CERMET PALLADIUM SILVER CONDUCTOR

ESL 9693-S-A is a low-cost, high speed printing palladium silver conductor that exhibits excellent adhesion, good solderability, and high conductivity.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOSITY:
(Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C) 150±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:
750°C-950°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 or 413
TYPICAL PROPERTIES

FIRED THICKNESS: 10-15 µm

APPROXIMATE COVERAGE: 90-100 cm²/g

RESISTIVITY: ≤ 3 mΩ/sq.

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

SOLDER WETTABILITY: excellent
(RMA flux, 5 sec. dip, 62 Sn/36 Pb/2 Ag, 220°C±5°C)

SOLDER LEACH
(No of 10 sec. dips to double the resistance of 0.25 mm wide x 100 mm long conductor, 62 Sn/36 Pb/2 Ag, 220°C±5°C) 4-8 dips

ADHESION:
(90° pull, 2.0 mm x 2.0 mm pads, 62 Sn/36 Pb/2 Ag, 220°C±5°C) Initial pull strength: ≥ 45 N