



## ESL ELECTROSCIENCE

CERAMIC TAPES &  
THICK-FILM MATERIALS

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# POLYMER SILVER CONDUCTOR

# 1901-E

RoHS Compliant\*

Polymer Silver for Application on Glass Substrates

ESL 1901-E is an economic silver-filled resin material designed for use as a conductor on glass substrates.

## PASTE DATA

|   |                                     |
|---|-------------------------------------|
| <b>Rheology:</b>  | Thixotropic, screen-printable paste |
| <b>Viscosity:</b><br>(Brookfield RVT, 1 rpm,<br>No. 6 spindle, 25.5 ± 0.5 °C) | 120 ± 20 Pa.s                       |
| <b>Shelf Life (at 5°C):</b>   | 6 months                            |

## PROCESSING

|                                   |                       |
|-----------------------------------|-----------------------|
| <b>Screen Mesh, Emulsion:</b>     | 200 or 325 S/S, 25 µm |
| <b>Curing Schedule:</b>           | 125°C / 10 min        |
| <b>Substrate for Calibration:</b> | Glass                 |
| <b>Thinner:</b>                   | ESL 110               |

ESL Europe 1901-E 0705-A

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See Caution and Disclaimer on other side.

## TYPICAL PROPERTIES

|   |                               |
|---|-------------------------------|
| <b>Cured Thickness:</b><br>(measured on a 100 mm x 0.25 mm conductor track) | 25 - 35 $\mu\text{m}$         |
| <b>Approximate Coverage:</b>  | 100 $\text{cm}^2/\text{g}$    |
| <b>Resistivity:</b><br>(measured on a 100 mm x 0.25 mm conductor track)     | < 30 $\text{m}\Omega/\square$ |
| <b>Printing Resolution:</b><br>(line/space)                                 | 0.25 mm / 0.25 mm             |

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\*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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