## Tapes

### 3M<sup>™</sup> Antistatic Utility Tape

3M Antistatic Utility Tape 40 combines 3M's remarkable antistatic adhesive with a clear, one mil polyester film backing, and is perfect for use in static-sensitive areas. An optional special pattern of ESD symbols alerts users that this is the only tape that should be used in static-safe areas.

At the heart of all 3M antistatic tapes is a unique conductive polymer adhesive that suppresses static, both during unwind from the roll and during removal from a surface. They generate less than 50 volts on unwind from the roll or removal from a stainless steel surface, even in extremely dry conditions of 10% relative humidity.

Use Antistatic Utility Tape 40 as a third hand to hold work orders, notes, documentation, or instructions in place; to seal static shielding bags and boxes containing electronic components; or to bundle DIP tubes and JEDEC shipping trays. It can also be used to hold down obstructions such as wires or attachments during manufacturing.



3M<sup>™</sup> Antistatic Utility Tape 40PR

| Product No. | Descrip   | tion   |   |   |  |
|-------------|---|--|---|---|--|
| 40/40PR*    | 3 in. Antistatic Plastic Cores<br>Antistatic Utility Tape.*         |  |   |   |  |
|             | Widths, in.<br>0.25<br>0.375<br>0.50<br>0.625<br>0.75<br>0.875<br>1 | (6.3)<br>(9.5)<br>(12.7)<br>(15.8)<br>(19.0) | Length, yd.<br>72<br>72<br>72<br>72<br>72<br>72<br>72<br>72<br>72 | (m)<br>(66)<br>(66)<br>(66)<br>(66)<br>(66)<br>(66)<br>(66) |  |
|             | 1 in. Antistatic Plastic Cores                                      |  |   |   |  |
|             | Widths, in.<br>.50<br>.75   | (mm)<br>(12.6)<br>(19.0)                     | Length, yd.<br>36<br>36   | (m)<br>(33)<br>(33)   |  |

Specify at time of order. Custom widths available upon request. \*PR designation means printed.

#### RoHS Compliant 2002/95/EC

#### Antistatic Utility Tape 40 and 40PR Properties

| Property   | Test Method  | Typical Value  |  |
|--|--|--|--|
| Static Charge Generation<br>Removal from Roll,<br>10% RH, volts  | 3M   | 20   |  |
| Removal from Roll,   | 3M   | 5  |  |
| 50% RH, volts<br>Removal from Stainless Steel,   | 3M   | 20   |  |
| 10% RH, volts<br>Removal from Stainless Steel,<br>50% RH, volts  | 3M   | 5  |  |
| Surface Resistance<br>Adhesive @ 50% RH<br>Adhesive @ 10% RH   | ESD S11.11<br>ESD S11.11   | 5 x 10 <sup>6</sup> Ω<br>5 x 10 <sup>8</sup> Ω                         |  |
| Tape Properties<br>Adhesion to Steel<br>Unwind Force from Roll<br>Thickness<br>Break Strength<br>Slit Width<br>Rolling Ball Tack | ASTM D1000<br>ASTM D1000<br>ASTM D1000<br>ASTM D1000<br>ASTM D1000<br>ASTM D1000                   | 19 oz/in.<br>24 oz/in.<br>2.2 mils<br>20 lb/in.<br>± 1/64 in.<br>70 mm |  |
| Outgassing<br>TML<br>CVCM  | ASTM E595<br>ASTM E595   | <1.0%<br><0.1%   |  |
| Shelf Life   | 2 years [when stored in original packaging<br>at 50°F (10°C) to 80°F (27°C) at 50%<br>RH maximum.] |  |  |

# **3M 40 Printed and Unprinted Antistatic Utility Tape** Data Sheet

3M<sup>™</sup> 40 Printed and Unprinted Antistatic Utility Tapes represent a breakthrough in PSA tape technology. This new tape, which generates less than 50 volts on unwind and removal from stainless steel, helps prevent ESD damage to sensitive electronic components in manufacturing environments. Triboelectric charge may

vary with your application and environment.

## Patented Technology

3M antistatic utility tape is a transparent polyester film tape with acrylic adhesive. Made with a proprietary technology, the tape generates extremely low levels of triboelectric charge when it is unwound from the roll and also when removed from most surfaces on which it is placed. This makes the tape an excellent choice for use near electronic components and assemblies. The tape is supplied on 36 yard and 72 yard rolls on 1" and 3" cores.

## **Superior Performance**

3M antistatic utility tape can be used at static-safeguard workstations as part of your total static control program. It generates very low levels of static charge even in dry conditions of 10% RH. The tape is supplied on a paper core; antistatic plastic cores are available to minimize

particulate contamination in clean work areas.

## **40 Printed for Protection**

The tape is printed on the adhesive side with the 3M logo and the ESD Protective Symbol. This reminds workers that 40 tape is the only utility tape you allow in static-safeguarded areas.



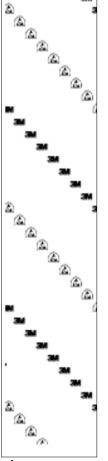
•

- Office/Clean Room/Work Station Holding notes of work orders Holding obstruction down Third hand, general purpose
- Manufacturing Close static shielding bags Conformal coating/maskins Holding and sealing supplies
- Packaging Box, bag and container sealing/holding DIP Tubes
- Removing Contaminants
- Label Stock

Call 1-800-328-1368 for more information or the name of your nearest 3M ELPD Division authorized distributor.

**Typical Properties** 

| Property/Unit of Measure                    | Test Method             | Typical Value            |
|---|-------------------------|--------------------------|
| ELECTRICAL PROPERTIES                       |                         |                          |
| Static charge generation:                   |                         |                          |
| Removal from roll,                          |                         |                          |
| 10% RH, volts<br>Removal from roll,         | ЗM                      | 20                       |
| 50% RH, volts                               | 3M                      | 5                        |
| Removal from stainless                      |                         | -                        |
| steel, 10% RH, volts                        | 3M                      | 50                       |
| Removal from stainless steel, 50% RH, volts | 3M                      | 5                        |
|   | 0101                    | 5                        |
| Surface resistance:                         |                         | 5 · · · 1 0 <sup>6</sup> |
| Adhesive @ 50% RH, $\Omega$                 | ESD Assoc.<br>STD 11.11 | 5 x 10⁵                  |
| Adhesive @ 10% RH, $\Omega$                 | ESD Assoc.              | 5 x 10 <sup>6</sup>      |
|   | STD 11.11               |                          |
| TAPE PROPERTIES                             |                         |                          |
| Adhesion to steel, oz/inch                  | ASTM D 100              |                          |
| Unwind force from roll, oz/incl             |                         |                          |
| Thickness, mils                             | ASTM D 100              |                          |
| Break strength, lb./inch                    | ASTM D 100              |                          |
| Slit width, inch                            | ASTM D 100              | 00 ± 1/64                |
| Non - outgassing                            |                         |                          |
| TML   | ASTM E 595              |                          |
| CVCM  | ASTM E 595              | <0.1%                    |



3M is a trademark of 3M

#### **Important Notice**

All statements, technical information, and recommendations related to Seller's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use.

Any statements or recommendations of the Seller which are not contained in the Seller's current publications shall have no force or effect unless contained in an agreement signed by an authorized office of Seller. The statements contained herein are made in lieu of all warranties, express or implied,



Electrical Products Division 6801 River Place Blvd. Austin, TX 78726-9000 800 676 8381 http://www.3M.com/elpd including but not limited to the implied warranties of merchantability and fitness for a particular purpose which warranties are hereby expressly disclaimed.

SELLER SHALL NOT BE LIABLE TO THE USER OR ANY OTHER PERSON UNDER ANY LEGAL THEORY, INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR STRICT LIABILITY, FOR ANY INJURY OR FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES SUSTAINED OR INCURRED BY REASON OF THE USE OF ANY OF THE SELLER'S PRODUCTS THAT WERE DEFECTIVE.

> © 3M 1998 78-8124-4849-2(A)

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

<u>3M</u>: 40PR