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CERMET PALLADIUM SILVER CONDUCTOR

9635-H

ESL 9635-H is a general purpose silver palladium conductor for use for on bare alumina substrates and on dielectric. It has good elevated temperature bond retention and excellent solderability. It retains its solderability after refiring at overglaze temperatures.

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:
 325/20 μm

 LEVELING TIME: (25°C)
 5-10 minutes

 DRYING AT 125°C:
 10-15 minutes

 FIRING RANGE:
 850°C-1000°C

OPTIMUM: 850°C

TIME AT PEAK: 10-12 minutes

RATE OF ASCENT/DESCENT: 50°C-60°C/minute

SUBSTRATE OF CALIBRATION: 96% alumina

THINNER: ESL 401

TYPICAL PROPERTIES

FIRED THICKNESS: (2 mm x 2 mm pad) 8-13 μm

APPROXIMATE COVERAGE: 90-110 cm²/g

RESISTIVITY: (100 mm x 0.25 mm conductor track) $\leq 20 \text{m}\Omega/\text{sq}$.

PRINTING RESOLUTION: (Line/Space) 125 μm x 125 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. dips to double the resistance of 0.25 mm wide x 100 mm long conductor, 62Sn/36Pb/2Ag, 220°C±2°C) ≥4 dips

ADHESION:

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

Initial pull strength: ≥50 N

Aged 48 hours at 150°C: ≥30 N

COMPATIBILITY: D-4913-A, 4903, 4905-CH

9635-H 9806-New

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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