Kapton® B

Polyimide Film

Description

Kapton® B polyimide film exhibits an excellent balance of physical, chemical, and electrical properties over a wide temperature range, with superior dimensional stability at elevated temperatures.

Kapton® B is a black, homogeneous opaque film. The matte black color of Kapton® B provides a uniform, aesthetically pleasing appearance while maintaining key physical properties. The homogeneous pigmentation provides better color integrity against flexural cracking or abrasion in comparison to black coatings or dyes. These characteristics make it ideal for use in many industrial applications where opacity, low reflectivity, or aesthetics are required.

Applications

Black films for use in:

- Heaters, Antenna, LED circuitry and stiffeners requiring Black aesthetics
- Applications requiring laser ablation

Product Specifications

Kapton® B polyimide film is manufactured, slit and packaged according to the product specifications listed in EI-10167, General Specification Bulletin.

Typical Properties for Kapton® B Polyimide Film at 23°C (73°F)

Property	50B	100B	200B	300B	500B	Test Method
Thickness, mil (µm)	0.5 (12.7)	1.00 (25.4)	2.00 (50.8)	3.00 (76.2)	5.00 (127)	–
Color	Black	Black	Black	Black	Black	–
Elongation, %	65	65	80	90	90	ASTM D-882-91
Tensile Strength, kpsi (MPa)	38 (262)	35 (241)	37 (255)	37 (255)	35 (241)	ASTM D-882-91
Modulus, kpsi (MPa)	450 (3100)	440 (3034)	440 (3034)	440 (3034)	440 (3034)	ASTM D-882-91
Shrinkage, % - MD and TD @ 200°C	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	IPC-TM-650
Dielectric Strength, V/mil	2900	2800	2700	2200	1600	ASTM D-149-94
Yield Factor, sq ft/lb (sgm/kg)	275 (56.3)	137 (28)	68 (14)	46 (9.3)	27 (5.6)	–

For more information on Kapton® or other Qnity products, please visit our website, www.qnityelectronics.

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