



Polyimide Film Tape

5413

Technical Data

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

| Product Construction | Backing | Adhesive | Liner | Color | Standard roll Length |
|----------------------|------------------------|----------|-------|-------|----------------------|
| | Kapton® polyimide film | Silicone | None | 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: | 22 oz./in. width (24 N/100mm) | D-3330 |
| Tensile Strength at Break: | 33 lbs./in. width (578 N/100mm) | D-3759 |
| Elongation at Break: | 62% | D-3759 |
| Backing Thickness: | 1 mils (.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) | |

- 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.

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 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 | Features | Advantages | Benefits |
|----------|-----------------------------|--|---|
| | Thin Kapton® polyimide film | Dimensionally stable at high temperatures | Higher productivity by reducing rework |
| | | Flame retardant, chemical and radiation resistant | Protects surfaces, helping reduce replacement costs |
| | Silicone adhesive | High temperature performance reduces adhesive transfer | No cleaning required/helps increase productivity |
| | High adhesive film bond | Reduces adhesive transfer | No cleaning required/helps increase productivity |

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Technical Information and Data

The technical information and data, recommendations, and other statements provided in this document are based on tests or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

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This Industrial Tape and Specialties Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

For Additional Information

To request additional product information please call on +44 1234 229400

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