



ESL Electro-Science

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GOLD CONDUCTOR

803

Lead-Free Conductor for Co-Fire Ceramic Tapes

ESL 803 is a gold conductor paste specially developed for use with ESL ceramic tapes. This material is designed for inner and top layer metallization.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ spindle, 10 rpm, 25.5°C±0.5°C)	250±50 Pa•s
SOLIDS CONTENT:	78.0%±1%
SHELF LIFE:	6 months

PROCESSING

SCREEN MESH/EMULSION:	325/12.5 µm
LEVELING TIME: (at 25°C)	5-10 minutes
DRYING: (at 80°C)	10-15 minutes
FIRING TEMPERATURE:	Conductors are co-fired with the LTCC
SUBSTRATE FOR CALIBRATION:	ESL 41010
THINNER:	ESL 401

803 0403 new

ESL Affiliates

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See Caution and Disclaimer on other side

TYPICAL PROPERTIES

THICKNESS: (μm)	9-12
RESISTIVITY: ($\text{m}\Omega/\text{sq.}$)	≤ 5
SOLDERABILITY: (Using 80 Au/20 Sn solder)	good
WIREBONDABILITY: (Pull strength using 25 μm Au wire)	$\geq 10 \text{ g}$
ADHESION: (2 mm x 2 mm pads, pull test)	$\geq 13 \text{ N}$

NOTES: All data was collected using ESL 41010 or similar tape, co-fired at 850°C.

COMPATIBILITY: ESL 41110, 41010, 41020, 41210

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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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