



# THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## Kapton™ Polyimide Film

<b>Item:</b>	<b>Kapton™ Polyimide Film</b>		
<b>Description:</b>	Kapton™ Polyimide Film possesses a unique combination of properties previously unavailable among polymeric film materials. The ability of Kapton to maintain its excellent physical, electrical, and mechanical properties over a wide temperature range has opened new design and application areas to plastic films. Kapton has proven to be especially useful in applications involving high operating temperatures.		
<b>Availability:</b>	Laminate Sheets - Gauges:	Kapton: Type HN 30, 50, 100, 200, 300, 500	Kapton: Type VN 50, 75, 100, 200, 300, 500
	Fabricated Parts:	The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers.	

Test Method	Units English (SI)	Typical HN Film Thickness (mils)					
		.30	.50	1.00	2.00	3.00	5.00
Tensile Strength, 23°C	psi (MPa)	16,000 (110)	20,000 (138)	20,000 (138)	24,000 (165)	24,000 (165)	24,000 (165)
Elongation	%	25	35	40	45	50	50
Shrinkage	%	4.0	4.0	2.5	2.5	2.5	2.5
Moisture Absorption	%	4.0	4.0	4.0	4.0	4.0	4.0
Dielectric Strength	V/mil (kV/mm)	3,000 (117)	3,000 (117)	6,000 (234)	5,000 (195)	5,400 (211)	3,000 (117)
Volume Resistivity	Ohm x cm	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>
Dielectric Constant, 1 kHz	--	4.0	4.0	3.9	3.9	3.9	3.9
Dissipation Factor, 1 kHz	--	0.007	0.005	0.0036	0.0036	0.0036	0.0036

Test Method	Units English (SI)	Typical VN Film Thickness (mils)					
		.30	.50	1.00	2.00	3.00	5.00
Tensile Strength, 23°C	psi (MPa)	20,000 (138)	20,000 (138)	20,000 (138)	20,000 (138)	20,000 (138)	20,000 (138)
Elongation	%	35	35	45	50	60	60
Shrinkage	%	0.1	0.1	0.1	0.05	0.05	0.05
Moisture Absorption	%	4.0	4.0	4.0	4.0	4.0	4.0
Dielectric Strength	V/mil (kV/mm)	3,000 (117)	3,000 (117)	3,000 (117)	3,000 (117)	3,000 (117)	3,000 (117)
Volume Resistivity	Ohm x cm	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>	10 <sup>12</sup>
Dielectric Constant, 1 kHz	--	3.9	3.9	3.9	3.9	3.9	3.9
Dissipation Factor, 1 kHz	--	0.005	0.005	0.0036	0.0036	0.0036	0.0036

AS9100 Certified QMS | ISO9001 Certified QMS | RoHS Compliant | ITAR Compliant

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.