

# **DUPONT™ KAPTON® MT**

## **TECHNICAL DATA SHEET**

### **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

Table 1 – Typical Properties of DuPont<sup>™</sup> Kapton<sup>®</sup> MT Polyimide Film

	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)	4.2				ASTM D150
Surface resistivity, ohm/sq	> 10 <sup>15</sup>				ASTM D257
Volume resistivity, ohm∙cm	> 10 <sup>16</sup>				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.dupont.com