

ESL ELECTRO-SCIENCE CERAMIC TAPES & THICK-FILM MATERIALS

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# **CERMET SILVER CONDUCTOR**

# 9997-G

# RoHS Compliant\* Silver Conductor Designed for Filling Holes on 96% Al<sub>2</sub>O<sub>3</sub> Substrates

ESL 9997-G is a high solids, pure silver conductor designed for filling holes in 96% alumina substrates. ESL 9997-G 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: DRYING: (at 125°C) FIRING RANGE:

OPTIMUM: TIME AT PEAK:

Bladder pressure fill 10-15 minutes 850°C-900°C in air 850°C 10-12 minutes 96% alumina ESL 438

SUBSTRATE FOR CALIBRATION: THINNER:

9997-G 1110 New

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#### **TYPICAL PROPERTIES**

(Stencil Screen on 96% Al<sub>2</sub>O<sub>3</sub>)

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

#### **RESISTIVITY:**

(Normalized at 15 µm lines thickness)

≤ 40 μm

< 15 m $\Omega$ /sq.

#### 9997-G 1110 New

\* Complies with RoHS ELV, WEEE, and CHP 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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