

## 3M™ Low Static Polyimide Film Tape 5433 (Lined)

### Product Description

3M™ Low Static Polyimide Film Tape 5433 is a clear PET lined version of 3M™ Low Static Polyimide Film Tape 5419. It is a translucent, polyimide film-backed amber silicone adhesive tape with extremely low electrostatic discharge properties.

### Key Features

- Polyimide film does not soften at elevated temperatures, thus the film provides an excellent release surface at elevated temperatures
- Dimensionally stable at high temperatures to help prevent rework and enable high productivity
- Flame retardant, chemical and radiation resistant to help protect surfaces and reduce replacement costs
- Silicone adhesive's high temperature performance reduces adhesive transfer to help eliminate cleaning, enabling high productivity
- Halogen Free\*

\*Halogen Free is defined as having maximum 900ppm bromine, maximum 900ppm chlorine, and maximum 1500ppm total bromine and chlorine, per 61429-2-21

### Key Attributes

| 3M™ Low Static Polyimide Film Tape 5433 (Lined) |   |  |
|---|---|--|
| Features  | Advantages  | Benefits   |
| Polyimide film                                  | Dimensionally stable at high temperatures<br>Flame retardant and chemical resistant | Helps promote high productivity<br>Protects surfaces, helping reduce replacement |
| Silicone adhesive                               | High temperature performance reduces adhesive transfer                              | Helps promote high productivity  |
| Low static                                      | Virtually eliminates circuit board degradation due to electrostatic discharge       | Helps reduce costly board waste due to component failure                         |
| Unique release liner                            | Easy release from silicone adhesive   | Capability to product die cut parts  |

### Product Construction/Material Description

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

| 3M™ Low Static Polyimide Film Tape 5433 (Lined) |                      |
|---|----------------------|
| Property  | Value                |
| Backing Material                                | Polyimide            |
| Adhesive Type                                   | Silicone             |
| Tape Color                                      | Amber                |
| Liner   | Clear PET            |
| Product Form                                    | Roll                 |
| Standard Roll Length                            | 36 yards (33 meters) |

### Applications

- Mask for printed circuit boards during wave solder or solder dip process
- Used as release surface in fabrication of parts cured at elevated temperatures

# 3M™ Low Static Polyimide Film Tape 5433 (Lined)

## Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes. Final product specifications and testing methods will be outlined in the products Certificate of Analysis (COA) that is shipped with the commercialized product.

| 3M™ Low Static Polyimide Film Tape 5433 (Lined) |  |  |
|---|--|--|
| Property  | Method*  | Value  |
| Adhesion to Steel                               | D-3330   | 20 oz./in. width (22 N/100 mm)                                     |
| Tensile Strength at Break                       | D-3759   | 33 lbs./in. width (578 N/100 mm)                                   |
| Elongation at Break                             | D-3759   | 60%  |
| Backing Thickness                               | D-3652   | 1 mil (0.03 mm)  |
| Liner Thickness                                 | D-3652   | 3 mil (0.08 mm)  |
| Total Tape Thickness                            | D-3652   | 2.7 mil (0.07 mm)  |
| Temperature Use Range                           | -  | -73° to 260°C) -100° to 500°F                                      |
| Dielectric Strength                             | D-149  | 7000 volts   |
| Insulation Resistance                           | -  | >1*10 <sup>6</sup> ohms  |
| Static Charge                                   | -  | (measured at 50% RH, 70°F (21°C) in an ESD controlled environment) |
| Removal from Liner                              | -  | <100 volts   |
| Removal from PWB                                | -  | Dependent on PWB substrate, generally less than 500 volts          |
| Outgassing                                      | E-595  | %TLM = 0.58; %CVCM = 0.24  |
| Flame Retardancy                                | per UL-510 product category:<br>OANZ2 File E230409 | Pass   |

\*Methods listed as ASTM are tested in accordance with the ASTM method noted

## Storage and Shelf Life

The shelf life of 3M™ Low Static Polyimide Film Tape 5433 (Lined) is three years from the date of manufacture when stored in the original packaging materials and stored at 21°C (70°F) and 50% relative humidity.

## Certificate of Analysis (COA)

The 3M Certificate of Analysis (COA) for this product is established when the product is commercially available from 3M. The commercially available product will have a COA specification established. The COA contains the 3M specifications and test methods for the products performance limits that the product will be supplied against. The 3M product is supplied to 3M COA test specifications and the COA test methods. Contact your local 3M representative for this product's COA.

This technical data sheet may contain preliminary data and may not match the COA specification limits and/or test methods that may be used for COA purposes.

Final product specifications and testing methods will be outlined in the products Certificate of Analysis (COA) that is shipped with the commercialized product.

# 3M™ Low Static Polyimide Film Tape 5433 (Linered)

Regulatory: For regulatory information about this product, contact your 3M representative.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M Product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



Electronics Materials Solutions Division  
3M Center, Building 224-3N-11  
St. Paul, MN 55144-1000  
1-800-251-8634 phone  
651-778-4244 fax  
[www.3M.com/electronics](http://www.3M.com/electronics)

3M is a trademark of 3M Company.  
Please recycle.  
©3M 2016. All rights reserved.  
70-0703-7733-1

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Adhesive Tapes](#) category:*

*Click to view products by [3M](#) manufacturer:*

Other Similar products are found below :

[56-YELLOW-34"X72YD](#) [00-021200-13972-7](#) [021200-64630](#) [60 TAPE \(1"\)](#) [62-GRAY-12"X36YD](#) [62-GRAY-1"X36YD](#) [69-1"X36YD](#) [764-1"x36yd-Red](#) [764-1"x36yd-White](#) [9500PC-3/4](#) [967454-1](#) [1181 19MM X 16,5 METERS](#) [130C-1X15FT](#) [E39-RS1-CA](#) [1900-48mm](#) [22-1/2X36YD](#) [88-SUPER-34X44FT](#) [890103N001](#) [2670](#) [96](#) [EVK-TA-TM047NBH01](#) [20-1"X60YDS](#) [2020-18mmx55m](#) [H150](#) [363](#) [3900-Blue](#) [3939-24mmx55m](#) [44-TAN-14"X90YD](#) [4504-34x18](#) [471-Trans-1"x36yd-Bulk](#) [5414 34X36](#) [35-Gray-1/2](#) [4008-12"X36YD](#) [4104-34"x18yd](#) [4116](#) [444-1"x36yd](#) [4466 1"](#) [4466W-1/2"x36yd](#) [4492B-12"x72yd](#) [4492B-1"x72yd](#) [4496W-12"x36yd](#) [4508-1"x36yd](#) [4516-3/8x36](#) [4726](#) [1/2"X36YD](#) [054007-43154](#) [054007-43152](#) [06149](#) [11-32-2857](#) [5419 1/2"](#) [56 TAPE \(1/2"\)](#)