POLYMER SILVER CONDUCTOR

ESL 1107-S is a phenolic based, silver filled, thermosetting conductive polymer that exhibits a very smooth surface. It can be nickel plated by electroless techniques to enhance solder leach resistance and solderability.

ESL 1107-SA is a lower viscosity version intended for applications requiring the metalization of through-holes.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOSITY:
(Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C) 1107-S 60-100 Pa·s
(Brookfield RVT, Spindle #6, 10 rpm, 25.5°C±0.5°C) 1107-SA 23.5-27.5 Pa·s

SHELF LIFE:
(Material will dry when in contact with air. Refrigerated storage is recommended) 6 months

PROCESSING (1107-S)

SCREEN MESH/EMULSION: 200-325/25 µm
LEVELING TIME: (25°C) 5-10 minutes
DRYING AT 125°C: 10-15 minutes
CURING RANGE:
IR Furnace at 220°C peak 3-4 minutes
Ventilated box oven at 150°C 2 hours

SUBSTRATE OF CALIBRATION: 96% alumina
THINNER: ESL 402
TYPICAL PROPERTIES (1107-S)

CURED THICKNESS: 25±7 μm
APPROXIMATE COVERAGE: (at 15 μm) 150 cm²/g
RESISTIVITY: ≤40 mΩ/sq.
PRINTING RESOLUTION: (Line/Space) 250 μm x 250 μm
SOLDER WETTABILITY: (RMA flux, 2 sec. dip, 62 Sn/36 Pb/2 Ag, 220°C±5°C) very good to excellent
COMPATIBILITY: 240-SB Polymer

CAUTION: Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

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