

3M™ Heat Resistive Polyimide Tape 7418E

Product Description

3M™ Heat Resistive Polyimide Tape 7418E is a heat resistive polyimide process tape with electrostatic discharge (ESD) properties on the polyimide backing layer. The adhesive is a thermally cross-linkable acrylic copolymer that provides good initial adhesion and has less adhesion build-up even after high temperature processes.

Key Features

- High initial adhesion and good wettability
- Less adhesion build-up after high temperature processes
- Excellent ESD properties on backside of the tape

3M™ Heat Resistive Polyimide Tape 7418E

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| ESD backside treated polyimide film: 25μm |
| Thermally cross-linkable adhesive: 22μm |
| Silicone treated polyester separator: 38μm |

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™ Heat Resistive Polyimide Tape 7418E | |
|---|---|
| Property | Value |
| Color | Amber |
| Backing | ESD backside treated polyimide film |
| Adhesive | Thermally cross-linkable acrylic adhesive |
| Separator | Silicone treated polyester film |

Applications

- Carrier tape for small parts in high temperature processes, masking, protection, temporary bonding
- * Before using this product for a specific application, it should be evaluated to determine if it is suitable for the intended use.

3M™ Heat Resistant Polyimide Tape 7418E

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.

| 3M™ Heat Resistant Polyimide Tape 7418E | | |
|---|---|--|
| Property | Method | Value |
| Adhesion to Steel (SUS304 BA) 23 deg. Celsius /30 min After 260 dc/10 min | Based on JIS 0237 Peel angle: 180 degrees Peel rate: 300 mm/min | 1.6 [N/cm] 1.7 [N/cm] |
| Adhesion to PA9T (Genestar) 23 deg. Celsius /30 min After 260 dc/10 min | Based on JIS 0237 Peel angle: 180 degrees Peel rate: 300 mm/min | 0.9 [N/cm] 0.8 [N/cm] |
| Adhesion to LCP (Laperos) 23 deg. Celsius /30 min After 260 dc/10 min | Based on JIS 0237 Peel angle: 180 degrees Peel rate: 300 mm/min | 0.9 [N/cm] 0.4 [N/cm] |
| Surface resistivity (backside of tape) Initial After 260 dc/10 min | JIS K6911 (ASTM D257) compatible | 1x10 ⁹ [Ω/sq.] 1x10 ⁹ [Ω/sq.] |

Storage and Shelf Life

The shelf life of 3M™ Heat Resistant Polyimide Tape 7418E is 24 months from the date of manufacture when stored in the original packaging and stored at 22°C (71°F) and 50% relative humidity.

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Safety Data Sheet: Consult Safety Data Sheet before use.

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.

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