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GOLD CERMET CONDUCTOR

8835 (520C)

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, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	325±25 Pa·s
BONDING MECHANISM:	Fritted
SHELF LIFE: (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
OPTIMUM:	520°C
TIME AT PEAK:	10-15 minutes
RATE OF ASCENT/DESCENT:	60°C-100°C/minute
SUBSTRATE OF CALIBRATION:	soda-lime glass
THINNER:	ESL 401

8835 (520C) 9802-A

ESL Affiliates

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES:

FIRED THICKNESS:		10-15 μm
APPROXIMATE COVERAGE:		55-70 cm^2/gram
RESISTIVITY:		$\leq 5 \text{ m}\Omega/\text{square}$
PRINTING RESOLUTION: (Line/Space)		100 μm x 125 μm
SOLDER WETTABILITY: (RMA flux, 5 sec. dip)	80 Au/20 Sn	Excellent
ADHESION: (90° pull, 2.0 mm x 2.0 mm pads, 80 Au/20 Sn, 280°C)		
	Initial Pull Strength:	30-50 N
THERMOSONIC WIRE BOND: (25 μm Au wire, 150°C bond temperature, 25 g force)		4-7 grams

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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.

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