



Polyimide Film Tape

5413

Technical Data

June, 1995

Product Description A tape consisting of a Kapton® polyimide film and silicone adhesive designed for high temperature applications.

Construction	Backing	Adhesive	Liner	Color	Standard Roll Length
	Kapton® Polyimide Film	Silicone	None	Amber	36 yds. (33 m)

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.

		ASTM Test Method
Adhesion to Steel:	22 oz./in. width (24 N/100 mm)	D-3330
Tensile Strength at Break:	33 lbs./in. width (578 N/100 mm)	D-3759
Elongation at Break:	62%	D-3759
Backing Thickness:	1 mil (.03 mm)	D-3652
Total Tape Thickness:	2.7 mils (.07 mm)	D-3652
Temperature Use Range:	-100°F to +500°F (-73°C to 260°C)	

General Information

- At room temperature, the properties of Kapton® and polyimide polyester films are similar. However, as the temperature increases or decreases, the properties of the Kapton® film are less affected than polyester.
- Kapton® film does not soften at elevated temperatures, thus the film provides an excellent release surface at elevated temperatures.

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Application Ideas

- Mask for protection of gold fingers of printed circuit boards during wave solder or solder dip process.
- Release surface in fabrication of parts cured at elevated temperatures

Features

- Thin Kapton® polyimide film
- Silicone adhesive
- High adhesive to film bond

Advantages

- Dimensionally stable at high temperatures
- Flame retardant, chemical and radiation resistant
- High temperature performance reduces adhesive transfer
- Reduces adhesive transfer

Benefits

- No rework - high productivity
- Protects surfaces, helping reduce replacement costs
- No cleaning required - helps increase productivity
- No cleaning required - helps increase productivity

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-227-5085. Address correspondence to: 3M Industrial Tape and Specialties Division, 3M Center, Building 220-8E-04, St. Paul, MN 55144-1000. Our fax number is 612-733-9175. In Canada, phone: 1-519-451-2500. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-0400.

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ISO 9002

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Industrial Tape and Specialties Division

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10% post-consumer

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