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8884
8884-A
GOLD CERMET CONDUCTOR

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

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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