



## ESL ELECTROSCIENCE

CERAMIC TAPES &  
THICK-FILM MATERIALS

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# CERMET GOLD CONDUCTOR

# 8835 VF-G

## Lead and Cadmium-Free\*

ESL 8835 VF-G has been designed as a high solids content gold conductor and is used for filling via posts in complex multilayer circuits. This conductor is compatible with the 4905-C series dielectrics and will not shrink or crack when subjected to multiple firing. It is available in two different viscosities and is therefore able to fulfil a wide range of customer requirements.

The lower viscosity version of 8835 VF-G can also be used for through hole printing in laser drilled holes and does not exhibit shrinkage cracking or adhesion problems after firing.

## PASTE DATA

<b>Rheology:</b>	Thixotropic, screen-printable paste
<b>Viscosity:</b> (Brookfield RVT, 10rpm, ABZ spindle, 25.5 ± 0.5 °C)	150 ± 30 Pa.s 275 ± 25 Pa.s
<b>Bonding Mechanism:</b>	Mixed-bonded
<b>Shelf Life (20 - 25 °C):</b>	6 months

## PROCESSING

<b>Screen Mesh, Emulsion:</b>	325 S/S, 15 µm
<b>Levelling Time (at 20°C):</b>	5 - 10 min
<b>Drying Time (at 125°C):</b>	10 -15 min
<b>Firing Temperature Range:</b>	850 - 1000°C in air
	Optimum: 850 °C
	Time at peak: 10 min
<b>Total Firing Cycle:</b>	1 hour
<b>Substrate for Calibration:</b>	96% alumina
<b>Thinner:</b>	ESL 401

ESL Europe 8835 VF-G 0406-A

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See Caution and Disclaimer on other side.

## TYPICAL PROPERTIES

**Fired Thickness:**

(measured on a 2 mm x 2 mm pad on 96% alumina)

20 ± 5 µm

**Approximate Coverage:**

95 cm<sup>2</sup>/g

**Resistivity:**

< 30 mΩ/□

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\*Complies with RoHS, ELV, WEEE and CHIP 3 EC directives.

**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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