

DuPont™ Kapton® MT+

Thermally Conductive Polyimide Film

Description

DuPont™ Kapton® MT+ polyimide film is a homogeneous film possessing nearly 2x the thermal conductivity of Kapton® MT, while retaining superior electrical properties. Its thermal conductivity properties make it ideal for use in controlling and managing heat in electronic assemblies and as a substrate for thermal interface materials.

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

Applications

- Thermal interface material substrate
- Heater circuits
- Power supplies
- Ceramic board replacement

Features

- Highest thermal conductivity for a polyimide film
- High mechanical integrity
- Extended storage between 4-29°C (40-85°F)
- UL 94 V-0 flammability rating
- Flex to fit, bend to install

Table 1 – Typical Properties of DuPont™ Kapton® MT+ Polyimide Film

Property	150MT+	200MT+	300MT+	500MT+	Test Method
Thickness, mils (mm)	1.5 (0.038)	2.0 (0.050)	3.0 (0.076)	5.0 (0.127)	ASTM D374
Tensile Strength, kpsi (MPa)	12 (83)	12 (86)	12 (83)	12 (83)	ASTM D882
Modulus, kpsi (GPa)	625 (4.3)	625 (4.3)	625 (4.3)	625 (4.3)	ASTM D882
Elongation to Break, %	51	53	28	29	ASTM D882
Dielectric Strength, kVAC/mil	5.3	5	3.4	2.9	ASTM D149 ¹
Surface Resistivity, Ω		>10 ¹⁵			ASTM D257
Volume Resistivity, Ω·cm		>10 ¹⁵			ASTM D257
Thermal Conductivity, W/m·K	0.75	0.75	0.75	0.75	ASTM D5470
Flammability	V-0	V-0	V-0	V-0	UL94
RoHS Compliant			Yes		N/A

Note 1: Tested with 1/4" brass electrode.



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

electronics.dupont.com

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 Caution Statement," H-50102-5 and "DuPont Policy Regarding Medical Applications" H-50103-5.

DuPont™, the DuPont Oval Logo, Kapton®, and all products, unless otherwise noted, denoted with ™, ® or ® are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc. Copyright © 2019 DuPont de Nemours Inc. All rights reserved.

K-29290 (8/19)