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GOLD CERMET CONDUCTOR

8884
8884-A

The ESL 8884 and 8884-A gold conductors are fritless and fire at 850°C. They exhibit excellent adhesion on both alumina and beryllia. They are commonly used for high reliability and power hybrid modules. The 8884-A is an alloyed version of 8884 designed to give superior aged aluminum wire bond results; especially with large wire diameter wire.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	400±25 Pa-s
BONDING MECHANISM:	MICRO-LOK®
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
FIRING RANGE	850°C-980°C
OPTIMUM:	850°C
TIME AT PEAK:	10-15 minutes
RATE OF ASCENT/DESCENT:	60°C-100°C/minute
SUBSTRATE OF CALIBRATION:	96% alumina
THINNER:	ESL 401

8884 & 8884-A 9711-A

ESL Affiliates

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS:		12.5±2.5 µm
APPROXIMATE COVERAGE:		60-70 cm ² /g
RESISTIVITY:	8884	2.5-3.0 mΩ/sq.
	8884-A	3.5-5.5 mΩ/sq.
PRINTING RESOLUTION: (Line/Space)		125 µm/125 µm
SOLDER WETTABILITY: (RMA flux, 5 sec. dip, 80 Au/20 Sn or 50 Pb/50 In)		95-100%
ADHESION: (90° pull, 2.0 mm x 2.0 mm pads, 62 Sn/36 Pb/2 Ag with 80 Au/20 Sn barrier layer)		
	Initial pull strength:	60-90 N
	Aged 48 hours at 150°C:	50-80 N
ULTRASONIC WIRE BOND:		
(50 µm Al wire)	8884-A	90 g
(500 µm Al wire)	8884-A	2,000 g
THERMOSONIC WIRE BOND:		
(25 µm Au wire)	8884 & 8884-A	≥ 8 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 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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