



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

416 EAST CHURCH ROAD
KING OF PRUSSIA, PA 19406-2625 USA

T: 610.272.8000
F: 610.272.6759

www.electroscience.com

CERMET GOLD CONDUCTOR

8813-G

RoHS Compliant*
For Use With Aluminum Nitride Substrates

ESL 8813-G is a newly developed gold conductor especially formulated for AlN. It can be used for 25 and 50 micrometer gold wire bonding. ESL 8813-G is designed to not dry on the screen and can be printed with 125 micrometer lines and spaces.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	285±50 Pa·s
BONDING MECHANISM:	Mixed
SHELF LIFE: (at 25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	325/25 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING TEMPERATURE:	850°C
TIME AT PEAK:	10-12 minutes
FIRING CYCLE:	50 minutes
SUBSTRATE OF CALIBRATION:	aluminum nitride
THINNER:	ESL 401

8813-G 0703-new

ESL Affiliates

ESL China • Rm#1707, Tower A • City Center of Shanghai • 100 Zunyi Road • Shanghai, China 200051 Tel: (011-86)-21-62370336 • Fax: (011-86)-21-62370338 • eslchina@eslshanghai.net

ESL Europe • 8 Commercial Road • Reading, Berkshire, England RG2 0QZ • Tel: (011-44)-118-918-2400 • Fax: (011-44)-118-986-7331 • Sales@ESLEurope.co.uk

ESL Nippon • Sukegawa Bldg • 6th floor • 3-4 Yanagibashi 1-chome • Taito-ku • Tokyo 111, Japan • Tel: (011-81)-3-3864-8521 • Fax: (011-81)-3-3864-9270 • Sales@ESL-Nippon.co.jp

See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS:		10-14 μm
RESISTIVITY:		$\leq 6 \text{ m}\Omega/\text{sq.}$
PRINTING RESOLUTION: (Line/Space)		125 μm x 125 μm
THERMOSONIC WIREBOND:		
	25 μm Au wire	$\geq 9 \text{ g}$
	50 μm Au wire	$\geq 25 \text{ g}$

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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.

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.
