PLATINUM/PALLADIUM/SILVER CONDUCTOR 9565

ESL 9565 is a mixed-bonded ternary conductor material for general purpose conductor applications, which exhibits excellent solder leach resistance, excellent silver migration resistance, good solder wetting, and excellent initial and aged adhesion. ESL 9565 is recommended for use as a resistor termination.

When used with 4905-C multilayer dielectric, ESL 9565 is well suited as a top layer conductor with excellent adhesion, bond retention, and leach resistance.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C) 325±25 Pa-s
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 OF CALIBRATION: 96% alumina
THINNER: ESL 401

9565 9809-B
TYPICAL PROPERTIES

FIRED THICKNESS: 12.0±2.5 µm
RESISTIVITY: 24-36 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) Very good
SOLDER LEACH:
(No. of 10 sec. dips to double resistance of 0.25 mm wide x 100 mm long conductor 62 Sn/36 Pb/2 Ag, 220°C±5°C) 5
ADHESION:
(90° pull, 2.0 mm x 2.0 mm pads, 62 Sn/36 Pb/2 Ag)
  Initial pull strength: 60 N
  Aged 48 hours at 150°C: 49 N
ULTRASONIC WIRE BOND: (25 µm Al wire)
  Initial 5.5-5.8 grams
  Aged 48 hours at 150°C: 3.6-4.0 grams
THERMOSONIC WIRE BOND: (25 µm Au wire)
  Initial: 4.0-4.8 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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