



ESL Electro-Science

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GOLD CERMET CONDUCTOR

8837-G

Thin Printing, Lead-free, Cadmium-free, Nickel-free Conductor

ESL 8837-G is very thin printing gold conductor. Depending on processing conditions, dense gold layers as thin as one micrometer can be obtained. This gold conductor is suitable for etching, after multiple prints, using standard potassium iodide/iodine solutions.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	250±50 Pa·s
BONDING MECHANISM:	mixed bonded
SHELF LIFE: (25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION (stainless steel)	400/12 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C	10-15 minutes
FIRING TEMPERATURE RANGE: (in air)	850-1000°C
	Optimum: 850°C
TIME AT PEAK:	10 minutes
RATE OF ASCENT/DESCENT:	50°C-60°C/minute
SUBSTRATE OF CALIBRATION:	96% alumina
THINNER:	ESL 401

8837 -G 0401 New

ESL Affiliates

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES:

SCREEN MESH/EMULSION:		400/12
FIRED THICKNESS:	1 print	2-3 μ m
	2 prints	3-4 μ m
	3 prints	4-6 μ m
APPROXIMATE COVERAGE:		150cm ² /g
RESISTIVITY:	1 print	34-50m Ω /sq.
	2 prints	11-17m Ω /sq.
	3 prints	7-11m Ω /sq.
SOLDER WETTABILITY: (80 Au/20 Sn)		100%
ADHESION:		
(90° pull, 2.5 mm x 2.5 mm pads, 80 Au/20 Sn and 62Sn/36Pb/2Ag)	1 print	30-50 N
	2 prints	40-70 N
	3 prints	60-100 N
THERMOSONIC WIRE BOND:		
(25 μ m Au wire)	1 print	5-10 g
	2 prints	10-15 g
	3 prints	10-15 g

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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.

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.
