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CERMET SILVER CONDUCTOR

9997-A

Designed for Filling Holes on 96% Al₂O₃ Substrates

ESL 9997-A is a high solids, pure silver conductor designed for filling holes in 96% alumina substrates. ESL 9997-A is compatible with 96% alumina and will not shrink or crack when subjected to multiple firings.

PASTE DATA

RHEOLOGY:

Thixotropic, screen printable paste

VISCOSITY:

(Brookfield HBT, 2.5 rpm, No. 7 spindle, 25.5°C±0.5°C)

4000-6000 Pa·s

BONDING MECHANISM:

Mixed

SHELF LIFE: (at 20°C)

6 months

PROCESSING

APPLICATION TECHNIQUE:

Bladder pressure fill

DRYING: (at 125°C)

10-15 minutes

FIRING RANGE:

850°C-900°C

OPTIMUM:

850°C

TIME AT PEAK TEMPERATURE:

10-12 minutes

SUBSTRATE FOR CALIBRATION:

96% alumina

THINNER:

ESL 438

9997-A 0008-New

ESL Affiliates

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

(Stencil Screen on 96% Al₂O₃)

THICKNESS: (For test purposes on a 2 mm x 2 mm pad)

≤ 40 μm

RESISTIVITY:

(Normalized at 15 μm lines thickness)

< 15 mΩ/sq.

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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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