



ESL ELECTROSCIENCE

CERAMIC TAPES &
THICK-FILM MATERIALS

416 EAST CHURCH ROAD
KING OF PRUSSIA, PA 19406 USA

T: 610-272-8000
F: 610-272-6759

www.electroscience.com

Alumina Tape

44007-X

High Purity Alumina HTCC Tape

ESL 44007-X is a family of flexible cast films of 99.99+% alumina powder dispersed in an organic matrix. This material is designed to be fired at 1550°C to yield a dense white-colored alumina ceramic. The 44007-X family is provided on a polyester film to protect the tape from mechanical damage and aid in handling.

PROCESSING PARAMETERS

LAMINATING:	21 MPa at 70°C
FIRING TEMPERATURE:	1550°C
TIME AT PEAK:	1.5 - 2.0 hours

TAPE CHARACTERISTICS

TAPE THICKNESS:	50µm, 70µm, 100µm, 130µm, 150µm
THICKNESS UNIFORMITY:	Nominal Thickness ±10%
TAPE WIDTH:	8 Inches on 12 inch wide polyester
SHRINKAGE: (90° layer rotation)	XY: 15.8% ± 1.0

44007-X 1207 REV A

ESL Affiliates

ESL China • Rm #1707, Tower A • City Center of Shanghai • 100 Zunyi Road • Shanghai, China 200051 • Tel: +86-21-6237-0336 • Fax: +86-21-6237-0338 • esichina@eslshanghai.net
ESL Europe • 8 Commercial Road • Reading, Berkshire, England RG2 0QZ • Tel: +44-118-918-2400 • Fax: +44-118-986-7331 • sales@esleurope.co.uk
ESL in Korea • AMT • South Korea • Tel: +82 31-466-0651 • Fax: +82-31-466-0658 • yumikim@esl-amt.co.kr
ESL-Nippon • Sukegawa Bldg 6th floor • 1-3-4 Yanagibashi • Taito-ku • Tokyo, Japan 111-0052 • Tel: +81-3-3864-8521 • Fax: +81-3-3864-9270 • sales@esl-nippon.co.jp
ESL Taiwan • 14F, No. 168, Dunhua N. Road • Sungshan District • Taipei 105, Taiwan • Tel: +886-975-553-612 • dshih@esl-taipei.com
See Caution and Disclaimer on other side.



44007-X

Alumina Tape

High Purity Alumina HTCC Tapes

44007-X is a family of alumina tapes... This material is designed to be fired at 1800°C for 2-5 hours... HTCC tapes are provided on a copper foil to protect the tape from mechanical damage and to facilitate handling.

PROCESSING PARAMETERS

LAMINATING	1800°C
FIRING TEMPERATURE	1800°C
TIME AT PEAK	2 - 5 hours

TAPE CHARACTERISTICS

TAPE THICKNESS	0.125 mm (5 mil)
THICKNESS UNIFORMITY	± 0.005 mm
TAPE WIDTH	12.5 mm (0.5 inch)
SHRINKAGE (WT. LOSS)	1.0%

44007-X 1207 REV A

*COMPLIES WITH ROHS, ELV, WEEE AND CHIP 3 EC DIRECTIVES.

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.