2011/65/EU

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