

DuPont™ Kapton® MT

Polyimide Film

Product Description

DuPont™ Kapton® MT polyimide film is a homogeneous film possessing 3x the thermal conductivity and cut through strength of standard Kapton® HN. Its thermal conductivity properties make it ideal for use in controlling and managing heat in electronic assemblies such as printed circuit boards.

Kapton® MT offers an excellent combination of electrical properties, thermal conductivity and mechanical toughness for its use in electronic and automotive applications.

Kapton® MT has higher modulus than HN; this offers improved strength to the final product. As all Kapton® films, MT retains its properties for extended storage periods in original packaging at temperatures between 4–29°C (40–85°F).

Applications

- Insulation pads (heat sink)
- Heater circuits
- Power supplies
- · Ceramic board replacement
- NKN slot liners

Table 1. Typical Physical Properties of DuPont™ Kapton® MT Polyimide Film

Property	100MT	150MT	200MT	300MT	Test Method
Tensile Strength, kpsi (MPa)	20 (138)	21 (145)	22 (152)	23 (159)	ASTM D882
Modulus, kpsi (GPa)	440 (3.0)	450 (3.1)	475 (3.3)	490 (3.4)	ASTM D882
Elongation, %	80	85	87	100	ASTM D882
Dielectric strength, V/mil	5500	5100	4600	4100	ASTM D149
Dielectric constant (25°C, 1kHz)	4.2				ASTM D150
Surface resistivity, ohm/sq	> 1015				ASTM D257
Volume resistivity, ohm· cm	> 1016				ASTM D257
Thermal conductivity, W/m·K	0.46				ASTM D5470
Tear strength, initial (Graves), lbf	1.7				ASTM D1004
Cut through, lb	40				DuPont Method



kapton.com

For more information on DuPont™ Kapton® polyimide films or other DuPont products, please visit our website.

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. It may be subject to revision as new knowledge and experience becomes available. This information is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. Since we cannot anticipate all variations in end-use and disposal conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. It is intended for use by persons having technical skill, at their own discretion and risk. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Applications CAUTION" and "DuPont Medical Applications POLICY" statements. These documents are available upon request.

DuPont[™], the DuPont Oval Logo, and all products, unless otherwise noted, denoted with [™], [∞] or [®] are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc. Copyright © 2020 DuPont de Nemours Inc. All rights reserved.

El-10144 (7/20)