GOLD CONDUCTOR

RoHS Compliant*

ESL 8880-G is a gold conductor material that exhibits excellent conductivity, adhesion to 96% alumina, and wire bonding characteristics. It is compatible with 4913-G dielectric which is also ROHS compliant*.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOITY:
(Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C) 310±50 Pa-s

BONDING MECHANISM: MICRO-LOK®

SHELF LIFE: (25°C) 6 months

PROCESSING

SCREEN MESH/EMULSION 325/20 μm

LEVELING TIME: (25°C) 5-10 minutes

DRIYING AT 125°C: 10-15 minutes

FIRING TEMPERATURE RANGE:
850°C-1000°C in air

OPTIMUM: 850°C

TIME AT PEAK: 10 minutes

TOTAL FIRING CYCLE: 45 minutes

SUBSTRATE OF CALIBRATION: 96% alumina

THINNER: ESL 401
TYPICAL PROPERTIES:

FIRED THICKNESS:
(measured on a 2.0 mm x 2.0 mm pad on 96% alumina)  8-12 µm

APPROXIMATE COVERAGE:  60-75 cm²/gram

RESISTIVITY:
(measured on a 100 mm x 0.25 mm conductor track)  2 – 4 mΩ/square

RESISTIVITY NORMALIZED AT 12.5 µm FIRED THICKNESS:
(measured on a 100 mm x 0.25 mm conductor track)  2.5 – 4.5 mΩ/square

PRINTING RESOLUTION:
(Line/Space)  75 µm x 75 µm

ADHESION:
(90° pull, 2.0 mm x 2.0 mm pads, 80 Au/20 Sn and 62 Sn/36 Pb/2 Ag)

Initial Pull Strength:  ≥ 50 N

THERMOSONIC Au WIRE BOND:
(25 µm wire; bond length 1.0 mm; no film lifts; ≥ 95% wire breaks)  ≥ 10 g

AGED Au WIRE (25µm) BOND:
(48 hours at 150°C; ≥ 95% wire breaks)  ≥ 7 g

*Complies with RoHS, ELV, WEEE and CHIP 3 EC directives.
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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