



## ESL ELECTROSCIENCE

CERAMIC TAPES &  
THICK-FILM MATERIALS

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# CERMET GOLD CONDUCTOR

# 8835-1D

ESL 8835-1D is a mixed-bonded gold conductor specially formulated for use on aluminium nitride substrates, exhibiting good conductivity and adhesion. The paste can also be used for dotting applications.

## PASTE DATA

**Rheology:** Thixotropic, screen-printable paste

**Viscosity:**  
(Brookfield RVT, 10rpm,  
ABZ spindle, 25.5 ± 0.5 °C) 225 ± 25 Pa.s

**Bonding Mechanism:** Mixed-bonded

**Shelf Life (20 - 25 °C):** 6 months

## PROCESSING

**Screen Mesh, Emulsion:** 325 S/S, 25 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 - 12 min

**Rate of Ascent/Descent:** 60 - 100 °C / min

**Substrate for Calibration:** AlN

**Thinner:** ESL 431 or 429

ESL Europe 8835-1D 9011-A

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See Caution and Disclaimer on other side.

## TYPICAL PROPERTIES

<b>Fired Thickness:</b> (measured AlN)	9.0 ± 1.0 µm
<b>Approximate Coverage:</b>	70 - 90 cm <sup>2</sup> /g
<b>Resistivity:</b> (measured on a 100 mm x 0.25 mm conductor track)	<4 mΩ/□
<b>Printing Resolution:</b> (line/space)	0.125 mm / 0.125 mm
<b>Adhesion:</b> (90° pull, 2 mm x 2 mm pads, 80Au/20Sn and 62Sn/36Pb/2Ag)	Initial pull strength: 2.5 - 3.5 kg
<b>Thermosonic Au Wire Bond:</b> (25 µm wire; bond length 1 mm; 100% wire breaks)	8 - 12 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 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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