



ESL Electro-Science

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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

TYPICAL PROPERTIES

FIRED THICKNESS: (line)	20±4 µm
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963 0403 new

ESL Affiliates

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See Caution and Disclaimer on other side

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 vapors 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. Electro-Science 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 their own tests to determine the suitability thereof for their particular use, before using it. User assumes all risk and liability whatsoever in connection with their intended use. Electro-Science's only obligation shall be to replace such quantity of the product proved defective.
