CERMET GOLD CONDUCTOR  8835-1D

ESL 8835-1D is a mixed bonded gold conductor specially formulated for aluminum nitride substrates. It exhibits good conductivity and adhesion. After proper dilution, 8835-1D can also be used for dotting applications.

PASTE DATA

RHEOLOGY: Thixotropic, screen printable paste

VISCOSITY: 225±25 Pa·s
(Brookfield RVT, ABZ spindle, 10 rpm, 25.5°C±0.5°C)

BONDING MECHANISM: Mixed

SHELF LIFE: 6 months (25°C)

PROCESSING

SCREEN MESH/EMULSION: 325/28 µm

LEVELING TIME: (25°C) 5-10 minutes

DRYING: (125°C) 10-15 minutes

FIRING TEMPERATURE: 850°C

TIME AT PEAK: 10-12 minutes

RATE OF ASCENT/DESCENT: 60°C-100°C/minute

SUBSTRATE FOR CALIBRATION: AlN

THINNER: ESL 431 or 429 for dotting purposes

ESL 401 for regular thinning

TYPICAL PROPERTIES

FIRED THICKNESS: 7.5-15 µm

8835-1D  9801-F
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 warranty is 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, direct or 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, before using it. 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.

APPROXIMATE COVERAGE: 70-90 cm²/g
RESISTIVITY: < 4 mΩ/sq.
PRINTING RESOLUTION: (Line/Space) 125 μm /125 μm
ADHESION: (typical on AlN)
[90° pull, 2.0 mm x 2.0 mm pads, ESL 3601 (80 Au/20 Sn) solder]

Initial pull strength: 25-35 N

THERMOSONIC AU WIRE BOND:
(Initial, 25 μm wire) 8-12 grams