



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CEREMT GOLD CONDUCTOR

8835 (520°C)

For use on soda-lime glass substrates

ESL 8835 (520C) is a fritted, high conductivity gold conductor for use on soda-lime glass substrates. This material can be fired at 520°C with 15 minutes at peak temperature giving good adhesion to the glass. The conductor can also be used in applications requiring wire bonding and eutectic die attachments. It is suitable for liquid crystal watch manufacturing for shorting the top and bottom conductors.

PASTE DATA

Rheology:	Thixotropic, screen-printable paste
Viscosity: (Brookfield RVT, 10 rpm, ABZ spindle, 25.5 ± 0.5 °C)	325 ± 25 Pa.s
Bonding Mechanism:	Fritted
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:	520°C
	Time at peak: 10 - 15 min
Rate of Ascent/Descent:	60 - 100°C / min
Substrate for Calibration:	Soda-lime glass
Thinner:	ESL 401

ESL Europe (KOP) 8835 (520C) 9802-A

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See Caution and Disclaimer on page 2.

TYPICAL PROPERTIES

Fired Thickness:		10 - 15 μm
Approximate Coverage:		55 - 70 cm^2/g
Resistivity:		$\leq 5 \text{ m}\Omega/\square$
Printing Resolution: (line/space)		0.100 mm / 0.125 mm
Solder Wettability: (80Au / 20Sn, RMA Flux, 5 sec. dip)		Excellent
Adhesion: (90° pull, 2 mm x 2 mm pads, 80Au/20Sn and 62Sn/36Pb/2Ag)	Initial pull strength:	3 - 5 kg
Thermosonic Au Wire Bond: (25 μm wire; bond temperature 150°C; 25g force)		4 - 7 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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