



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CERMET GOLD CONDUCTOR

8837-G

RoHS Compliant* Thin Printing Gold Conductor

ESL 8837-G is a very thin print gold conductor.

PASTE DATA

Rheology:	Thixotropic, screen-printable paste
Viscosity: (Brookfield RVT, 10rpm, ABZ spindle, 25.5 ± 0.5 °C)	250 ± 50 Pa.s
Bonding Mechanism:	Mixed-bonded
Shelf Life (20 - 25 °C):	6 months

PROCESSING

Screen Mesh, Emulsion:	400 S/S, 12 µm
Levelling Time (at 20°C):	5 - 10 min
Drying Time (at 125°C):	10 -15 min
Firing Temperature Range:	850 - 1000°C in air
	Optimum: 850 °C
	Time at peak: 10 min
Total Firing Cycle:	1 hour
Substrate for Calibration:	96% alumina
Thinner:	ESL 401

ESL Europe (KOP) 8837-G 0703-A

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See Caution and Disclaimer on page 2.

TYPICAL PROPERTIES

Screen Mesh, Emulsion:		400 S/S, 12 μ m
Fired Thickness:	1 print	2 - 3 μ m
	2 prints	3 - 4 μ m
	3 prints	4 - 6 μ m
Approximate Coverage:		150 cm ² /g
Resistivity:	1 print	34 - 50 m Ω /sq.
	2 prints	11 - 17 m Ω /sq.
	3 prints	8 - 14 m Ω /sq.
Solder Wettability: (80 Au/20 Sn)		100%
Adhesion: (90° pull, 2.5 x 2.5mm pads, 80 Au/20Sn and 62Sn/36Pb/2Ag)	1 print	≥ 3.0 kg
	2 prints	≥ 4.0 kg
	3 prints	≥ 6.0 kg
Thermosonic Au Wire Bond: (25 μ m wire)	1 print	≥ 5.0 g
	2 prints	≥ 9.0 g
	3 prints	≥ 9.0 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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