



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
- RoHS Compliance

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

Property	100MT+	150MT+	200MT+	300MT+	500MT+	Test Method
Thickness, mils (mm)	1.0 (0.025)	1.5 (0.038)	2.0 (0.050)	3.0 (0.076)	5.0 (0.127)	ASTM D374
Tensile Strength – MD, kpsi (MPa)	12.9 (89)	12.8 (88)	12.5 (86)	11.9 (82)	14.0 (97)	ASTM D882
Tensile Strength – TD, kpsi (MPa)	10.1 (70)	10.9 (75)	10.9 (75)	10.0 (69)	12.2 (84)	ASTM D882
Modulus, kpsi (GPa)	544 (3.8)	575 (4.0)	580 (4.0)	700 (4.8)	580 (4.0)	ASTM D882
Elongation to Break – MD, %	49	56	47	32	30	ASTM D882
Elongation to Break – TD, %	46	54	56	24	28	ASTM D882
Dielectric Strength, kVAC	7.1	8.85	10.2	12.6	16	ASTM D149
Surface Resistivity, Ω	>10 ¹⁵					ASTM D257
Volume Resistivity, Ω·cm	>10 ¹⁵					ASTM D257
Thermal Conductivity, W/m·K	0.77	0.82	0.85	0.85	0.73	ASTM D5470
Flammability	V-0	V-0	V-0	Pending	Pending	UL94
RoHS Compliant	Yes					N/A

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