



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CERMET GOLD CONDUCTOR

8847

Thin Printing, RoHS Compliant*

ESL 8847 is a cermet gold paste designed for printing on 96% alumina substrates. The conductor exhibits excellent line definition, surface smoothness, printability and gold wire bonding properties.

PASTE DATA

RHEOLOGY:	Thixotropic, screen-printable paste
VISCOSITY: (Brookfield 2xHBDVIII, CPE 52 cone, 10 sec ⁻¹ , 25°C to 26°C)	225±50 Pa·s
BONDING MECHANISM:	Fritless
SHELF LIFE: (25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	325/20 µm 400/25 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING:	PEAK TEMPERATURE: 850°C
	TIME AT PEAK: 10-15 min
TOTAL CYCLE TIME:	50 minutes
SUBSTRATE OF CALIBRATION:	96% alumina
THINNER:	ESL 413

8847 0703-A

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS:		8 ± 2 μm
RESISTIVITY (8 μm fired thickness):		≤ 5 mΩ/sq.
PRINTING RESOLUTION: (Line/Space)		100 μm x 100 μm
THERMOSONIC WIRE BOND (25μm Au Wire on alumina)	Initial	≥ 8 g
	1000 hrs @ 150°C	≥ 6 g
(50 μm Au wire on alumina) (fired thickness ≥ 10μm)	Initial	≥ 40 g
(100% wire breaks)	1000 hrs. @ 150°C	≥ 35 g

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***None of the six substances referred to in the RoHS Directive (2002/95/EC) are used in the formulation of this product.**

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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