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CERMET SILVER PALLADIUM CONDUCTOR 9695

ESL 9695 is a screen printable palladium silver conductor material featuring low-cost, excellent adhesion, good solderability, and high conductivity. ESL 9695 has a wide firing range, (625°C to 930°C), and can be used on porcelain enameled steel substrates as well as alumina.

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:	325/25 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING AT 125°C:	10-15 minutes
FIRING RANGE:	625°C-930°C
OPTIMUM: (On alumina):	850°C
(On PES):	625°C
TIME AT PEAK:	10-12 minutes
RATE OF ASCENT/DESCENT:	60°C-100°C/minute
SUBSTRATE OF CALIBRATION:	96% alumina
THINNER:	ESL 401

ESL Affiliates
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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS:		12.5±2.5 µm
APPROXIMATE COVERAGE:		75-100 cm^2/g
RESISTIVITY:		2-8 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
	63 Sn/37 Pb, 250°C±5°C	good
SOLDER LEACH:		
(No. of 10 sec. dips to double the resistance of 0.25 mm wide x 100 mm long conductor,62 Sn/36 Pb/2 Ag, 220°C±5°C)		2-5 dips
ADHESION:		
(90° pull, 2.0 mm x 2.0 mm pads,62 Sn/36 Pb/2 Ag)		
	Initial pull strength:	50-60 N
	Aged 48 hours at 150°C:	20-40 N
ULTRASONIC WIRE BOND:		
(25 µm Al wire)		8-10 g

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