CERAMIC TAPES & 416 EAST CHURCH ROAD
THICK-FILM MATERIALS KING OF PRUSSIA, PA 19406-2625, U.S.A
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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:
Optimum: 580 °C
Time at peak: 1 min

580 - 700°C in air

Total Firing Cycle: 1 hour

Substrate for Calibration: Soda Lime Glass

Thinner: ESL 401
TYPICAL PROPERTIES

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

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

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

Fineness of Grind:  
7µ average

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

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

Adhesion:  
(90° pull, 2 mm x 2 mm pads, 62Sn/36Pb/2Ag)  
Initial pull strength:  
>1.0 kg