CERMET PLATINUM SILVER CONDUCTOR  9501-C

ESL 9501-C is a very low cost, high speed printing conductor material exhibiting high conductivity, and excellent adhesion and solderability.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOITY: 225±25 Pa·s
(Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)

BONDING MECHANISM: Mixed

SHELF LIFE: (25°C) 6 Months

PROCESSING

SCREEN MESH/EMULSION: 325/25 µm

LEVELING TIME: (25°C) 5-10 minutes

DRYING AT 125°C: 10-15 minutes

FIRING RANGE: 850°C-930°C

OPTIMUM: 850°C

TIME AT PEAK: 10-12 minutes

RATE OF ASCENT/DESCENT 60°C-100°C/minute

SUBSTRATE FOR CALIBRATION: 96% alumina

THINNER: ESL 401

TYPICAL PROPERTIES

FIRED THICKNESS: 10-15 µm

APPROXIMATE COVERAGE: 60-70 cm²/g

9501-C  9710-C
RESISTIVITY: 2.0-4.0 mΩ/sq.

PRINTING RESOLUTION: (Line/Space) 250 µm x 250 µm

SOLDER WETTABILITY: (RMA flux, 5 sec. dip)

62 Sn/36 Pb/2 Ag, 220°C±5°C excellent

SOLDER LEACH:
(No. of 10 sec. dip to double the resistance of 0.25 mm wide x 100 mm long conductor) 6-10 dips

ADHESION:
(90° pull, 2.0 x 2.0 mm pads, 62 Sn/36 Pb/2 Ag, 220°C±5°C)

Initial pull strength: 50-70 N

Aged 48 hours at 150°C: 40-60 N

ULTRASONIC WIRE BOND:
(25 µm Al wire) 8 grams

THERMOSONIC WIRE BOND:
(25 µm Au wire) 6 grams

(50 µm Au wire) 20-30 grams

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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