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CERMET SILVER/PLATINUM CONDUCTOR 9598-G

Cadmium, Lead and Nickel-Free*

ESL 9598-G is a silver / platinum conductor that can be fired on alumina using a wide temperature range. The 9598-G is a non-migrating conductor with exceptional solder leach resistance and can be used to replace Pt / Au in some applications.

PASTE DATA

Rheology:	Thixotropic screen-printable paste
Viscosity: (Brookfield RVT, 10rpm, ABZ Spindle, 25.5 ± 0.5 °C)	300 ± 25 Pa.s
Bonding Mechanism:	Mixed-bonded
Shelf Life (20 - 25 °C):	6 months

PROCESSING

Screen Mesh, Emulsion:		325 S/S, 20 µm
Levelling Time (at 20 °C):		5 - 10 min
Drying Time (at 125 °C):		10 - 15 min
Firing Temperature Range:		550 - 980 °C in air
	Optimum:	850 °C
	Time at peak:	10 min
Total Firing Cycle:		1 hour
Substrate for Calibration:		96% alumina
Thinner:		ESL 401

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

Fired Thickness: (measured on a 2 mm x 2 mm pad on 96% alumina)	12.5 ± 2.5 µm
Approximate Coverage:	90 - 100 cm^2/g
Resistivity: (measured on a 100 mm x 0.25 mm conductor track at 12.5 µm fired thickness)	⩽ 80 mΩ/□
Printing Resolution: (line/space)	0.125 mm / 0.125 mm
Solder Wettability: (RMA Flux, 5 sec. Dip, 95.5Sn/3.8Ag/0.7Cu, 250°C)	95 - 100%
Solder Leach: (No. of 10 sec. dips to double lowest resistance of 100 mm x 0.25 mm conductor, 95.5Sn/3.8Ag/0.7Cu, 250°C)	>10 dips
Adhesion: (90° pull, 2 mm x 2 mm pads, 95.5Sn/3.8Ag/0.7Cu)	
Initial pull strength:	> 6.0 kg
Aged 48 hours at 150°C:	> 5.0 kg

***None of the six substances referred to in the RoHS Directive (2002/95/EC) are used in the formulation of this product.**

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 vapours 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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