



DUPONT™ KAPTON® 200RS100

DESCRIPTION

DuPont™ Kapton® 200RS100 is a two layer polyimide film with an electrically conductive layer on one side. The conductive layer is precisely loaded with conductive carbon to produce film with a tightly controlled surface resistivity. The resistive property cannot be cracked, rubbed off, or otherwise easily damaged as is often the case with surface coatings or metallizations.

Kapton® 200RS100 has proven performance in applications where a precisely controlled surface resistivity was needed. It provides a durable resistivity, which is only slightly affected by temperature and humidity changes. Kapton® RS film retains all the outstanding inertness, radiation and temperature resistance of other Kapton® polyimide films, which make them ideal for use in extreme environments. In addition, Kapton® 200RS100, has excellent thermal, electrical, mechanical and chemical resistance properties.

Applications requiring high temperature performance would benefit from this all-polyimide conductive film. A typical application for this product is flat heaters. As a heater, this material is more efficient since the entire surface area will conduct heat. It can also be easily cut into various configurations. Due to its polyimide composition, it is resilient to high temperature, thin, and highly flexible.

CHARACTERISTICS

- High Tg
- Conductive side: black matte surface
- Dielectric side: shiny smooth surface
- Durable from -270°C to 240°C
- Thermally durable to 325°C in oxygen-free environments

APPLICATIONS

- Heaters
- Automotive
- Aerospace
- Consumer

Table 1 Typical Properties of Kapton® 200RS100 Film

Property	Unit	200RS100	Test Method
Physical			
Thickness	mil	2.00	ASTM D-374
Yield	ft ² /lb	61.5	—
Density	g/cc	1.46	ASTM D-1505
Mechanical			
Tensile Strength	kpsi	19	ASTM D-882
Tensile Modulus	kpsi	440	ASTM D-882
Elongation to break	%	40	ASTM D-882
Optical			
Light Transmittance	—	opaque	—
Electrical			
Surface Resistivity	ohms/sq	100	four-point probe

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102-4.

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