



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CEREMT GOLD CONDUCTOR

8847

RoHS Compliant* • Thin printing

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 RVT, 10 rpm, ABZ spindle, 25.5 ± 0.5 °C)	225 ± 50 Pa.s
Bonding Mechanism:	Fritless
Shelf Life (20 - 25 °C):	6 months

PROCESSING

Screen Mesh, Emulsion:	325 S/S, 20 µm or 400 S/S, 25 µm
Levelling Time (at 20°C):	5 - 10 min
Drying Time (at 125°C):	10 - 15 min
Firing Temperature:	850°C
	Time at peak: 10 - 15 min
Total Cycle Time:	50 min
Substrate for Calibration:	96% alumina
Thinner:	ESL 413

ESL Europe (KOP) 8847 0703-A

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See Caution and Disclaimer on page 2.

TYPICAL PROPERTIES

Fired Thickness: 8 ± 2 µm

Resistivity:
(8 µm fired thickness) < 5 mΩ/□

Printing Resolution:
(line/space) 0.100 mm / 0.100 mm

Thermosonic Au Wire Bond:
(25 µm wire on alumina) Initial ≥ 8 g
1000 hours @ 150°C ≥ 6 g

(50 µm wire on alumina, fired
thickness >10 µm, 100% wire breaks) Initial ≥ 40 g
1000 hours @ 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 vapours 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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