



Low Static Polyimide Film Tape (Linered)

5433

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Technical Data

Product Description Tape 5433 is a linered version of Tape 5419. A translucent, polyimide film-backed silicone adhesive tape with unique and extremely low electrostatic discharge properties.

| Product Construction | Backing | Adhesive | Color | Standard roll Length |
|----------------------|-----------|----------|-------|----------------------|
| | Polyimide | Silicone | Amber | 36 yds (33m) |

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

| | | ASTM Test Method |
|----------------------------|-------------------------------------------------------------------|------------------|
| Adhesion to Steel: | 20 oz./in. width (22 N/100mm) | D-3330 |
| Tensile Strength at Break: | 33 lbs./in. width (578 N/100mm) | D-3759 |
| Elongation at Break: | 60% | D-3759 |
| Backing Thickness: | 1 mil (.03mm) | D-3652 |
| Total Tape Thickness: | 2.7 mils (.07mm) | D-3652 |
| Temperature Use Range: | -100°F to 500°F (-73°C to 260°C) | |
| Dielectric Strength: | 7000 volts | |
| Insulation Resistance: | >1*10 ⁶ ohms | |
| Static Charge: | (measured @ 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 | |

- General Information**
- Employs a proprietary technology that results in extremely low electrostatic discharge at unwind and removal from the PWB. Conventional polyimide tapes can typically generate over 10,000 volts during use which can damage board mounted electronic components. Tape 5433 overcomes this problem without any of the typical drawbacks of conventional “anti-static” or “static-free” tapes (e.g., variable adhesion and opaqueness).
 - At room temperature, the properties of polyimide and polyester film are similar. However, as the temperature increases or decreases, the properties of the polyimide film are less affected than polyester.
 - Polyimide film does not soften at elevated temperatures, thus the film provides an excellent release surface at elevated temperatures.

Shelf Life To obtain best performance, use this product within 12 months from date of manufacture and store under normal conditions of 60° to 80°F (15° to 21°C) and 40 to 50% R.H. in the original carton.

- Application Ideas**
- Mask for many printed circuit boards during wave solder or solder dip process
 - Release surface in fabrication of many parts cured at elevated temperatures

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| Features | Features | Advantages | Benefits |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------|
| | Polyimide film | Dimensionally stable at high temperatures | Helps promote high productivity |
| | | Flame retardant and chemical resistant | 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 produce die cut parts |
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Industrial Tape and Specialties Division

3M Center, Building 220-7W-03
St. Paul, MN 55144-1000
1 800 362 3550
1 800 223 7427 Fax on Demand
www.3M.com/industrialtape

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