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CERMET PALLADIUM SILVER CONDUCTOR 9694-SA

Cadmium-free, High Speed Printing Palladium Silver

ESL 9694-SA is a cadmium-free high speed printing palladium silver conductor that exhibits excellent adhesion, good solderability, and high conductivity. The 9694-SA is also recommended for use with ESL R-300-P and R-300-C series resistors as a termination in trimmer and potentiometer applications.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	225±25·Pa.s
BONDING MECHANISM:	Mixed
SHELF LIFE: (25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	200-325/20-30 μm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING RANGE:	750°C-930°C
OPTIMUM:	850°C
TIME AT PEAK:	10-12 minutes
RATE OF ASCENT/DESCENT:	60°C-100°C/minute
SUBSTRATE OF CALIBRATION:	96% alumina
THINNER:	ESL 401 or 413

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS:	8-15 μm
RESISTIVITY: (Measured on a 100 mm x 0.25 mm conductor track at 12.5 μm fired thickness)	2.0-5.0 mΩ/sq.
PRINTING RESOLUTION: (Line/Space)	250 μm x 250 μm
SOLDER WETTABILITY: (RMA flux, 5 sec. dip, 62 Sn/36 Pb/2 Ag, 220°C±5°C)	excellent
SOLDER LEACH (Number of 10 sec. dips to double the resistance of a 100 mm x 0.25 mm long conductor, 62 Sn/36 Pb/2 Ag, 220°C±5°C)	≥ 4 dips
ADHESION: (90° pull, 2.0 mm x 2.0 mm pads, 62 Sn/36 Pb/2 Ag, 220°C±5°C)	
Initial pull strength:	≥ 65 N
Aged 48 hours at 150°C:	≥ 35 N

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