ESL ELECTRO-SCIENCE
CERAMIC TAPES & CERAMIC TAPES & THICK-FILM MATERIALS 416 EAST CHURCH ROAD T: 610.272.8000
KING OF PRUSSIA, PA 19406-2625 USA F: 610.272.6759

POLYMER SILVER CONDUCTOR

ESL 19102-A is a solderable high-temperature, low-resistivity silver polymer conductor, that provides good adhesion and thermal stability. It is designed for use as solderable pads for LED and as a resistor termination for heating element on ceramic and polyimide film. The ESL 19102-A can also be used on ESL 14401, 14402-A and 14404 polymer dielectric on metal substrates.

Please review the Application Note: Polyimide Thick Film Materials before using this product.

PASTE DATA

RHEOLOGY: Thixotropic, screen-printable paste

VISCOSITY: (Brookfield RVT, ABZ spindle, 10 rpm, 25.5°C ± 0.5°C) 150 ± 50 Pa·s

SHELF LIFE: (at 0°C) 3 months
(at -18°C) 12 months

PROCESSING

SCREEN MESH / EMULSION: 200 / 20-30 μm

LEVELING TIME: 5-10 minutes

DRYING at 125°C: 10-15 minutes

CURING CYCLE: 320°C / 150 minutes (10-15°C/min. rise)

SUBSTRATE OF CALIBRATION: aluminum

THINNER ESL 455
**TYPICAL PROPERTIES**

**CURED THICKNESS:** 10-15 µm

**RESISTIVITY:** (12 µm cured thickness) < 12 mΩ/sq.

**COMPATIBLE MATERIALS:** ESL 14401, 14402 and 14404 dielectric