CERMET SILVER CONDUCTOR 9903

RoHS Compliant* Silver

ESL 9903 is a high-conductivity silver conductor developed for use with LED circuit packaging and has the benefit of low-temperature firing. It has excellent compatibility with 4613 dielectric and adheres directly to aluminum substrates for thermal via applications.

PASTE PROPERTIES

Rheology: Thixotropic, screen-printable paste
Viscosity: (Brookfield RVT/ABZ, 10 rpm, 25.0°C – 26.0°C) 150 ± 50 Pa·s

PROCESSING

SCREEN MESH/EMULSION: 200-325 / 5-25 μm
LEVELING TIME: (25°C) 5-10 minutes
DRYING AT 125°C: 10-15 minutes
FIRING TEMPERATURE: 530°C
TIME AT PEAK: 5-10 minutes
TOTAL CYCLE TIME: 60 minutes
SUBSTRATE OF CALIBRATION: 4613 dielectric on aluminum
THINNER: ESL 401
TYPICAL PROPERTIES

FIRED THICKNESS: 14.0 ± 4.0 μm

RESISTIVITY: ≤ 3 mΩ/sq.

PRINTING RESOLUTION:
(Line/Space) 125 μm x 125 μm

SOLDERABILITY:
(62Sn/36Pb/2Ag at 220 ± 5°C) ≥ 95%
(95.5Sn/3.8Ag/0.7Cu, SAC 387, at 250 ± 5°C) ≥ 95%

ADHESION STRENGTH: > 25 N

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.

DISCLAIMER: The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. Electro-Science assumes no liability for any injury, loss, or damage consequential arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make their own tests to determine the suitability thereof for their particular use. The user assumes all risk and liability whatsoever in connection with their intended use. Electro-Science’s only obligation shall be to replace such quantity of the product proved defective.

*TComplies with RoHS, ELV, WEEE and CHIP 3 EC directives