



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

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SILVER PALLADIUM CONDUCTOR

963

Conductor for Use as Top or Inner-Layer Electrode With Co-Fire Ceramic Tape

ESL 963 is a silver palladium conductor designed for use as a co-fired top electrode with ceramic tape. ESL 963 may also be used with transfer tape on 96% alumina substrates.

PASTE DATA

RHEOLOGY:	Thixotropic, screen printable paste
VISCOSITY: (Brookfield RVT, ABZ Spindle, 10 rpm, 25.5°C±0.5°C)	175±25 Pa·s
BONDING MECHANISM:	Fritted
SHELF LIFE: (at 25°C)	6 months

PROCESSING

SCREEN MESH/EMULSION:	325/25 µm
LEVELING TIME: (25°C)	5-10 minutes
DRYING: (at 80°C)	10-15 minutes
FIRING:	850°C
SUBSTRATE OF CALIBRATION:	ESL 41010
THINNER:	ESL 401

ESL Europe (KOP) 963 0403-New

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See Caution and Disclaimer on other side.

TYPICAL PROPERTIES

FIRED THICKNESS: (line)	20±4 µm
RESISTIVITY: (20µm fired thickness, co-fired with ESL 41010 tape)	19±7 mΩ/sq.
PRINTING RESOLUTION: (Line/Space)	250 µm x 250 µm
ADHESION:	≥ 20 N
SOLDERABILITY:	good

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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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