



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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POLYMER INSULATOR

1901-I

Polymer Insulator for RFID Antennas • RoHS Compliant*

ESL 1901-I is a flexible resin material designed for use as an insulator on low-temperature substrates. This insulator may be used as a buffer layer between the conductive tracks on RFID antennas. After screen-printing and curing, the insulating film remains reasonably flexible and the resistance of the antenna track made from 1901-S / 1901-SD remains constant over time. The paper or plastic sheet bearing the printed antenna is laminated within a number of plastic layers and the individual cards are punched out. Many antenna pattern layers can be insulated in a single print operation.

PASTE DATA

Rheology:	Thixotropic, screen-printable paste
Viscosity: (Brookfield RVT, 10 rpm, No. 7 spindle, 25.5 ± 0.5 °C)	50 ± 10 Pa.s
Shelf Life (at 5°C):	6 months

PROCESSING

Screen Mesh, Emulsion:	200 or 325 S/S, 25 µm
Curing Schedule:	125°C / 10 min
Substrate for Calibration:	PVC plastic card
Thinner:	ESL 659

ESL Europe 1901-I 0407-B

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

Cured Thickness: (measured on a 2 mm x 2 mm pad)	25 - 30 μm
Approximate Coverage:	100 cm^2/g
Printing Resolution: (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.

DISCLAIMER: The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. ElectroScience assumes no liability for any injury, loss, or damage, direct or consequential, arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular use, before using it. User assumes all risk and liability whatsoever in connection with his intended use. ElectroScience's only obligation shall be to replace such quantity of the product proved defective.
