



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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CERMET SILVER/PALLADIUM CONDUCTOR 9910-C

ESL 9910-C is an economical silver conductor for use on a variety of low-temperature firing substrates including PZT and glass.

PASTE DATA

Rheology:	Thixotropic, screen-printable paste
Viscosity: (Brookfield RVT, 10rpm, ABZ Spindle, 25.5 ± 0.5 °C)	225 ± 25 Pa.s
Bonding Mechanism:	Fritted
Shelf Life (20 - 25 °C):	6 months

PROCESSING

Screen Mesh, Emulsion:	325 S/S, 12 µm
Levelling Time (at 20°C):	5 - 10 min
Drying Time (at 125°C):	10 - 15 min
Firing Temperature Range:	580 - 700°C in air
	Optimum: 580°C
	Time at peak: 1 min
Total Firing Cycle:	1 hour
Substrate for Calibration:	Soda Lime Glass
Thinner:	ESL 401

ESL Europe 9910-C 0207-B

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

Fired Thickness: 12.5 ± 2.5µm
(measured on a 2 mm x 2 mm pad on 96% alumina)

Resistivity: <5.0 mΩ/□
(measured on a 100 mm x 0.25 mm conductor track)

Printing Resolution: 0.250 mm / 0.250 mm
(line/space)

Fineness of Grind: 7µ average

Solder Wettability: 95 - 100 %
(RMA Flux, 5 sec. dip)
62Sn/36Pb/2Ag (220°C)

Solder Leach: 5 dips
(No. of 10 sec. dips to double lowest
resistance of 100 mm x 0.25 mm conductor)
62Sn/36Pb/2Ag (220°C)

Adhesion:
(90° pull, 2 mm x 2 mm pads, 62Sn/36Pb/2Ag)

Initial pull strength: >1.0 kg

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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 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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